An Aussie Looks at His Environments

Fred Davies



Fred and Mollie Davies, 1980s?

Copyright Fred Davies, 1993, 2017.

Davies, Arthur Frederick, 1908-1994.

Contents

	Editor's Pretace	5
	Foreword to Version One, 1984-92	8
	Foreword to Version Two, 1992	10
	Prologue and This is What He Saw	12
P	ART 1. Life On, and With, the Land	15
1.	Life on the Farm - Deniliquin	16
2.	Life on the Farm - Portland	39
3.	Old Faces and Places Revisited, 1927–1987	54
4.	Conservation Work in South West Victoria, 1947-1984	71
5.	Fire in the Australian Environment – Management Tool or Menace?	102
6.	Our Most Valuable Resource – Water	115
P	ART 2. Looking at Australia	125
7.	Drought	127
8.	Grazing in the Arid Zone	133
9.	The Ord River Fiasco	138
10.	The First Australians	143
11.	The Red Centre	150
P	ART 3. A Layman's Economics and Politics	159
12.	If a Boy is Too Dull Put Him on the Land	160
13.	More About Economics	168
14.	Democracy?	174
15.	The Evolution of Church–Labor Politics	179
P	ART 4. Some Thoughts on Religion	184
16.	In The Beginning	185
17.	What We Have Found	195
18.	Absence of Knowledge Leads to Serfdom	202
19.	The Modern Day Church	205
P	ART 5. Recent Happenings, Late 80s to 1992	216

20.	Various Topics	217
21.	Is There a Solution to the Foregoing Problems?	232
22.	A New Start for a Frustrated Society	239
23.	Conclusions	247
	References	249

Editor's Preface

My Dad left school at age 14. From school he got the basic three Rs but perhaps not a great deal more. Nevertheless he was a lifelong reader and thinker and in his middle and later years he wrote quite a lot, especially through his conservation work. He last worked on this memoir when he was 84 or 85. It had a lot of typos and some odd spellings. Its style is unconventional! A copy editor would recoil in HORROR!!! But he could organise his thoughts and tell a story.

The main motivation for this version was to convert it from hard copy to an electronic file. In the process I've given it a light editing, and toned down some of the shouting and table-banging a bit. (I realised that of course you couldn't do italics with a typewriter, so I've changed some of the capitals to italics where it seems it was meant more as emphasis than shouting.) I may still have missed some typos. Otherwise I've left it close to his own words and style. This is not the place for fussy rules, it's a personal account. Those who knew him will recognise him in these pages.

I have in my filing cabinet various draft sections from various times, most of them undated. From letters and the odd time marker it seems the memoir grew out of a 35-page paper written around 1983, *Environmental Work and Problems in Far Southwest Victoria* 1947-1983. This was a summary and overview of the conservation work he had been involved in after we moved to Portland in 1951. Most of it seems to have carried through into the present memoir.

That paper was well received in conservation circles, and a portion of it was published in the Autumn (March?) 1984 issue, No. 136, of *Parkwatch*, the magazine of the Victorian National Parks Association, under the title *Of bygone days*. A letter to me in early 1984 indicates that the rest of the paper would be published in full in *Parkwatch*, so perhaps a later issue or issues include that material, but I don't have any copies.

In that undated letter, from sometime between New Year and May 30, 1984, but perhaps around April, Dad says that, thus encouraged, a notion he had held for some years to write a book had crystallised "in the last two or three months". In a letter dated 30 May he says he was thinking of calling it *Australia Through the Eyes of an Environmentalist*.

The memoir eventually became *An Aussie Looks at His Environment*, about 90 pages of typescript with some extra papers taking it up to around 120 pages. The Foreword and Contents of that version are included below. As he says, it had been written "over a period of seven or eight years", so that would date that version to 1991-92, which fits other evidence.

By May 1992 we were corresponding about the possibility of me retyping it into a computer file, with a bit of editing in the process. That ambition of mine did not progress very far. By 12 September Dad wrote saying he had a new word processor and thought he could now rewrite the memoir himself. This second version was finished by the end of 1992, according to its Foreword, and was entitled *An Aussie Looks at His Environments* (plural), some 270 pages long. He had decided to incorporate various papers on politics,

religion and a few other topics, and the chapters were re-organised. That is the version reproduced here.

I should explain that his word processor, a rather new thing in those days, had a 14-line screen on which he could edit text before the machine typed it out. It was also possible to record the text on magnetic tape. Dad did not record the text. He just thought it was great that he could edit small sections as he went along, before the machine typed it out. So the manuscript had an ephemeral existence as digital files and then was gone. I groaned when I found out, but I suppose we might not have been able to read those tapes into another computer anyway. So we were on the cusp of digital text files, but did not quite make it, my re-typing of 1992 having not progressed.

By 2012 software existed that could convert a digital image of text into a digital text file (using OCR, optical character recognition). I set about scanning the memoir and converting it, but the typescript was poor and the conversion was very messy, requiring a lot of editing. The project lapsed. For some reason I don't recall, in that attempt I used version 1.

By now, September 2017, the conversion software is better and I'm using version 2 of the memoir, which is a cleaner typescript, so at last it is a reasonably straightforward task to create a digital version.

I've included the Forewords of both versions and the Contents table of the first to give an indication of the shift in flavour or emphasis. The later additions on politics, religion and so on give it a gloomier cast, but the accounts of his early life and the Australian environment are all there.

I want to offer just a bit of context. Dad was a relatively early practitioner of *conservation*, before it became environmentalism. He was also a bit unusual in being both a farmer and a conservationist. He was not unique in this regard, for example Eric Rolls comes to mind as the author of *A Million Wild Acres*. Even so it's a shame there are not more connections between environmentalism and farming, they belong together. The Landcare program is an excellent example. It was founded by some farmers in Victoria and later promoted by a collaboration between Rick Farley of the National Farmers Federation (NFF) and Philip Toyne of the Australian Conservation Foundation (ACF). Landcare has certainly promoted the cause, within Australia and internationally, and there are of course now many farmers working to make their land "sustainable".

Unfortunately that enlightened collaboration was not continued by subsequent NFF leaders, who tend to be politically conservative, and in the broader political and social arenas farmers and environmentalists are still all too often disconnected or even opposed. Indeed our society is riven with divisions among farming, industry, economics, finance, consumers, employees and so on. But that's another story, though you will see some of those issues cropping up in the following pages.

So Dad was, among other things, a person to whom conservation and farming were complementary aspects of caring for the land, in the largest sense. He explains why.

Dad's focus is on land and events, and family enters only incidentally. For the information of future family I'll add a bit of basic genealogy.

Arthur Frederick (Fred) Davies was born 2 March 1908 and died 18 April 1994.

In 1936 he married Ina Mary (Molly) McIlvenna, b. 3 October 1909 and died 27 July 1992.

They had three children, Judith Mary, b. 5 March 1937, Michael Henry, b. 15 February 1942 and died 20 December 2011, and Geoffrey Frederick, b. 19 September 1944.

Finally, I knew Dad, during my growing up, as a very practical man with wideranging interests and opinions, and one who professed atheism. It was a bit of a surprise therefore when he started writing about spirituality. It was also of a not very conventional kind. Enquiring minds can take us in many directions. But it's his story and he will tell it.

Geoff Davies, 23 September 2017

Foreword to Version One, 1984-92

This book has been written over a period of seven or eight years. Its main purpose is to record the changing environments which I encountered on a long journey through life.

Like early man, who looked up at the heavens at night time and wondered how all those pin points of light came to be there, I have always had an inquiring mind and have derived much satisfaction in pursuing questions and ultimately finding answers.

In the first instance it is a record for my family of the lifestyle of earlier days and the progression of establishing the basis for a reasonable lifestyle for my wife, myself and my descendants without impinging too much on fellow humans or the natural environment which sustains us, and secondly to record for posterity the experiences encountered in that long journey.

The word environment usually means the natural environment, that is the land and the forests and the myriads of species which inhabit these areas. But there are other environments, man made, which interact with the natural environment such as economic, political and religious and of necessity must be included in any overall approach.

Until about one hundred years ago the man-made environments did not intrude unduly into the natural environment and there was little concern that the natural environment would not last indefinitely.

However, with the remarkable technological progress since then there is now a very real threat that the careless use of that technology will reduce the natural environment to a point of no return. If this happens the human race will die with it.

There are too many people on the planet, and as we still have not evolved a more caring and sharing lifestyle because of selfishness and greed by individuals and groups within our society there is not much hope for the future. This, in spite of the fact that there have been numerous Extra Terrestrial Missionaries at different times in the last two thousand years or so to try and steer us onto a lifestyle that is more compatible with our environment and to a more compatible lifestyle within our society.

In the last decade the deterioration of our natural environment by influences coming from the economic, political and religious environments has been so rapid that a section "Recent Events" has been added to the original story to bring it up to date. [Later incorporated into Version Two - GD.]

CONTENTS (Version One)

-	_	_	_		$\overline{}$	_
עו	v	H I	FΑ	۱ (٠,	Ŀ.
	ı 🔪	1 7 1	ı ' /-	٦,	. 1	٠.

1. AND THIS IS WHAT HE SAW. (INTRODUCTION)	1.
2. LIFE ON THE FARM. PART 1.	4.
3. LIFE ON THE FARM. PART 2.	25.
4. LIVING WITH NATURE.	32.
5. DROUGHT.	39.
6. GRAZING IN THE ARID ZONE.	44.
7. THE ORD RIVER FIASCO.	49.
8. THE FIRST AUSTRALIANS.	54.
9. THE RED CENTRE.	60.
10. FIRE IN THE AUSTRALIAN ENVIRONMENT.	68.
11. OUR MOST VALUABLE RESOURCE (WATER).	79.
12. A LAYMAN'S ECONOMICS.	89.
13. MORE AOOUT ECONOMICS.	
14. DEMOCRACY???.	
15. THE BEGINNING.	
16. WHAT WE FOUND.	

- 17. KNOWLEDGE IS POWER CONVERSELY, WITHOUT KNOWLEDGE WE ARE CHALK IN THE HANDS OF OUR RULERS.
- 18. RECENT EVENTS.

Foreword to Version Two, 1992

This is the story of my life and times. It begins with earliest memories of around 1912 up to the present time, the end of 1992.

It tells of schooldays, life on the farm as a young fellow with dreams of the future and ends on a cynical note at the failure of our Rulers and leaders to provide a caring and sharing lifestyle for the peoples of the Earth. It tells of the great depression and its repercussions, of the struggles on the farms to establish a niche in the society in which I lived, compatible with the vast natural resources of our continent.

It tells of an affinity with the "Bush" from the earliest memories to the present time, of a compelling urge to manage well that part of the natural environment which sustains us.

Apart from the natural environment it tells of the struggles through the jungles of Politics, Economics and Religion.

It traces the establishment and evolution of our Rulers, both Temporal, the Establishment, and Spiritual, the Church, of their close association and collaboration in maintaining the ignorance and poverty of the people which is the power base of both groups. It tells of the sham of the teachings of the church which are supposed to be based on the Bible scriptures but these are, in fact, ignored.

Very early in our civilisation we were persuaded to take the Spiritual tangent with its myths and legends handed down from generation to generation for thousands of years with all their inaccuracies enshrined in the Bible, instead of the Moral tangent which contains the real substances of good living.

It tells of a corrupt political system which hands choice pieces of our natural environment to the wolves of progress in their relentless and compassionless drive to power and riches and of a corrupt religious hierarchy buried in a morass of religious dogmas irrelevant to the establishment of a more caring and sharing society which the peoples of the earth want and so desperately need.

The main trigger for this story was the great depression 1929–1931, and the long haul through the hungry 30s to get our lives, our economy and our nation back on track. There was no money for silly things like an improved standard of living!

1939 saw the start of the second world war and, overnight, there was money to burn. Where did that money come from? Why wasn't it available in the hungry 30s to get our economy back on track? And at the end of the war where did the billions of dollars come from to rebuild the devastated cities of Europe, Russia and Japan?

Where did Jack Lang get the money to build the Sydney Harbour Bridge, in the middle of the great depression, and the money to re-build and electrify the whole of the Sydney Suburban Rail System at the same time? And where did President Roosevelt get the billions of dollars to rebuild the American economy in the same depression?

Questions? Questions? And an inquiring mind demanded answers.

Prologue ... and This is What He Saw

An old ... old Continent, rich in tradition, basking in the sunshine of its declining centuries. A continent which has seen many changes in its long history.

Like the time not so long ago, when the Centre was lush with vegetation and mighty rivers flowed into Lake Eyre and thence to the sea by way of St.Vincent and Spencer Gulfs. Then back to the time when the sea connected these two inland depressions with the Gulf of Carpentaria. This happened on at least two occasions. Then back to the time when there were Glaciers in the Kimberley area. The Author picked up pieces of Glacial Till way out in the desert in that country.

Further back in time when the sea extended from St.Vincent and Spencer Gulfs to the Timor Sea leaving the Kimberleys as an Island. At this time the old limestone barrier which skirts this country was an active Coral Reef. Then back to Cambrian times when the MacDonnell Ranges were formed in the Centre. Then back to the dim past, long before Cambrian times, when the ancient land of Yilgarnia was forming and the rich gold bearing reefs of Western Australia were being pushed towards the surface. Mountain Ranges were formed and levelled by the long process of erosion and the ancient land of Yilgarnia took basically its present form. Apart from a few minor crustal movements this land has remained almost as we see it today.

Very recently, by geological time, people came to the old continent. They found it provided for all their needs and they stayed. They lived with their environment, nurturing it carefully, and after thousands of years it was just as productive as when they came.

Then one day, just two hundred years ago, some different people came from the other side of the planet, sailed into Port Jackson and set up camp at Sydney Cove. Most of these people were prisoners and were sent to this side of the Planet to be out of the way. They were transported because they had committed a few serious crimes, but mostly for minor offences against the bourgeoning Capitalist society of the time.

The few people in charge were the masters and the prisoners had to work hard establishing the settlement. If they committed further offences, even minor ones, or were otherwise lax they were flogged.

The environment into which these people came was treated with the same contempt as the masters treated the prisoners. The land was cleared and plowed to grow food crops, but the birds and the animals and the native people liked the new crops. The birds and the animals were shot, and many of the native people, who resented the newcomers taking their land were also shot.

In time free settlers arrived and set about growing food and fibre to be exported back to the "Old Country" Their approach to the environment was no different to that of the masters in charge of the prisoners.

As time went on settlement extended and much of the vegetation was cleared and burnt. Animals were destroyed or driven further back from the settled areas. Problems of managing the new environment were evident from the first settlement. It was different to the "Old Country" and would not conform to the usual methods of farm husbandry. Drought was one of the great problems. It did not occur to the settlers that drought was the norm in the new country – not the exception.

As time went on losses of stock and crops became, in some cases, catastrophic. Then the idea surfaced that irrigation would provide excellent insurance against drought. So for over one hundred years irrigation has been the catch-cry to eliminate drought.

Because the old continent was so dry compared to overseas countries it was simply taken for granted that irrigation must be the answer to drought. It was never considered necessary to question this assumption. Farmers and Graziers persuaded Governments, not that they needed much persuasion they could also see it as a winner, to dam rivers and put in channel distribution systems. These proved useless because when water was needed most, in the driest times, the rivers were dry! So, giant storages had to be built near the headwaters of the rivers. Even these have been dry at critical times!

No overall plan was ever considered, no thought was given to the Ecology of the rivers and what would happen when the normal flow was interrupted. No thought was given to the suitability of the soils for flood irrigation. Such vast quantities of water had never been poured onto the soil before.

The old Continent groaned under the impact and was slow to move, but eventually it did. Almost imperceptibly at first, but gathering momentum as time passed. First the plants which the water was supposed to nourish started to die, in patches at the beginning, then whole paddocks! Pouring such vast quantities of water onto the land lifted the water table, and with it the salt layer, because this country was an old seabed. The destruction of so many trees which transpire vast quantities of water into the atmosphere which later falls as rain compounded the problem.

As irrigation extended so did the salt layer rise! In some places the clearing of trees was enough to bring the salt layer to the surface without irrigation! the ironical part is that after 100 years of irrigation it does not prevent or even alleviate droughts in the slightest degree! This is because farmers and graziers still do not understand the Ecology of the old Continent and manage their projects accordingly.

In the marginal country, the Mallee for example, the dense stands of mallee Eucalypts were cleared to grow wheat. Then the wind which comes with the inevitable droughts blew the top soil away. In the undulating heavier rainfall country the removal of vegetation to grow grass caused gully erosion and hillside erosion! Exploitive management of our woodlands and forests and excessive burning is slowly destroying the Ecology of these areas.

Further afield, the graziers, with both sheep and cattle, have extended their range over the whole Continent, even well past the fringes of the three main deserts. Overstocking is slowly reducing vast areas of this country to desert! Worst of all numbers of all domestic animals have been turned loose in this country and they are breeding freely - buffalos, cattle, camels, horses, donkeys, goats and pigs! These are placing an even greater burden on the fragile environment!

Another most disturbing environmental problem is the Chemical explosion. Chemicals to kill grass and weeds prior to cropping, Chemicals to kill insect pests, in the home, in crops and pastures and in livestock. Chemicals to defoliate plants to facilitate harvesting of crops, and Chemicals used in the mining and refining industries. Others are being used as soil sterilants without knowing if there is likely to be a long term backlash. Many of these are certainly polluting our rivers, creeks and estuarine marshlands. It is interesting to note that most life in the sea originates in estuarine marshland!

There is air pollution, mostly caused by burning excessive amounts of fossil fuels. So far it effects our major cities. Overseas where it is much worse, it causes acid rain which kills trees and life in inland waters. We should be forewarned!

In the middle of last century an enterprising sportsman released a pair of rabbits into our environment. He specially brought them out from England to provide sport in the new country. They loved the new country and their population exploded. In a little over one hundred years they have cost farmers and graziers billions of dollars and have done untold damage to our environment. The fox was brought out for the same reason and has been cursed by sheepmen ever since!

Parts of the Old Country are becoming an open quarry for overseas mining tycoons whose only concern is to make a fast buck and with very few exceptions have no concern about whether the environment is irretrievably damaged in the process or if there will be enough minerals left for our own use in the years to come

In the next chapter we will show how people on the land can live with the natural environment without completely destroying it, and how we can live with Nature's creatures and enjoy their company without destroying them.

We will have a look at some of the main problems mentioned in this introduction in more detail.

And we will have a look at some of the Geological Gems which this old country has preserved for us trespassers to admire.

PART 1. Life On, and With, the Land

1. Life on the Farm - Deniliquin

Pine Hills

Although not born on a farm, introduction to the life was at an early age. My Dad worked at various places around Warrnambool – Saltau's produce store, the Warrnambool butter factory, a saw mill between Cobden and Timboon, a dairy farm just outside Cobden and from there to a new district, Pine Hills (now Mayrung), about 25 miles east of Deniliquin in southern N.S.W. to grow wheat.

The move to Pine Hills was made in 1913 when I was five years old. A large tract of country which had been taken up by the squatters many years previously as sheep runs was made available for closer settlement by the N.S.W. Government. The area was surveyed into blocks of from 600 to 800 acres and the first blocks were available in 1911.

The dairy farm at Cobden was owned by Dad's uncle [F. Hay?] who had just bought three or four blocks at Pine Hills, and he persuaded Dad to go north and try his hand at wheat growing.

Although the previous station owners had been running sheep the country had only been lightly stocked so that my first impressions of the country was what I would now call a virgin landscape.

In the saw mill days near Cobden I had been intrigued by the huge trees in the forest, the bottle brushes and all the pretty flowers on the forest floor. Mum's Dad [Isaac Goldstraw] and four of his sons were all saw millers so I guess an early interest in the 'Bush' was inherited – hence an immediate interest in the virgin country at Pine Hills.

Where the interest had been the pretty flowers at Cobden, it was the birds at Pine Hills. Some of the country had low sandy ridges running in a north westerly direction and this country carried the most vegetation, mostly trees. There was a preponderance of Murray Pine, almost at forest density in places, bull oak, several species of box trees, numerous species of acacias, a few quondongs and a scattering of other species.

There were many-species of birds: Noisy Miners, Black Jays (White winged Chough), Apostles, Babblers, Top Knot Pigeons (Crested Pigeon), an occasional Bronze Wing Pigeon, Grey Butcher Bird, Crows, Magpies, Plovers, Curlews, Brolgas and various species of ducks in season. Two or three kinds of hawks, and the Wedge Tailed Eagle. There were various members of the parrot family. The migrants included, Cockatoo Parrots, Budgies by the tens of thousands, Sandpipers (Rainbow Bird), wood swallows, and so on. Plenty of Emus and Galahs by the thousand. I have given the names of birds as we knew them.

Kangaroos were there in hundreds, possums, both Silver Grey and Ringtail. We would often find in logs what we called Wood Mice, no doubt one of the small marsupals.

When we started school one of the boys' hobbies was collecting birds eggs, and yours truly was no exception. By the time I left school the collection was near 100 species and

there were still many which I did not have. However, by that time the importance of the landscape and its creatures was beginning to dawn and no more were collected.

It did not take the settlers long with firestick and plow to clear their blocks and get them sown down to wheat. A few had more than an average amount of capital available to buy two or more blocks, and with the greater acreage were able to run sheep exclusively. Most of the other settlers ran some sheep in conjunction with wheat. Endless miles of the golden grain was the environmental picture of the time. No thought was given to leaving a few areas in their virgin state so that a future generation might see what original landscape looked like.

There was a block of Crown land which had not been sub-divided next to the block where Dad was. It was known as the Lease block and was about 1000 acres in area. The soil type was mostly sandy rises and it carried a heavy growth of Murray Pines, almost a forest, along with a scattering of other species previously mentioned. This was bird country and very quickly became my favourite haunt.

The Apostles, Babblers, Black Jays, Galahs and Miners were more gregarious than the birds we later came to know in Portland and were extremely noisy. The noisy Miner seemed to be the guardian of the whole bushland. Its high pitched piercing call could be heard for long distances. It was certainly the bane of the hunter.

The first wheat crop Dad planted had to be broadcast by hand because he didn't have a drill. Although it was immediately harrowed much grain was left uncovered. The Galahs thought this was manna from heaven and had a wonderful time. On top of this it was a lean year and I don't think Dad got much more than seed for the next crop.

When we arrived in 1913 many settlers had young children and had been there eighteen months or more. So a school for these children was high on the agenda. A branch of the Farmers and Settlers Association had been firmed in late 1912 and this was the settlers medium for contact with Politicians, Governments and Councils. The Association approached the Education Department with the request that a school be established. The Department was sympathetic to a point - it would provide a teacher but the settlers would have to provide their own hall, and no amount of persuasion would alter this decision.

Faced with this situation the settlers set about building their own hall. They called for donations and these ranged mostly from one guinea (21 shillings) to five guineas. The livewire proprietor of the Deniliquin Pastoral Times promised a donation of five guineas if he could get five new subscribers to his paper. The settlers got their five guineas! They held numerous social functions and by January 1914 were in a position to call tenders.

The building was to be 30 feet by 20 feet with 12 foot walls. One tender was received from Moore & Sons hardware Merchants and builders of Deniliquin for 161 pounds nine shillings and sixpence. The tender was accepted. By August 1st the hall had been completed and with some minor adjustments to the tender price a cheque for 155 pounds was written out as full payment.

When one compares values of those days with values these days this was a mighty achievement! The basic wage at the time was two pounds eight shillings, so donations

represented from one half to two weeks wages. One wonders how many people these days would give \$100 to \$400 as a donation to such a project.

Another example of the settlers' fund raising ability was a special day for the Belgian war fund. The effort was first mentioned towards the end of June and a day of fund raising activities was set for September 29th. At the end of the day an amount of 89 pounds 10 shillings and 3 pence was divided between the Belgian War fund and the Red Cross.

For the first couple of years Dad carted his wheat to Finley. This involved a three day trip with wagon, six horses and about fifty bags of wheat. On a couple of occasions I was allowed to go along. Such a trip was a highlight. For me camp bed was a hammock slung across the back of the wagon. There was only one hammock so I guess Dad must have dossed on the ground.

It was always fun when the time came to boil the billy and explore the tucker box, not that there was ever much to choose from. Mostly cold meat, bread, butter, jam and perhaps some cakes. It always seemed much more exciting sitting by a campfire having a meal than sitting up to the table at home where one had to be very careful not to put too much butter and jam on the bread for fear of paternal repercussions. They were costly, and anyway too much, especially jam, was not good for young people.

Very little of the road was formed, and anyway, formed or not, in the wheat season, especially nearer Finley, where traffic was heavier, it just cut up into potholes of dust. After seeing the way dust accumulates in the boot of a car if it is not properly sealed, one wonders how the hammock was negotiated through the layers of dust when it was time to turn in. We didn't seem to notice!

After the first camp near Finley it was always up early next morning to try and get to the weigh-bridge before too many wagons arrived, otherwise waiting one's turn to get weighed and unloaded could be most frustrating. In one of those early years, 429,000 bags of wheat was delivered to the Finley rail terminal. Most of it came from the area between Finley and Deni. This gives an idea of the way the early settlers went for wheat. From this it can also be imagined what a tremendous assault was made on the environment.

When we first arrived at Pine Hills, home was a two roomed tin hut (corrugated iron). It was only a few hundred yards from the Lease block and this was home for about twelve months, when Dad built a two room mud brick house.

It was shortly after moving into this house that the school was opened. There must have been 17 or 18 youngsters to start and some would be 11 or 12 years old. Their education must have been pretty skimpy for they left school at 14 and worked on the farm, both boys and girls.

With the 1914-15 drought came the dust storms. I can remember several where the lamp had to be lit in mid-afternoon. Looking back now the dust was a clear indication that the environment to the North West had already been grossly overstocked. It had been sheep country for 60 or 70 years.

The drought broke in May 1915 and in the spring of that year there was a massive growth of native grasses. Coming home from school we (the Curries and the Swaffers

came past our place) used to crawl through the Crowsfoot grass making mazes of tracks. It must have been over two feet high, because on our hands and knees we couldn't be seen.

Glengower

After a couple of years in the mud house Dad moved to another farm about three miles to the East [west?], which made it about four miles to school. The farm was called "Glengower". Dad bought me a shiny new bike to ride to school. Learning to ride was no problem. I rode the bike to school for three years. Sometimes it broke down or a tyre punctured and if Dad did not have time to fix it I walked to school. Usually when walking I went through the Lease block, much to the consternation of the birds! There was little difference in distance between the two routes, but the road was better for the bike.

In the mud house days, and for some time after we moved to Glengower, our mail came from Finley, Wednesdays and Saturdays, and I had to go back to school on Saturdays to collect it. Then the mail contract was re-organised and it came from Deni on Monday, Wednesdays and Saturdays and was left in a roadside box at our front gate about three quarters of a mile from the house.

Shortly after the school was completed one of the Ministers from Deni used to drive out once a month to administer to the Spiritual needs of the settlers. I always considered this to be a day wasted. I had to go to school five days a week and couldn't see why I had to be dragged back on Sundays, even though it was only once a month. But I guess that was what the settlers wanted and little me couldn't do much about it.

No one ever worked on Sunday, and apart from Church days, the day was mostly taken up by the settlers and their families visiting each other. I could see a lot of sense in this idea, because it always involved other kids and we could play. Mum had an organ and most other families had some sort of a musical instrument and Sunday evenings would finish up with a sing song. Then of course, there would be an occasional dance at the Hall. this didn't interest me much because there was no opportunity for kids to join in.

When we left Glengower for Glenview, nearer Deni, the practice died out. I think communities are the poorer for this. Such visits would always involve an exchange of views which could be on farm husbandry, machinery, local politics, sport etc. and the women folk would have a like exchange of views.

The change to Glengower also meant a change in the direction our wheat went to the railhead. It now went to Deni and involved only a two-day trip.

Our shopping centre, from when we first arrived at Pine Hills, was always Deni. Saturday was the usual day, and we had to be away early in the morning, it was a 2-1/2 to 3 hour drive. We would be home before dark in the summer time but it was always well after dark in the winter time. We started with one horse and a single seated buggy and there were five of us, my brother Frank was twelve months old when we arrived at Pine Hills, and my sister Florrie was born when we lived in the mud house. How we all crammed into the buggy with a week's rations I'll never know. Frank and I had to sit on the floor against the dashboard, and in winter it was freezing cold. Even though we were well wrapped up the cold still got in.

There must have been some trouble between neighbours about leaving gates open. Coming home from Deni one night, pitch dark, Dad decided to go home a shorter way than the way we went in and found a gate locked! To go back and pick up the other track to get home would have taken hours so Dad got to work on the gate. Am not sure if he lifted it off its hinges or whether he opened the fence, but we got through.

Dad had a good year in 1917 and he bought a pair of ponies and a brand new double seated buggy with a hood over the front seat. The back seat was open to the elements! The old coach makers must have been a pretty dumb lot. It would have been quite easy to extend the hood over both seats. It gave Frank and I a bit more room and we had a seat to sit on, but it was still freezing cold in winter!

Our lighting inside the house had always been kerosene lamps, and about this time a new double burner lamp was brought home. I can remember the first night it was lit. For the times it was a most elegant affair. It had a black shiny ceramic base, an attractive moulded glass bowl, along clear chimney, and an outer figured and tinted bowl which fitted over the clear chimney and gave the lamp an air of elegance. We quickly found the outer bowl blocked off a lot of light so it was put away. That light, with numerous clear chimneys (occasional ones broke), was used for many years. It now sits proudly in a prominent place in the living room with the original outer globe still intact!

About 1917 one of the Deni storekeepers decided to start a weekly grocery run out around the settlers. It was a two day trip with a pair of horses and a light wagonette, but without a cover on the back. An elderly chap, George Moltine, did the run. He would make two or three calls the first day and usually camp at our place, finish the run and back to Deni the second day.

As the 1917 mouse plague was building to a peak George camped as usual not thinking to take precautions against the mice. By next morning the mice had riddled the whole cargo! When he returned to Deni, and told the story no one believed him! The next week the boss himself, Fred Moltine, came out and the mice treated him even worse although he had been forewarned!

I can't remember how long the plague lasted but they created havoc while they were there. Two of the rooms in the old house had a wooden dado up about four feet and above that was lined with hessian and paper, another room had hessian and paper right to the floor. The kitchen was unlined. The mice got between the outer wall and the lining and ate most of the hessian and paper. They were after the paste which stuck the paper to the hessian! They got into Mum's organ and ruined it. It never played again. It was extremely difficult to keep them away from food. We lived with the smell of mice for months!

Dad had a full stack of hay and half a stack which he was using; they ruined it all. He had some wheat on a raised stand and by putting a corrugated iron barrier around it was able to keep most of them out. One evening he put a handful of wheat in a bag and propped the mouth open just outside the barrier. We went out after tea and the bag was half full. They were drowned in a tub of water. Next morning we counted them out of curiosity, there were well over a thousand!

Enormous damage was done to the wheat stacks at the various railway stations throughout the district. Then all of a sudden they disappeared! For months afterwards we found staggering numbers dead under any shelter where they could crawl – under old bags, sheets of tin, boxes and as the haystacks were pulled to pieces heaps of dead ones were all through them!

I remember Mum saying when we arrived at Pine Hills rabbits were almost unknown, yet within three or four years they had overrun the country. In the sandy areas they dug massive warrens often covering a square chain or more. There was no method of dealing with them except with dogs and shooting. In the finish the dogs would not chase them – there were too many. In the time it took to shoot a hundred several more hundreds would be born. Trapping was used extensively. Between these three methods, after the initial explosion, some measure of control was possible, but farmers had to be conscientious about the job. The trouble was some farmers kept their rabbits under reasonable control while the next door neighbour didn't do anything! This led to friction. Finally the Government appointed inspectors under the jurisdiction of the Pastures Protection Boards. The job of these inspectors was to bring the lazy farmers into line under penalty of fine. These inspectors have been needed right down to the present day.

It was not until 1950 when the Myxomatosis virus was introduced into the rabbit population that any reasonable measure of control was possible. Later the poison 1080 gave further control. I think too, five or six decades after the initial flush breeding has tended to moderate.

In our area half grown rabbits and upwards would make what we called a "Squat" in the dry grass and sit there without further movement until feeding time towards the end of the day. We quickly discovered they would sit rather tightly, and in most cases, not move until almost walked on.

Dad was always a hunter, and so it naturally followed with so many rabbits around many a half day was spent out after them. Dad quickly evolved a waddy, a stick with a bit of weight about eighteen inches long and nicely trimmed. He could hit a rabbit in a squat at several yards and never miss. Of course, I had to copy Dad but fortunately for the rabbits most of my throws would miss by yards, much to Dad's disgust. Anyway, we had a lot of fun especially in the wet year 1917 when many burrows were flooded out and the rabbits just had to get out into the open. An added bonus was that the skins were worth keeping and gave a bit of pocket money without having to dip into main revenue.

From the beginning we always had three or four cows. This meant plenty of milk, butter and cream, even though other important items of diet were missing or in scant supply.

Shortly after we moved to Glengower it became my job to bring the cows into the yard for milking after I came home from school, and as an added burden, I thought, had to get the morning's wood. It did not take the cows long to discover they could have a bit of fun with the young fellow, not much taller than the grass in the spring time!

Sometimes when I approached they would head for home without any trouble. At other times, if they felt so motivated, they would turn and with their tails in the air head

for the farthest corner of the paddock at the double! I would traipse after them, and when near enough to turn them for home they would repeat the process, this time to the opposite corner! On such occasions I would head for home. WHERE ARE THE COWS? They ran away from me. WHAT ROT! GO BACK AND GET THEM! Mostly they would come at the second try and make a fool of me, but occasionally I would come back a second time without them. There would be howling and tears, and Mum or Dad would have to go and get them. At the sight of someone with a bit more authority they would turn for home and walk into the yard like LITTLE LAMBS!

I guess cows, like elephants, have a good deal of intelligence. We have had a beef herd now for over 20 years, and what some of those dear old girls don't know is not worth knowing!

One of the worst hazards to encounter when going for the cows in the spring time was grass seeds. The paddock where they were run mostly had not been plowed. Two native species, Corkscrew and Barley grass grew extremely well in the light loamy soil and naturally seeding was profuse. By the time I would get the cows home socks could hardly be seen for grass seeds. The corkscrew had a needle sharp point and would easily penetrate the skin, so that, on taking my socks off legs would be a mass of pinpricks! I often wonder why I didn't take them off before starting, or why I wasn't told to take them off.

The grass seeds had other repercussions too. Dad always kept a few sheep and always killed our own mutton. In springtime, when the pelt of a lamb was removed and one rubbed one's hand on the inside it was like rubbing on a piece of sandpaper with needle sharp points, so many corkscrew seeds had penetrated the skin. The Barley grass seeds had the unhappy knack of getting into sheep's eyes and they had to be yarded every so often and the seeds removed. Fortunately these seeds did not have a sharp point, but they did have four or five furry tails about half an inch long which helped them penetrate wool sox or eyes!

This reminds me of another story which may best be told here.

Many years later I was talking to an elderly neighbour over the fence and he asked to see if I could find something in his eye. I lifted the lid and fished out a barley grass seed - it had been there since the previous day!! The old timers must have been tough!

The grass seed problem has largely been eliminated in the agricultural areas by plowing it out and replacing with species more suitable for our domestic stock and much more productive. But then as with numerous other species was this the right thing to do without making sure the species would be preserved in adequate reserves?

My other major problem at Glengower was getting the morning's Wood. More often than not the wood heap would be reduced to the status of a desert. This happened if Dad was too busy cropping or harvesting, or if he didn't feel motivated to get a load of wood. It was much more fun to go rabbiting or fox hunting. The axe was always lying there frightfully blunt, waiting for someone to cut something that wasn't there!

When the wood heap was bursting at the seams, this did happen on rare occasions, it was no trouble to get to get a few chips and other odds and ends - enough to start the fire

in the morning. But when the wood heap was empty ... on such occasions I would have to wander further afield. This was all right for a while but as the source of bark and twigs receded further and further from the house getting the kindling wood became more and more of a problem. At times the morning wood would be pretty skimpy, then a row if there was not enough to start the fire.

Some of the other kids had much the same problem as I, some had parents who were much more understanding. These kids didn't have to worry about such things as cows or firewood - how they were envied ...

I must digress here and tell a story that is somewhat related. Dad's family lived at various places but at this time were in Western Australia. Dad's oldest sister Nell came over to us with a girl friend for a holiday. Nell was a practical and very capable person. Harry was a neighbour and an eligible bachelor. To say that Harry was lazy would not be correct, but the affinity of Harry with work was never a comfortable one. He was never in a hurry, never got flustered and appeared to achieve all the goals in life to which he aspired.

Other farmers would be up before daylight feeding their horses and getting ready for the days' work and be ready to move off at sunrise. This could apply to cropping or plowing time but rarely at harvest time because the crop would mostly be damp from the overnight dew and this would have to dry out before harvesting could start.

On the other hand, Harry would be seen driving his team out to the paddock for the days' work at 9, 10 or even 11 o'clock in the morning. On shopping days in town Harry would dawdle around the town, and when the shops were about to close would see about getting his weekly stores and head for home well after dark in the winter time.

When Harry met Nell they clicked, and in six weeks were married.

Like Dad Harrys' affinity with the wood heap could not be described as friendly, in fact there seemed to be a simmering a hostility between the two. Nell battled along for a long time. Occasionally Harry would put a small donation of wood on the wood heap and Nell would have to take it from there. On very rare occasions he would chop some.

Then one day it happened ...!

There was no wood to keep the fire going after breakfast so it went out. Mid morning Nell got the leg of mutton out, got it ready and put it in the roasting dish, tucked the potatoes, onions and pumpkin around it and put it in the oven. When Harry came in for dinner the roast was taken from the oven, vegetables carefully put on a plate, the leg put on its serving dish and with carvers placed in front of Harry!!

In spite of this Harry and Nell had a long, happy and fruitful life. The names of the family will be mentioned here because some will be mentioned in a later chapter. Esther, Marjory, Colin, Allan, Max, Harry, and Margaret.

Another exciting event for us kids in the early days was when the Davies and the Curries would combine for a week-end fishing campout at the Yanco Creek.

The Yanco Creek is part of the natural drainage system of Riverina. It ran into the Billabong Creek, which flowed into the Edward River which ran into the Murray which flowed into Lake Alexandrina and then a short distance to the sea.

In the early days, like Pine Hills, a lovely place to be. Way out in never never country, home to countless fish, birds and other fauna, and all lived an almost undisturbed life as they had always done. It is the country where the wail of the Curlew proclaims a solitude that can be experienced nowhere else.

No words can describe the feeling of being part of this landscape, of camping under the myriads of stars ... of rolling into a bunk under this canopy ... and listening to the stillness ... an occasional call from a strange bird or animal ... Then the low wail of a Curlew ... another ... and another ... the wail of the corroboree begins almost softly at first ... builds to a final crescendo ... then silence ...

This landscape, like the Pine Hills landscape, does not exist anymore ... progress (?) has destroyed it.

For weekend trips to the Yanco Curries had a type of wagonette with a cover over it, and we had a buggy and a sizable tent. We used to leave early on a Saturday afternoon and arrive in time to set up camp before Sundown. It was about twenty miles.

It was always an exciting time for us kids, so many things to do and see, like getting in the parents way while they were setting up camp and getting a cuff under the ear. Wood had to be gathered, fire lit and bunks made.

Once camp had been set up the men went off to set their lines. There was never a shortage of fish, Murray Cod, Murray Perch, Redfin, Bream and Catfish. The men never got much sleep, they tended their lines for most of the night. It was always fish for breakfast and dinner next day with an ample supply to take home.

Breaking camp was always a sad time for me. The gleeful expectations of the previous morning, of going out into what, to me, was never never country for a camping trip where few people had been, of getting ready, things to take, things to leave, all the good things that went into the tucker boxes. Suddenly it was all over ... more school ... more cows ... more wood ...

Glenview

At the end of 1918 Dad's term at Glengower would expire. He looked around for another place but the only one available was a property three or four miles east of Echuca on the Terricks road. He took this, and on finishing cropping at Glengower took horses plows and other needed equipment down and plowed up about 200 acres for cropping the next season. Grandfather Davies [John Frederick - GD] was here at that time and he went down and drove one team. With two teams the area was completed more quickly. Mum and us kids followed Dad down two or three weeks later and I went to school at Whaparilla school, which was about a mile away.

Dad had almost finished plowing when he heard that Glenview was available. This property was on the Moonee Swamp road, the same road as Glengower but only seven

miles from Deni. Dad took it and moved the plant back to Glengower to take off the harvest and we moved to Glenview early in 1919. I suppose he got some compensation for the plowing he did at Echuca.

It was just before we left Echuca that the first war ended.

Glenview was similar country to the tin hut country with low sand hills running through it. In area it was only 420 acres, smaller than Glengower's 640. Only 100 acres had been cleared. The main paddock of about 280 acres carried a dense stand of timber - Murray pine, Bull Oak, 3 or 4 species of box trees, dense stands of needlewood on the sandy rises and many species of acacias. From a bird point of view it was almost as good as the Lease block. A few kangaroos and emus were left but were quite numerous on the station property at the back. Most of the box trees were on a box flat and had been rung [ring-barked] many years previously.

Glenview was never a viable proposition. There were not enough acres to make a living from wheat, and although some sheep were run as well it was still not enough.

The new farm meant a change of school, and for a time I rode horseback to school in Deni. It was seven miles. Frank started school about twelve months later, and Florrie not long after that. This meant that we drove horse and buggy to school until the end of 1920. It was a long drag, especially in the winter time. The last six miles into town was within the town boundary and the road was badly neglected. In winter it degenerated into a shocking condition, and often it would be just on dark when we got home, even though on request from Mum and Dad the teacher would let us out half an hour early.

With all the dead timber on the farm Dad decided to buy a house in town and start a wood yard. The house was set on about an acre of land so there was plenty of room. The wood was manually cut into five foot lengths on the farm and carted into town. Here he set up an engine and saw bench to cut it into the lengths required.

This meant the end of my long haul to school, and I finished schooldays at the end of 1922.

Dad also bought a chaff cutter and with the engine used to go round the neighbouring properties cutting chaff for the owners to feed their horse teams for the cropping season. He seemed to get by, but only just.

By the time I had left school a start had been made to clear the 280 acre block. As mentioned above this included the box flat with all the dead timber. A small amount had been taken for the wood yard, the rest was burnt! Anyone who has used red or Black box for firewood would know how much energy went up in smoke! Within about three years the block had been cleared and was growing wheat.

In 1924 a station property known as "Mundiwa" of 22,000 acres was subdivided into farm blocks and sold. Glenview fronted the Moonee Swamp road on the north while most of Mundiwa was on the south side and extended, in places, the four miles to the Finley Road. Dad bought a 300 acre block, the second one south from the Moonee Swamp road which meant that it was three quarters of a mile between Glenview and the new block but about three miles around the road.

This gave hope of a more viable farming proposition with wheat and sheep. The new property was called "Naringal" after the district near Warrnambool where Mum was born and grew up. There was very little timber on the new property and the soil graded from a sandy loam to heavy box flats. In a couple of years it had been cleared and plowed.

We lived in town until 1927. In the years 1922 - 1927 in the busy season Dad and I camped at Glenview all the week and stayed in town all the weekend, except when hunting, and in the off season drove out most days. In these years Dad's management troubled me. He seemed to be out cutting chaff for other people or sometimes doing other work in the busy season when he should have been home attending to his own work. Most of this work required me also, which meant that work at home was at a standstill.

At school I had played some cricket and football and before leaving had learned to swim. In the summer swimming was the main recreation until about 1930. The Deniliquin Swimming Club was formed in 1922 and from the beginning I took an active part in Club activities. I guess I was more of a tortoise than a hare in the water, but we had a lot of fun. In 1972 I went back to Deni to join in the 50th Anniversary celebrations of the Club.

From 1922 to 1927 winter sport was mostly hunting. There were plenty of rabbits and some foxes. Using Glenview as a base Frank and I, with horse and jinker, would go out for the day, mostly on the station property "Lindifferon" which came close to the back (North) boundary of Glenview. I had bought a single barrel shotgun and a Marlin 22 Cal. repeater rifle. For a while we had some ferrets. We would get from 30 to 60 rabbits. The price of skins was good so we earned good pocket money.

In the late 20s we had a district cricket competition made up of Clubs between Deni and Finley. I played in this for about three years until the competition broke up. I tried football for a couple of seasons but was not cut out for it. Frank was the footballer. He played with different Deni Clubs for many years. I joined a country Tennis Club near Glenview and played for a few years, then joined a Club in town. Probably progressed a bit past the tortoise stage!

We had a reasonably good year in 1926 so Dad decided to sell the house in town and build on the farm. But which farm? Mum would not go back to the sand on Glenview because it was too hot. From a management point of view Glenview would have been better. Naringal was settled for and a couple of chaps who said they could build a mud brick house were given the job. Mud brick was chosen because it was considered the cheapest. I wasn't greatly rapt in the idea because old time mud brick houses were a pretty rough affair.

The chaps started making the bricks early January 1927 and by early April we were able to move in. Not long after they started building they must have been a bit behind so they gave me a job. I stayed until the house was completed and by then they had another three houses to build in the surrounding area.

I stayed on right through and this brought us to harvest time, early December. We were able to lift the standard of mud brick houses considerably in that time. I had always been handy with tools and this experience proved to be most valuable in later years.

Back in 1919 Dad bought a small spot mill for sawing timber. There was plenty of Murray pine on the place for this purpose. Initially the idea was to add two rooms to the old house on Glenview. He cut the timber but even then found the cost was too great, and that was when the decision was made to move into town,

In the early 1920s Harry [Barker?] also bought a small spot mill, mainly to supplement farm income. There was still a lot of Murray pine around Glengower. Over the next few years Harry developed his mill into a very efficient unit. To a point Murray pine was good timber, it was white ant proof, which was essential in this country, but it was fairly hard and one had to be careful driving nails or it would split.

After harvest in 1926, with the prospect of building a house in the near future Dad got Harry to come to Glenview and set up his mill and cut about 300 logs. Most of these came from the section of the back paddock where clearing had been almost completed. This timber was almost enough to build the house on Naringal the next year.

After the 1927 harvest, early 1928, Harry had a lot of timber to cut around Glengower and asked if I would work on the mill. I went out and spent three months there. He taught me to bench (the actual cutting of the timber). As there was an enormous demand for tongue and grooved flooring he bought a planer which would do flooring, besides many other forms of mouldings. Again this experience proved to be of immense value in the years ahead.

By 1924 tractors were starting to intrude into the farming scene, and this began the great Tractors V Horses debate for farm work. Being young and with what I thought was a progressive mind at the time I was all for tractors. It was extremely difficult to convince the old timers of the advantages of mechanical farming. The greatest hurdle seemed to be the initial cost of the tractors, around 500 pounds. At the time that would go a long way towards buying a farm. Both Glenview and Naringal only cost 900 Pounds each!

The family of one of my school cronies, of Pine Hills days, had moved to Walliston, some miles west of Mathoura. In 1926 they bought a new 15/30 McCormick Deering tractor and I was invited down for a few days to see it working. Bernie, about my age, was the proud operator of the new machine. In my mind it was quickly promoted to the ultimate in sophisticated farming methods. I stayed for three days. It was heaven to go out in the morning, refuel, grease and check oil levels and get going! At least an extra hour in bed in the morning because there were no horses to feed and yoke up, switch it off at night and go home, no horses to unyoke and feed - it was something out of this world!

From Dad's point of view it was the wrong thing to go down and see Bernie's tractor working. From then on he had no peace until he bought me a tractor. Just before the 1927 harvest he bought me a small Fordson Tractor. It was only one third the cost of Bernie's and nowhere as sophisticated, but it was a long way ahead of the horses.

Dad never seemed to have any pride in farm husbandry methods or his plant. I am sure I must have had the scrubbiest team of horses in all Riverina, and he never gave much thought as to whether the machinery he bought would do the job he wanted it to do to the best advantage. Up to now and for some time to come I did not have the experience to question management. In 1924 he bought a new 8-foot McKay header, and to me it was

an outstanding piece of machinery and it was treated accordingly. It took off many harvests and finally died of old age!

In the early days of wheat growing, Teamsters, who had evolved in the wool industry, used to cart a fair percentage of farmers wheat to the various railheads in the area, Berrigan, Finley, Deni, Mathoura etc. It was done on a contract basis and, for those farmers who could afford to have a portion of their wheat carted, meant finishing up the harvest two or three weeks earlier. For those farmers unable to afford such carting it meant that after the harvest had been completed, there was still the long haul to get the wheat to the railhead, finishing up about the end of January or well into February in a wet season.

The teamsters usually had more horses and a bigger wagon than the farmers. The average team would be about 10 horses and the wagon would carry about 80 bags. Contract price was usually 1/6 [1 shilling and 6 pence] a bag from Pine Hills to Deni. An 80 bag trip would earn 6 pounds, and 18 pounds for the three trips in the week. One wonders how on earth they made ends meet! By the time they allowed maintenance on wagon and harness, feed for the horses, horse replacement, it seemed incredible that this could be done on 18 pounds a week!

The teamsters always seemed to have their big gun carriers, at this time it was a chap called Bill Henderson. He had an enormous wagon, by the standards of the day, and 14 horses! He would cart from 100 to 120 bags a trip. I remember one day when we were coming home from school, when we lived at Glenview, Bill was well and truly bogged on that treacherous piece of road out from Deni. When we came along there were about half a dozen wagons stopped near by. They had 39 horses hitched to Bill's wagon, but to no avail. Eventually they finished up unloading most of Bill's load on to the other wagons to get it out!

Then one of the Pine Hill farmers, with a sort of finger in the mouth approach, bought a Ford one ton truck to try it on wheat! He only put on 15 bags at a time, but he was doing six trips a day - Pine Hills to Deni! 180 bags in the time it took a carrier to cart 80! And so the movement of produce by truck took off.

It quickly became evident that the trays on the trucks were not long enough. A chap Dad knew pretty well had a carrying business in Deni, and his eldest son Irvine did most of the driving. One day he took the body off the truck, extended it, put a pair of wheels on the back, a turning plate on the back of the truck and a corresponding plate under the front of the tray and with a King pin pinned it to the back of the truck, and so the first semi-trailer was born, at least in our district. It was crude by today's standards, but it was a giant stride forward in road transport.

In mid 1927 Dad took on a neighbour's 640 acre farm on the shares. It was to be a start for me. I plowed up 300 acres for planting the next season. The 1927 harvest was lean, the 1928 harvest which included the 300 acres on the shares was worse, averaging just over two bags to the acre. By the time the owner took one third there was not enough left to pay expenses. With two poor years behind us it was reasonable to hope for a better harvest the next year. The whole 600 acres was planted plus 300 at home. Credit was stretched to the limit.

It was a disaster ... the crop averaged 1½ bags to the acre and was sold for 1/6 a bushel!

A young fellow's dreams were scattered to the four winds like a pack of cards in a hurricane ...

I don't know how we survived the next twelve months, but we did. The disaster was not only local but world wide! The whole economy of the Capitalist world had collapsed!

Our local Member of Parliament was an old family friend and made representations on behalf of Dad and many other farmers in the district to the Government. All were in the same trouble. Dad hung on to the two farms long enough to be given protection from creditors under a government moratorium which had been introduced to prevent the whole Rural economy from collapsing. All debts were consolidated by the Government and paid out at a discount. The financial management of these farms was placed in the hands of a local accountant.

An acceptable plan of farm management had to be worked out by each farmer and adhered to. All revenue had to be paid in to the Accountant and he paid all accounts. Any surplus was used to liquidate the debt. Reasonable living expenses were allowed together with a small amount of free money for personal use. Conditions were pretty tough, but for those willing to play the game it was a way back to solvency.

It took Dad ten years to clear the debt!

There was no room now for a young fellow in the new farm program. Dad was expected to cope with the activities involved in running the two farms, some sheep and a manageable area of wheat. Ironically, 1931 was a bumper year, but a static program did not allow advantage to be taken of it. Dad decided to milk half a dozen cows to generate some regular income. This required the erection of a dairy which had to be to a certain standard to comply with regulations. Mud brick was acceptable so it was no trouble to build.

In the early autumn of 1931 the Government gazetted an open season for possums to help the unemployed. I went to the Police station, applied for and got a licence. Skins were valuable. I spent just on four months of the 1931 winter walking the bush by night, skinning the possums in the early morning, sleeping the rest of the day. Up for tea and out again for another night.

I had a horse and there was a light spring cart at home which I used. My Marlin rifle proved to be a winner. I rounded up an old acetylene gas motor bike light and spent a bit of time adapting it to the job. It was a winner also. I spent some time in the vicinity of home but did not get many. Too many other chaps were doing the same thing. I had to get right away.

At the start I really only had the clothes I stood up in which included an old pair of boots, most unsuitable for night walking in that was to be the wettest Autumn and Winter for many years. Mum got me a new pair, and these were a big improvement. She would leave a log on the open fire and when I came home in the early hours of the morning I would stand the boots on the hob to dry out. Came out one morning soon after and one boot had slipped into the coals and the toe had burnt out!

I have faced many disasters both before and since, but never one where the heart sank so low as it did at the sight of that burnt out toe! Possessions had become very precious. I wore it for about a week. One can easily imagine the battering the old big toe took in walking the bush several hours in pitch darkness with head in the air looking for possums, wet grass up to the knees, with pools and in some places almost lakes of water everywhere ...

I would just have to approach the local storekeeper for some credit to buy (with hindsight what I should have done in the first place) a pair of rubber knee boots. He was most grave and explained that it was just not possible to allow any more credit. I didn't owe him anything, there was far too much on his books. I explained my position, that I had so many skins on hand but wanted more to sell them to better advantage. I could not say just when the boots would be paid for, except that it would certainly be when I sold my skins. Well ... I got the boots and was never more grateful for anything in my life. They were paid for in due course.

I asked Harry if I could come out to his place. Yes, you can camp in the men's hut. But Nell wouldn't let me batch. I was there for about ten days getting a few when an old mate wanted to join me.

We were there for a week or more when I decided to go out to my Yanco landscape. I rode out horseback because the country was too wet to drive. I left early afternoon and had quite a load with rifle, spotlight, rations and a piece of rope so the horse could get a feed.

I got 31 and have never seen so many possums in my life, either before or since, they seemed to be everywhere. I counted seven in one tree! This doesn't mean they were easy to get. Towards morning I made a fire and a bit of shelter against a tree and slept for a while. I decided to do the right thing and go around to the station, which was several miles out of my way and ask permission to come back. The answer was NO!

Had I not gone to the station I could have poached for a few nights, and may never have been found out. Having gone to the station I couldn't go back.

We moved to various places in the outback country and when we sold our skins at the end of the season we averaged 4 Pounds a week each.

Tough as conditions were I was never hungry. This was not the case in Deni. For a time conditions were really bad. A canteen was set up and was well patronised. The depression saw the beginning of wages tax and the Dole, called Social Service payments these days.

To relieve the situation the Government started the construction of the Stevens Weir about 16 miles downstream from Deni on the Edward River. It was the first major construction work for the Wakool Irrigation project, for which there had been much agitation in recent years. The manual workers were paid sustenance wage of 30/- per week. I am not sure if it was one week on and one week off or two weeks each way, time worked was certainly on such a basis

It was ironical that, at the time, there was plenty of work to be done, plenty of workers to do the work and produce the necessary materials, there was plenty of food in the country. The only item missing was money - an artificial commodity!!

I will never forget the way people were sucked unnecessarily into the maw of that depression.

By the time the possum season was over a neighbour was waiting to have a dairy built, then another, and another; I built about six. Wages were two pounds ten shillings per week and keep [food and shelter]. A dairy was built in four weeks. Each was 8' by 10' by 10' walls. Concrete floor, ceiling, separator block, work bench etc., and neatly finished inside and out.

The last one was for a farmer some miles south of Deni. The dairy was built in January, and when nearly finished the farmer asked if I would paint the house outside, and when that was near finished wondered if I would stay for the cropping which had just started.

He could only pay 35/- per week and keep, wasn't much but at least I was doing something and being fed. I was driving 14 horses, 7 and 7 tandem, and another chap was driving 16, 8 and 8 tandem. We put in about 700 acres of mostly wheat and some oats. When cropping was finished he asked if I would come back for the harvest, and then I stayed for the next cropping.

An old school mate, Dick Martin, who had a property over near Swan Hill came over to see if I would build him a mud brick house. "Heavens I couldn't build a house!" "Course you can" "OK if you are game to take the risk, I am game to try" Wages three pounds ten per week and keep. Keep was bachelors keep but there was plenty to eat. Dick had the bricks made.

I started building early January 1934 with Dick labouring for me. On more than one occasion the temperature reached 114 [46°C], but we just kept going! I did the Bricklaying, Carpentery, Plumbing, Plastering, Painting - the whole works in 14 weeks. A two bedroom house, Lounge, Dining room and facilities, with 8' verandah right around! My wages came to 49 pounds!!

When I got back home a neighbour was waiting for a house to be built. From then on I built Mud Brick and Cement Brick houses until the end of 1938. Sometimes a few weeks between jobs. The finish on Mud houses was taken a long way. The walls could be set as smooth as a plaster set wall, and could be textured as well, a finish that was popular at that time. There was nothing to be made out of building, money was scarce and competition fierce, but I did drag myself through the hungry 30s. In 1936 I built a big cement brick house for Harry and Nell; it took a whole year.

If any gain was made in those years it was in experience, there was certainly no monetary gain.

Late 1938 I went back to the farm to wait for the water.

In the mid-1920s agitation for irrigation water began in the farming community. The Murrumbidgee Irrigation Scheme had been going for some time, with water coming from the Burrinjuck Dam on the Murrumbidgee River. This scheme appeared to be giving good results at the time, mainly from Horticultural crops. Some water had been made available for Rice, and a wheat crop usually followed. Both giving excellent results.

The Hume dam had been started, and with a series of dry seasons pressure for water from the farming community in the Murray Valley was mounting. In our district the plea was "If we could only get enough water to grow 30 or 40 acres of lucerne it would give us some drought insurance". The Political clout of the farming community was considerable and Governments were sympathetic. The result was that several grandiose schemes were planned. At the time salting problems were evident in the Kerang-Cohuna area on the Victorian side of the Murray. This scheme had been in operation for a number of years, water coming from the Torrumbery Weir down stream from Echuca.

There is no doubt the schemes on the NSW side of the border were established with undue haste, and it is obvious that the problems now surfacing, which were evident in the Kerang-Cohuna system at the time, could have been eliminated with proper planning. If the various schemes had been constrained to the capacity of the environment, the water tables, and the Red Gum forests along the Murray and its tributaries then the schemes themselves and the industries they support would have been in better condition than is evident at the present time.

The Murray was dammed at Yarrawonga to raise the water high enough to divert it into the Mulwala Canal for irrigation schemes on the N.S.W. side of the border, and for a similar canal on the Victorian side for that State to use its share of the water. It should be noted that prior to this time agreement had been reached between the N.S.W., Victorian, South Australian and Federal Governments on sharing the waters of the Murray and its tributaries.

The first scheme, the Berriquin, on the N.S.W. side took in all the land from near Berrigan to Deni. If the plans for this scheme were not on the drawing board at the depth of the depression they were very close. As Dad's two farms were within this scheme the importance of holding them was clearly evident. From results of irrigation in other districts Dad could expect a new and hopefully more profitable era from his farming project. With the prospect of irrigation coming there would be scope for extra help.

Frank [Dad's younger brother] was never particularly interested in the farms. When he left school he worked on the farm on an on-and-off basis for two or three years and then gradually established himself in the Mathoura District just working around. He did a fair amount of building also. On occasions he worked for me and on occasions I worked for him.

In 1938 it was decided he would go back to the farm and wait for the water, which was now expected some time in 1940. Dad had got to the stage of needing help, providing it did not cost too much, because he was still paying out depression debts, but was progressing quite well. Frank stayed only a few months, did not get on well with Dad and this left the way open for me.

By this time I had a wife and two year old daughter. We went back and lived in a small house on a neighbour's property close to Naringal home. I was to get 2 pounds a week until the water came and the other arrangements would be made. We worked out that we could live on two pounds but there would be nothing to spare. In addition to this we got milk, butter, eggs and meat from home. When time permitted I was able to get jobs away from home to supplement income.

It may be of interest to note the weather in the first two weeks in January 1939. In the first week the temperature was never below 100 and averaged 107 [42°C]. The next week the average was 111 with the top at 116 [47°C]. The events of that second week are now a black page in Victoria's history.

During that hot spell I started to build a mud brick house of three rooms on Glenview. By working on and off according to seasonal work on the farm we were able to move in before Xmas. Still no indication when the water would arrive. 1941 was a good year. We had put in 200 acres of wheat and it averaged 8 bags to the acre. The old header, which had been new in 1924, with the addition of a few new spare parts never missed a beat, and I had the harvest finished in three weeks. By contrast our Naringal neighbour, who had a similar header had no end of trouble and was not even half way, so I went over with header and team and helped him finish.

It had been decided when the water came the main line of production would be dairying. To this end Dad had been increasing the small Naringal herd. Since depression days a small number had always been milked.

1941 saw the last of the depression debts paid out. It also saw the water at the boundary of Glenview. When the Japs bombed Darwin all work stopped on the irrigation scheme overnight. All plant disappeared, and we did not know for some time it had gone to Tocumwal to build a big aerodrome to handle the big B52 [?] bombers. We did not get water at Naringal until after the war.

From early discussions on ways of setting out the irrigation it seemed that there would be disagreement. Much of the work in preparing the land would be manual involving horses and plant. It was clear there would not be enough money for other essentials to get the dairy project under way. On work involving little capital expenditure Dad wanted to take short cuts and I wouldn't hear of it. He had always used short cut methods and I believed this was why he had not done as well in the early days as he should have done.

We scooped a channel from the water wheel on the boundary, round the contour of a sand hill, across a box flat through a small sand rise and into a dam near the house, where a windmill and supply tank was erected. This gave us permanent fresh water for the cow bails and dairy and for home and garden. I made the cow bails in one unit with cement bricks. There was plenty of suitable gravel on the place. I got the old saw bench going, cut down a few logs and cut enough timber for the roof and other sections of the building. I had just finished laying bricks for the bail section and had stopped work for the day; did not take the precaution of strutting it, and a sudden squall about an hour later flattened it!! For a builder to do something like that was unforgivable. It took two or three days to rebuild it.

Eventually the dairy unit was finished, the yard built, the milking unit installed, and a few acres of pasture laid out and growing. I engaged a Land Army girl, Val, to do the milking while I attended to the irrigation. There was still a lot of work to be done before there would be enough feed for the cows. Dad had bought a dozen Illawarra short horn heifers from the south coast of N.S.W., the milkers from Naringal were brought over and we were in the business of dairying. The idea was to sell cream, run a few pigs as a side

line to use surplus milk, and as we were still growing some wheat this could also be used as feed.

In the spring I laid out 30 acres for lucerne and sowed it. It was just two or three inches high and doing well when the grass hoppers came and ate the lot. It had to be resown the next autumn. The hoppers cleaned out everything, including the house garden. Walking anywhere in the paddocks, whether in green grass or dry, was like walking through a thick fog; visibility was down to a few yards!

The final upset with Dad came when I wanted him to borrow 600 pounds from the Bank to buy a mower, hay bailer and hay rake. While he conceded they were needed he thought I could make shift for a while longer; mainly he didn't want to borrow any more money from the Bank after the experience of the depression years. To a point this was understandable, but the farm now was a vastly different proposition to what it was back in depression days. If the dairy project was to survive it was vital to have an ample supply of feed for the cows, both for immediate needs and for reserve.

It was no problem to get the money from the Bank, they were just as anxious as I to see the farm revitalised after the depressing years of the 30s. Finally the loan was OKd and Dad left me to it. He got a job in Melbourne and was away for about three years.

My head and my credibility were on the chopping block. The next few years together with two or three of the worst years of the depression are years I would like to forget, but they won't go away ...

I made one resolution when the dairy project was started: there would be a holiday every year. It was never broken.

Dad was still doing a lot of work when he left. That work still had to be done ... somehow. I had not been going long when the C.O. of the recently established Air Training School in Deni came out looking for fresh milk for the School. This would be a much better proposition than cream and pigs. The Air Force came out for their milk once a day, and towards the end twice a day. This relieved us of delivery worries. To cope with this I had to lay out more irrigation to get green feed through the summer to keep up a year round milk supply.

By the time the 1944-45 drought arrived the dairy project was well established. I had 150 acres of irrigation laid out and there was plenty of water. It was one of our best years. The Government paid a good subsidy on milk production during the drought and this also helped.

Frank had decided earlier to enlist in the Air Force and when we talked about it he pointed out that he was still single and was the obvious one to go. I thought this was very fair. He did well and quickly rose to Officer rank. I had tried earlier to enlist but was told to stay where I was. After the Japs bombed Darwin, Volunteer Defence Corps were formed around the country. I joined the one in our area and we spent a lot of time learning the arts of war, mostly at weekends and nights. The threat at one stage was very real.

By late 1944 my horse team was getting old and becoming in efficient. I applied to the Department of Supply for a medium sized tractor. They accepted my application and,

surprisingly, I had the tractor within three months and this took an enormous amount of drudgery out of the work.

One day, in 1945, Ted [Pitman?], our Naringal neighbour, was driving the tractor for me on Naringal. It had been blowing almost a gale from the NW all day and visibility was down to a quarter of a mile. I rode the bike over to see how he was going. I caught up with him and we were talking, he on the tractor seat and I leaning on the mudguard. We talked for a while and the wind suddenly chopped around to the SW. Within a minute or two we were enveloped in a dense cloud of dust. I could not see Ted's face which was no more than three feet away!! We talked a while longer and it eased off a bit, so I headed for the house about 30 chains away and got lost! When I came to a fence I was about 45 degrees out! On another occasion driving home from Naringal I was caught in a similar cloud. I was driving horse and jinker and was on top of the formation; couldn't see where I was going. It was only the contour of the formation that kept me straight! When I got home I could just see the light in the kitchen, and when inside the kitchen was still hazy with dust.

One of the early problems with the cows was bloat. This was something I didn't know about and hadn't allowed for. Shortly after setting out the first small area of irrigation I went over to a neighbour to see how he was going, he had almost a year's start on me. He had a small paddock of subterranean clover, magnificent, it was about a foot high. Certainly something to follow! The clover and lucerne I planted never had the chance to grow that high, but it was enough to kill an odd cow. When the first one died the Vet very quickly told me the cause. This meant that cows had to be grazed very carefully on clover-dominant pastures or lucerne. At times they could only be given 15 or 20 minutes in a paddock and then taken out. If a blown cow could be found in time she could be saved, but one had to be quick. When a blown cow was saved milk production dropped dramatically and did not pick up for a long time.

One evening towards dark, I went down the paddock to check the water and make sure the cows had gone into the right paddock after milking, and found they had broken down a gate and were in the next paddock of lush clover. I got them home at the double, and by this time it was dark, treated a couple, and in that time six more were dead!! That made a big dent in the milk supply. I bought another couple and replaced the others over the next twelve months.

On one occasion I had a paddock of lush clover and couldn't get the cows on to it. Ted was short of feed at the time so I got him to bring his horses over and put them in. Ted was happy, the horses were happy and so was I because they knocked the lushness off the clover and the cows were able to go in. Incidentally horses do not get bloat, it only effects animals that chew their cud.

For a long time I believed that fowls had a place on the farm on a semi-commercial basis, especially where cereals were grown. So, along with the establishment of the dairy project a start was made to build up a flock of 400 or 500, and this number was maintained until we sold out. I reasoned that fowls should be able to pay household accounts and provide a bit of pocket money without having to dip into the main source of revenue.

The idea worked quite well, especially as most of the feed was grown on the farm. However there were problems. Like the time when a fox got into a pen of young pullets and knocked off about 70, or the Saturday we went to town to do the shopping; had lunch in the Park and dawdled for a couple of hours. It was pretty hot, but didn't think it unduly so but when we got home it had been 120! There was a dive for the fowl pens and 160 dead ones were picked up!! Another time 400 day old chicks arrived and a couple of days later I went to bed with the measles and hardly did a thing for six weeks! My advice to all kids now is to get the measles when you are young, and don't wait until half way through life. It was the most uncomfortable illness I have ever had. How Molly and Val coped with the cows, the fowls, the chickens and a young family I will never know, but they did.

Shortly after the war ended Val left to get married, and then began another period of turmoil - trying to get satisfactory labor to milk the cows. After about eighteen months things settled down again. I got a young chap from Gippsland who was very reliable, and then a bit later on another chap, Bob, who wanted to learn dairy farming under a Government sponsored scheme.

The irrigation part of the project was a full time job; setting out the land and sowing it down, watering every 10 days in the summer time, new fencing and then maintenance, fodder to be conserved and so on.

After the war, work on the irrigation scheme resumed and it wasn't long before water was at Naringal. Something had to be done there to make it earn its keep, so 150 acres were laid out and sown down. There were times when water was going on at both places at the same time, almost a 24 hour a day job.

After about three years Dad came back from Melbourne and lived at Naringal. He seemed quite satisfied at the way things had gone. Sometime after the war Frank was discharged from the Air Force and he took over Naringal. He had married just before leaving for overseas.

Not long after this, and after a family pow wow, the freehold of Naringal was transferred to Frank and the freehold of Glenview was transferred to me, and between us we built Mum and Dad a home in town.

About the end of 1948 I decided to sell the cows and try fat lambs. Suitable help to milk the cows seemed to be a recurring problem. It was too much to do the lot myself. Strangely, Dad was in agreement with this move.

At the end of 1950 it was decided to sell the place and move somewhere where the rainfall was better and more reliable. The usual problems with irrigation were beginning to surface. For example: far too much water had to be used to keep the place viable, and although there had been plenty of water to date shortages were looming ahead. Drainage was a problem; surplus water had to be drained into a box flat, a practice conducive to salting. The prospect of adding acres to Glenview from adjoining properties was not good.

We looked around for about twelve months and finally settled for Portland, and arrived a few days before Xmas 1951.

Reflections on irrigation

It is interesting to reflect on irrigation in the Murray Valley since that time.

Before we left Deni water had been taken under the Edward River to the Denimein and Deniboota schemes, west and south west of Deni. This meant that water was being used on an ever increasing scale, but there was only one Hume Dam. Since then the Eildon and Dartmouth dams have been built. This did give more water at the expense of the environment, but it had to be shared between two States. As I see it now, flood irrigation has overused and wasted a large percentage of water from the Murray Valley catchment. In addition, bad management in the Victorian alps have further reduced the flow which should be coming from that source. Cattle grazing, excess burning, clear felling for both timber and wood chips are downgrading the amount of water which should be available. The time has already arrived when concern is being expressed about a possible shortage of water even for human consumption in the State. Further information on this aspect of water will be given in a later chapter.

On the N.S.W. side of the border, where in the late 20s farmers who only wanted enough water to irrigate 30 or 40 acres of lucerne to provide a fodder reserve for drought, plowed almost the whole of their farms when water became available and set them out for irrigation! There was plenty of water. When the war finished water was rushed under the Edward River for further schemes as mentioned earlier. Much of this country is incapable of using the vast amounts of water poured onto it. It very quickly brought the salt to the surface in many places. Water was made available to grow vast acreages of rice for export, and a few years ago I was staggered to find potatoes growing on Glenview! Another vast irrigation scheme, the Coleambally, was set up on the south side of the Murrumbidgee, between Darlington point and Jerilderie. The huge water tap has been turned on, and because of the political clout these farmers possess no politician has been game to turn it off. The ironical part of all this is that about two thirds of this water is wasted. More on this aspect later.

Because of accumulating amounts of saline water flowing into the Murray as it passes the various irrigation areas and reduced water flow because of excessive irrigation the lower reaches of the Murray are almost a salt drain. This is creating problems for South Australia because this State, more than N.S.W. and Victoria, depends on the Murray for its stock and domestic water supply. Meanwhile people upstream in Victoria and N.S.W. are pouring water on thousands of acres to grow food and fibre for overseas people who are well able to look after themselves, and in most countries are over-producing their own food. Uncertain markets for our surplus food is proof of this. We only have one environment and if we destroy it we will destroy ourselves.

The great Red Gum forests along the Murray are being down graded because of insufficient water, and with the Gums go the whole delicate environment, which has taken nature thousands of years to build; the birds, the animals, the micro flora without which nothing can exist are all being downgraded. The River Gums have provided us with a valuable timber industry in the past and could continue to do so if the whole environment was properly managed. To preserve the environment we need to balance the ledger, we

can't take one item out and expect it to stay balanced, it gradually becomes lopsided and will eventually die.

In the farming areas the farmers destroyed the trees which send their roots deep down into the soil and keeps the salt pan at bay, trees which transpire enormous quantities of water into the atmosphere to fall to earth as rain, trees which absorb carbon dioxide and release oxygen, trees which house the birds which feed on the insects which attack the farmers crops. Trees which keep his stock warm in winter and cool in summer. They drained the swamps which house other birds which in turn kept other insect pests at bay. My experience with flood irrigation convinced me that this type of irrigation was wasteful of water and wasteful of land. It is an extremely expensive way to produce food and fibre for both human and animal wellbeing. The only exception would be rice for our own use. Even this, when weighed against the cost of water and land use and the cost of nutrients returned is borderline.

We have grown up with a wool, wheat and dairying mentality - monocultures, which are slowly destroying our environment. We need to diversify our crops, we need to gradually curtail flood irrigation and substitute spray irrigation on more intensive crops which will give us maximum food value for a minimum expenditure of water and land.

Our continent is the driest on the planet. Foolhardy use of water will end in disaster.

The land in the Murray Darling basin was an old seabed on more than one occasion. In places they left extensive gravel deposits. These deposits have been used extensively for road work and concrete work. The irrigation channels were put through these beds without sealing. When the water was turned in, each deposit had to fill before the water moved on. One such gravel pit from which large quantities were used for road work is in a neighbour's paddock close to the Glenview boundary. There is no channel near it but it now contains three or four feet of water!!

With all these cavities full less than 50% of water released into the system is paid for, the rest goes in evaporation and seepage. The water rate which I paid did not pay the cost of maintenance on the channel systems let alone the capital cost of putting them in, or the capital cost of the main dams!

The early settlers in this country developed a strange quirk that they had to produce vast amounts of food and fibre for the "Old Country". That attitude is still with us! It is time we got a bit of common sense into the management of our environment and forgot about these nonsensical attitudes.

The solution to the environmental problems in the Murray Valley irrigation areas is a piped water supply applied by sprays to a more intensive culture system. Economists would be horrified at the cost, but as mentioned before the real cost would be in labor and materials, and we have plenty of both. The missing item is money, an artificial commodity which should present no problem to a Federal Government concerned with the long term environmental management of this continent!

2. Life on the Farm - Portland

By the time I had returned to the farm in 1938 the importance of the environment to the life and survival of all creatures, including human beings, was beginning to surface, and by 1943 this was one of the factors to be taken into account when management was taken over.

By this time, after working around the country for over a decade, and gradually becoming conscious of the battering the original environment and its creatures had taken, there was a very great urge to go back and see my Lease block, but the landscape I knew wasn't there anymore, it had been sub-divided, cleared and was now growing wheat! The Yanco landscape was still there, but it too was to disappear shortly, when water from a Berriquin extension was taken into that country.

A 140-acre paddock on Glenview had still not been cleared and carried a lot of timber, both green and dry. This paddock was never cleared in my time. It had provided most of the timber for the three room house and for the cowshed and dairy. There was a lot of dry timber on the ground, this was not burned as previously, but provided wood for the house and for the small boiler in the dairy. When and as need for new fencing arose permission was obtained from the local Forest Officer to get Red Gum posts from Crown land along the Edward River. Very little of the timber potential of these areas had been used up to this time, so there was plenty. The Glenview paddock was gradually cleaned up and no more green trees were taken out.

Incidentally, we still have ties in Deni and when up that way we usually drive past the old place. Last time we drove down the lane on the west side, most of the trees which had been nurtured for so long had been bulldozed out!!! The place now has its third owner since we left. The present owner also owns the adjoining place across the road and has done so for a number of years. Not only had the trees been bulldozed out but bad farming practices on the place across the road, in the 1982-83 drought, had allowed the topsoil to drift and almost covered both fences. There was evidence that the Shire Council had been there with trucks and had cleared massive amounts of drift sand to get the road open again.

When we first went to Glenview there was a dense stand of Hop bushes on the main sand hill, not far in from the Moonee Swamp Road. These were cleared off at the time and the hill was used to grow cereals, mostly oats, for many years. In dry seasons there was some drift but nothing serious. By 1939 the hill had not been cropped for some years and the Hop bushes were coming back. They were allowed to grow, and although not a lot of grass grew between the bushes, they did provide excellent shelter for stock. When the decision was made to sell Glenview it realised the highest price per acre of any land sold in the area.

The environment would be well to the fore in selecting a new farm. It had to have at least a 20 inch rainfall average and be more reliable than that at Glenview. The irrigation work had been a drudge, at least up to the time the cows were sold. We took our time, had a good look around southern N.S.W. but nearer to the divide. A place about 22 miles east

of Holbrook appealed and had good potential but Holbrook was the nearest school and the road was bad.

We had a good look around the Western district but land prices were too high, and the country was too open - it had all been cleared! We came on to Portland to stay one night and found the place we eventually bought.

It was a 364 acre property, almost two farms by the standards in the area. Only six miles from Portland and a rainfall of 32 inches! There were two distinct soil types - a 200 acre heath block and 164 acres of old dune limestone country. All the improvements on the place would have to be written off, house sheds and fencing. It was the sort of place I was looking for, something to improve to my own standards.

Getting established

Nearly half the heath block had been cleared and was obviously poverty stricken, but it might give some return for two or three years until more could be cleared and brought into production. Being heath country it was wet, but inquiries showed that spring growth carried well into December, even January. The ridges were dry, so the two soil types would give summer and winter country.

The ridge country was made up of six small blocks and there was Crown land on the south and west sides. This meant that there was a possibility of adding further acreage at a later date.

The new Portland harbour was just about to get under way. This must help the district along. Before leaving Portland next morning I walked to the end of the station pier and watched a sizeable ship turn in off the shipping lane and within an hour it had parked itself alongside the pier without any help and was ready to discharge or take on cargo. This situation was immediately contrasted with Melbourne where tugs would have been fussing around from the time the ship entered the Heads until it had berthed. I thought the new harbour must give Portland a cost advantage over Melbourne. In my innocence I hadn't reckoned with the powers that control shipping and commerce!

The heathland had always been problem country and for this reason many farmers worked at Borthwicks [abattoir] or on the boats when they were in Port. This meant that the farm was only of secondary consideration so that improvements and production were slow to make headway. The main grass on the heathland was Fog grass, and the main clover Boyds, with some Lotus Major, the poorest pasture types one could get. Add to this a liberal growth of flat weeds and sorrel and the pasture picture was complete.

On the place we bought I looked for white clover and found a few plants. Strawberry Clover was nonexistent where surely it must grow. I looked for millable timber on the ridges - nothing.

Copper deficiency in the heathland soils had been finally confirmed in the late 40s. In places other trace elements were missing but copper was the main one. A check was made with the Department of Agriculture which showed copper to be the main missing link.

Also, large amounts of superphosphate were needed to promote the growth of clover which in turn was a good base to build a pasture and thus fertility

The chap on the place was dairying and growing potatoes. He was a soldier settler and was obviously under-capitalised and the Government had not seen that he had reasonable equipment to manage the place. For potato work he had a three furrow plow, three horses and an old set of harrows. Planting was primitive – a bag slung over his back. One run with the plow and then walk the furrow dropping the sets in place. Another run with the plow which covered the row just planted and made the furrow for the next row, and so on.

The dairy, cowshed and yard were most primitive also. No way would the Dairy inspector at Deniliquin have passed them as suitable. It became evident later that such conditions were widespread in this corner of the State! This was surprising because Victoria was always considered a leader in the dairy industry.

Potatoes didn't seem to yield as much as could be expected from the soil type, which was sandy, and the rainfall. Experimental fertiliser trials for this crop were being conducted on a nearby property, and some trials were already promising. Two or three years later at the end of the trials a major potash deficiency in the soil was confirmed.

When I asked the owner how much fertiliser he put on the pastures each year he looked me straight in the eye and said "A bag to the acre". I doubt if the cleared land had had a bag to the acre in its whole life, except that used for potatoes, and potatoes did not leave any residue in those days.

From the above information, who in the world would want to buy such a rundown, poverty stricken farm? Only me. I bought it!

From an assessment of the potential of the place it seemed that in the long term it should have a carrying capacity equal to the irrigation country I had left. This was estimated at five or six years. (In actual fact it took 15). Better husbandry methods must lift production at least 50%. (In fact as this is being re-typed in 1992 production has increased many times, exceeding that of Glenview by far).

A house was purchased in town and when the boys had finished school we would build a home on the farm and move out. We moved from Deni to Portland a few days before Xmas 1951.

When I took possession there was a massive crop of Boyds Clover on the cleared land. It had been identified to me as Lotus Major and that a market existed for the seed. An excellent crop of White Clover had been left behind on Glenview and it seemed that an Allcrop Header would pay for itself in one season.

The new owner of Glenview offered a half share in the white clover, so a machine was purchased. It was delivered to Deni and the new owner, Allan, harvested the white clover and brought the Machine to Portland on his truck. A lot of the so called Lotus Major was harvested but there was some trouble in selling it. Too late the real identity of the seed was discovered. More was learned about Lotus Major and it was not much better than the Boyds for a pasture plant!

When possession of the new place was taken the outgoing owner had planted 15 acres of potatoes, and arrangements were made to take over this crop. It would provide some income within weeks. When the time came to harvest or dig the crop, it was amazing to find the neighbours turning their crops out by hand with a digging fork; in one case about 30 acres! There didn't seem to be any mechanical way of digging the crop. After a pretty thorough search of the district a most primitive digger was found and tried, but it was almost useless. I finished up getting men to dig the crop.

During the winter, a trip was made to Beech Forest, one of Victoria's main potato growing areas, to see how more progressive farmers managed their crop. They were little better than Cashmore, where I was. There were one or two small diggers which put the potatoes on top of the ground and from there they had to be put into bags by hand. There were also one or two automatic planters. Needless to say, after being associated with a rather progressive wheat growing industry there was some disappointment at the primitive state of the potato industry. Incidentally, it is only in the last few years that potato harvesters have reached a reasonable degree of proficiency.

After coming home from Beech Forest it was decided to go to the next Melbourne show to find out just what potato machinery was available. In the whole showground there was just one very small potato digger, and it was hidden away in a back corner! By the time the next harvest came around a small digger was purchased. At least it put the potatoes on top of the ground even if they had to be bagged by hand.

When the time came to plow the land for the next crop the plow turned the soil over in one continuous sod from one end of the paddock to the other. The soil was completely sod bound, mostly with Fog grass roots! There was some trouble working it down to a suitable seed bed. I had a one way disc cultivator which was very good up north but of little use here. By going over the ground two or three times a pretty rough seed bed was produced. A small fertiliser dispenser was found and set up on the plow together with a hopper and chute which held about a bag of seed. This meant that the crop could be planted sitting on the plow.

Potato marketing the first two seasons was through the wartime Potato Marketing Board. This gave a stable price. If there was a glut of potatoes they were accepted on a *pro rata* basis. The price was fixed at around 30 pounds per ton. In the 1954 season the Board was abolished and the bottom fell out of the market. The last few tons were sold for 6 pounds a ton. A further lot could have been sold at 4 pounds per ton. I wouldn't accept it and finished up dumping about one third of the crop! That put a real damper on developing the farm and for the next two years it was a matter of holding the fort and waiting for a break.

With the header in the shed some seed crops were tried, Field Peas, Red Clover, and Ryegrass. These crops yielded reasonably well but due to the late seasonal nature of the country little harvesting could be dome before March. By that time there were heavy dews at night which took most of the next morning to dry out enough to start the header. This left only two to four hours in the day for satisfactory harvesting. Some farmers off the heathland were growing cereal crops, Barley, Oats, Peas, etc. These crops matured late

December, January, so there was some contract harvesting with the header which helped out.

1955 was a reasonable year, 1956 and 1957 were good years so a real start was made to get the place on a better footing. In 1956 a six foot rotary hoe was purchased. This revolutionised seed bed preparation. When this crop was ready to dig one of the first potato harvesters was also purchased. The harvester dug the potatoes, lifted them onto a cross elevator where they could be sorted and diverted into bags. Certainly a revolution compared with a fork

Meanwhile the Department of Agriculture had put in three lots of experimental pasture plots. These gave a good guide on the best way to establish pastures. It was quickly discovered that the poverty stricken soil needed at least half a ton of Super [superphosphate] to the acre and some Potash before reasonable results could be expected. Capital was still scarce so this slowed the process of building soil fertility. But now, we knew how to go about it.

From the fertiliser trials on the neighbours place the recommendation for the potato crop was half a ton to the acre of a 3-1-2 mixture, in other words, 3 parts superphosphate, 1 Part Ammonia, and 2 parts Potash. With this amount of fertiliser going into the ground, a small residue was left which helped to establish the following pasture. In addition at least a bag of Super, 7 pounds of copper sulphate and some Potash, but the latter was not needed every year. A pasture mixture of 5lbs of perennial Ryegrass, 5lbs Short rotation Ryegrass, 2lbs White clover, and 2lbs Strawbwrry Clover. With this knowledge it was only a matter of a few more years when the stock carrying capacity was equal to that we had left behind at Glenview. Over the years the fertility of the soil is still building up. For some years now when Michael sells his first draught of vealers, more often than not they top the market.

Neighbours were quick to use the information gained from the Department's early pasture trials. Today, the best of Cashmore heathland has a stock carrying capacity equal to any land anywhere in the State.

In resowing pasture following potatoes, which are only grown in the same ground once every four years, the seed mixture has remained basically the same. Some Subterranean clover is included where there are dry banks in a paddock.

Where paddocks are closed up for hay in the spring yield varies from two to three tons per acre. With the establishment of better pasture species and a heavy stocking rate the poverty species of Fog grass, Lotus Major and Boyds Clover have almost disappeared. They cannot compete.

The soil structure has changed dramatically. Where, in the early days, in the heavier patches of soil it would stick to and build up on the mouldboards of the plow and have to be cleaned every so often, now with much more humus in the soil the mouldboards remain clean. It is fascinating now to watch Michael plowing. He plows about 8 inches deep and as the sod turns over it almost crumples up. Twice over with the rotary hoe leaves a perfect seed bed, so essential for mechanical harvesting. The new soil supports a large worm population.

When the farm was taken over clearing had been on a patchwork basis, bits and pieces all over the place! Fencing was even worse, and worse still it would not hold stock. The first job was to lay out, on paper, an orderly arrangements of paddocks. Once this was done and transferred onto the ground, clearing and fencing could start. For a while sheep were considered, in fact a few lots of lambs were fattened and turned off, but the ground in the winter time was considered to be much too wet and conducive to foot troubles in sheep. Beef cattle were considered to be a better proposition.

When the subdivision was laid out it was found that three or four clumps of trees which had been cleared around were in the middle of new paddocks. They had to be removed. The new paddocks were 10 to 15 acres.

It was found that good stock water could be had by digging down nine feet and putting in concrete well rings. Three wells were put down with a small centrifugal pump on each. Five circular 1000 gallon concrete troughs were constructed and placed so that two of the wells each watered four paddocks. Water levels in the wells varied, coming to the surface in winter and dropping down five or six feet in summer.

When a start was made to clear the rest of the heath block, shelter strips of vegetation about one chain wide were left on the north-south fence lines. Some strips were left on the east west lines but it was found later that these served no useful purpose as most wind was NW to SW. In one place a clump was left in a corner. This provided additional shelter without interfering greatly with cultivation. In another place 3 or 4 acres of the original heath was left and fenced off.

With the benefit of hindsight, better and quicker results would have been obtained if new land had been cleared and used in the first place instead of using the poverty stricken land that had been cleared.

Lack of fencing did not allow the purchase of stock until this had been rectified. Bits of old fencing were repaired, but in the main all fencing had to be new.

Stock at the beginning had to be a fattening proposition, lambs as mentioned earlier and young beef. The cattle were bought as weaners 10 or 12 months old. This worked all right until late 1960 when 45 weaners were bought. The price of cattle at the time was high, but within three months the bottom had fallen out of the market. They were held for twelve months and sold for no more than had been paid for them.

What should have been done in the first place was done now, 45 breeding cows were purchased as the basis for a commercial herd. We would breed our own weaners. This has been the pattern to the present time. Except for bulls, no more outside cattle have been bought. Expansion of the herd and replacements have all been bred on the place.

One aspect of the fattening proposition soon became apparent – no matter how good our vealers may be, and we have topped the market on numerous occasions and are never below the top few pens, they don't fatten as well as they did on Glenview. Stock here lack "Bloom" - I can't describe this except to say that stock on Glenview had a more noticeable pattern of sleekness, whether it be lambs or vealers. This applies to the whole area in this part of the State. It may be the extra sunshine, or maybe the extra rainfall here leaches vital nutrients out of the soil. It would be interesting to know the answer.

(This paper was first written in 1984, it is now being edited and revised in 1992. About twelve months ago a local butcher bought the first draught of Michael's for the season and said they were the best cattle he had seen in the Heywood saleyards. They topped the market. Maybe the answer to the question of "Bloom" mentioned in the above paragraph could be found in the build up of soil fertility. Further time will tell.)

There was no suitable timber on the place for milling, and as we had always had a small sawmill and some logs that could be converted to timber, some sort of a plantation was needed. To have to go to the local timber yard for every small piece of timber was unreal as well as costly.

In 1957 a five acre block on the ridges near where the sheds are was bulldozed and cleaned up. The Forest Officer at Heywood was approached for information on planting the softwood Pinus Radiata. I was referred to Rennick on the S.A. border. The Forest Officer there was most co-operative. He even came over for half a day to have a look at the site and said he would supply pine seedlings at a nominal price. The site was declared to be marginal for Radiata, so he recommended Pinus Pinasta, which was slower growing and did not grow to the hight of the Radiata.

Over a three year period 4-1/2 acres were planted, half an acre of Radiata, balance Pinaster. First timber was cut from the plantation about 1976. It has supplied a lot of quartering and lots of pine boards, but most has been used for 1/2 ton potato bins and well over 400 have been made. The trees are now growing faster than we can use them. The radiata have grown to a height of 80 feet with perfectly straight stems, while the Pinaster are only about two thirds that height, but still very good timber.

The first job on the new farm was to set up the sawmill. Although suitable logs were not available on the farm there were plenty in the district. The Forests Commission was approached for logs but they would only supply the saw mills not individuals. However there was still a lot of millable timber on private property, and this is where the logs came from for the first buildings.

A few limestone caves had been discovered in the ridge blocks, but it was not until the late 50s that we got around to exploring them. They were explored pretty thoroughly and found to be more numerous than expected. At the bottom or western end of the place was an old limestone house and an old lime kiln, and about half way down was the remains of an old limestone hut. There were three big peat swamps which held water in the winter time. Wombats and Poteroos had been recorded, and the area was rich in wildflowers and birds. Talking to Tom Taylor, our neighbour, who was over 80 at the time, he said the big swamp at the far end used to hold a lot more water than now, and that the people who lived there used to keep a boat.

The assessment for the west end of the ridges was for a wildlife reserve rather than farming. There were no Parks or Wildlife Reserves as such at the time. Fisheries and Wildlife Department was approached to establish a wild life reserve. I would return 64 acres to the Crown for this purpose providing the Crown would add at least another 150 acres of adjoining Crown land and I would be given 64 acres of Crown land nearer the house. This exercise has been covered in another paper.

By the time the balance of the ridges could be cleared and sown down it was not considered to be a viable proposition. Where the heath land had been cleared with a heavy Majestic plow twice over, the ridges would need a bulldozer, a much more expensive exercise. From experience gained in working this country the soil was of a very poor type, add to this the cost of seed and heavy dressings of fertiliser, it was not worth the effort. It would be a much better proposition to use it as winter country for the cattle just as it is. They would get a lot of natural feed out of it especially in the swamps, and it would be excellent shelter in the winter time. It was fenced and divided into two paddocks, and since then the cattle have spread white clover all through it.

One aspect of stock raising the farming community generally have not accepted is that the provision of adequate shelter for stock, whether in wide belts or clumps of trees, is far more valuable as shelter than all the grass that could be grown on the ground taken up by the trees. When stock are cold they have to consume more feed to generate more energy to create warmth. If anyone doubts this, stand out in the open on a cold wet winters day, then stand in the shelter of a good clump of trees and note the difference in temperature!

In more recent times a bonus was the discovery, quite by accident, of about 35 feet of water bearing sand under most of the heath block. It was only a few feet below the surface.

On occasions the wells supplying stock water would get very low by late summer and would have to be pumped twice a day. Then sand screens became available for extracting the water from the sand. They varied in diameter, but were a circular frame wrapped with a narrow stainless steel band. The gap could be varied to suit the size of the sand. These screens were put well down into the sand and pump fitted at the top.

A four foot screen and fittings were purchased, put together and taken down to the well. Michael thought if it was put in on its flat in the bottom of the well it would do the job, but it just wouldn't lie flat in the bottom of the well. In desperation he stood it up on its end and pushed, it kept on going down to its full length!

The next season, with this experience Michael put down four bores each 40 feet deep, put a 2 inch ten foot screen down each, hooked them all together at the top ... and with suitable pump was able to get 5500 to 6000 gallons per hour. Enough to water the potato crop and lift yield about 50%.

Living with nature

With Geoff leaving school at the end of 1961, it was decided about the middle of the year to sell the house in town and build on the farm. Not enough capital had been accumulated to build the house without selling the one in town. The town house was sold near the end of the year and we rented a place in Palmer St for some months.

The entrance to the farm led into an area of natural scrub, about 5 or 6 acres. This had been roughly plowed a few years previously but had regenerated. A road was made into the sheds about 300 yards in and these were on cleared ground. The site for the house was about half way through the scrub on the south side of the track about 30 feet in to the front of the house. A bulldozer was brought in and just enough scrub cleared to fit the house in.

The ground at the back of the house sloped down to a small swamp, about 30 yards. This area was cleared. By leaving most of the scrub a lot of wildflowers, including orchids, were preserved. More importantly the scrub was home to the birds and a number of Marsupials. The house was started in May and we moved in just before Xmas. We did nearly all of the work ourselves.

It may be an idea to introduce my family at this stage, because they were just as keen to live with nature as I am. Molly, my wife, Judy, the eldest, Michael in the middle and Geoff last. Julie, Michael's wife. [Judy never lived in this house, and Geoff only in vacation times. Judy had married in 1957. Michael and Julie married in 1974 and the house was extended to accommodate them.]

We set out a small garden around the house, which included a bird bath. Molly planted, amongst other things, along the house side of the road some Cotoneaster shrubs. The birds were shy of the bath at first, but when the shrubbery grew a bit they took over, the shrubbery providing a good getaway. Birds of all sorts shapes and sizes now use the bath, even an occasional magpie. When one of these has had a bath, as you can imagine there is very little water left. Sometimes two or three of the smaller birds get in together and water goes everywhere. When the berries are on the Cotoneaster the Crimson Rosellas take over. The shy Ground Thrush can be seen occasionally digging for worms, and occasionally will try the bath. A pair of Bristle Birds have nested on the side of the track about half way in to the house, and we often see a Bronzewing Pigeon on the road about the same spot in the nesting season. It is not unusual to come back to the house during the day to see Molly and later Julie looking into the tree tops at the side of the house trying to locate the origin of the superb calls of the Olive [or rufous] Whistler.

Cats are not tolerated in our environment. If one is sighted and lives more than a few days it is lucky.

When Michael brought Julie home, housing for a while posed a problem. It was eventually solved by Molly "Why can't we build another kitchen on the other end of the house, give them our bedroom, which would join it, and share facilities". And that is what happened.

Julie loved the new environment and in no time had a bird bath and small garden up her end. Shortly after these were established a lily pond was mentioned. It was mentioned at regular intervals until finally, near the end of 1982, it became a reality.

Apart from ourselves, the first inspection of the lily pond was by an Echidna. It walked all around the rim trying to get a drink, but the water was too low. Julie went out and put a bowl of water down, and sure enough Echidna was back in a short time for a drink. The next visitor was a tiger snake! Its inspection was very thorough. Probably looking for frogs for dinner!

The kangaroos found both the pond and the bird bath, and for the next few months they were regular visitors, just on dusk. The bird baths were just the right height, they could lap the water without bending down! Seemed funny to see them getting a drink without perching on the rim!

Kangaroos

When the place was first taken over there seemed to be about ten or a dozen kangaroos, Eastern Greys, on a permanent basis, and the number never varied for a number of years. There were also about the same number of Red-necked Wallabies. However, when pastures improved and permanent water was provided where there was none previously the number of Greys started to increase, and after some years we had to get a permit to thin them out. This has happened on several occasions. They need thinning again now with an estimated 90 to 100.

Rather ironically, greatly improved conditions for the cattle has also meant greatly improver conditions for the kangaroos! The creation of the Fauna reserve and our own uncleared land on Bats Ridges (the old sand dunes) has meant that their original homeland has been preserved, but with access to better and more reliable food and water where it did not exist before their once-static numbers have become unbalanced. It's a pity the surplus numbers could not be harvested. It is generally accepted that Kangaroos are more efficient at converting grass to protein than any of our domestic animals. In more recent times the Greys don't even bother to go home at daylight, they simply laze away the day on the sunny sides of our shelter belts!

I was down the paddock one day and disturbed a mob sunning themselves. One old man was cut off from the mob and found himself at the bottom of a drain. On the bank of the drain was a 4 foot high fence. He contemplated the situation for a few seconds, then from a standing position leapt the fence, a leap of at least five feet!

A lot of Greys feed around the house and sheds, especially in late summer and early autumn when pastures and feed in the bush have dried off. There is always a green pick here because Julie does a lot of watering in the dry season. This lot usually camp on the edge of the bush only a couple of hundred yards away.

Perhaps another redeeming feature about the Kangaroos and Emus apart from having a bit of Australiana around the back door, they don't worry the potato crop unduly, except when they charge through a well grown crop and damage the tops. Another interesting point about their feeding habits – they only eat grass and have no interest in legumes. If they get any natural food from the bush it is only minor. Our pastures seem to provide all their needs.

Another interesting point is that while the population of the Greys has exploded, the population of the Wallabies has remained static. The explanation seems to be that they prefer the natural food in preference to our pastures.

Emus

Emus are the clowns about the place. Like the Kangaroos, with better pastures and water where they never had it before, their numbers have increased and have had to be thinned out. The present population would be 60 or 70. Their feeding habits differ slightly from that of the Kangaroos. Most of the year they feed on the pastures, but come spring time and breeding time they return mostly to the ridges. Apparently at this time they get a lot of natural food from this area. They especially like the flowers of the Flame Heath and

when this shrub is in flower their droppings consist wholly of the flowers. I was up on top of the haystack one day when three emus were feeding on apparently bare ground and I was intrigued to know what they were eating. With a little bit of manoeuvering without disturbing them I discovered they were eating the young succulent shoots of the Bracken fern!

Their breeding habits vary considerably, apparently with the fluctuations of seasonal conditions, and seasonal variations effect them more than the Kangaroos which have a more even pattern of breeding. I think this would indicate that the Emus rely more on the natural feed in the bush, although they do seem to consume an awful lot of pasture. Some years they have quite a number of young ones then perhaps two or three years with very small clutches.

Unlike the Kangaroos they don't mind grazing with the cows. On odd occasions we have been driving around the paddocks and noted cows, calves and Emus grazing contentedly together. Suddenly for no apparent reason an Emu will stand to its full height then put its head down and charge through cows and calves like a mad thing. Two or three of the others may do the same and in moments there is pandemonium, cows desperately looking for their calves, then after a minute or two everything settles down and all are grazing as if nothing had happened!

Some times when driving down the paddock Emus may be spread across the track. They watch the vehicle approach, then one may run around in a circle two or three times, one or two others may do the same then they all move out of the way. It would be interesting to know why they do this. Seems stupid to us!

Two or three years ago an Emu brought six or seven young ones, just hatched, up to the sheds and reared them in this vicinity!

Last October an Emu brought his brood, just hatched, up to the sheds, and proudly presented them for all and sundry to see. There were 13 no bigger than the eggs from which they had just hatched! I must admit they were a handsome lot, and were indeed a credit to the old boy's fertility!

Father Emu quickly established a demarcation circle for defence purposes. It was quite reasonable from our point of view, an imaginary line with a radius of about 20 yards. This gave us ample opportunity to admire his offspring and to watch their remarkable growth, which could be noticed almost daily. The demarcation line was father's basic line of defence. If danger threatened a low trumpet call and the little ones would be inside that circle as fast as their little legs could move. If anything crossed that line reaction was instant, CHARGE!! Most of their early life was spent around the house and sheds.

One day Julie appeared, rather hurriedly, at the back door, clutching her camera, face as long as a pitchfork, and tried to explain in a casual way, but couldn't get away with it, "He chased me". Apparently she had stepped over the line when trying to get a picture, with dire results.

On another occasion, towards evening, I was walking over to my den and Father's brood was spread across my path. He was in my territory and I was going to cross his line; an interesting situation could arise! I kept walking with measured stride. As I approached

the line the Old Boy stood up to his full magnificent height, a good six feet! With neck feathers flared he was ready for instant action. I kept walking and didn't bat an eyelid – as I stepped across the line – CHARGE! He took three or four mighty steps towards me ... and shied off!!

Whether he conceded at the last instant my right to my territory as I had always conceded his right to his territory, or whether I called his bluff, only he would know. I have walked through his offspring on two or three occasions since and apart from a low trumpet call to alert everyone he has allowed me to pass. I hope he has realised that I have no ill will against either he or his offspring.

The Emus and the cows have always grazed together quite amicably, and Father's brood and the cows certainly knew each other quite well. One day both were grazing near the sheds but about 100 yards apart. Two or three of the calves kept grazing closer to the Emus and were not far from Father's defence line. Suddenly a bit of the devil must have surfaced in the calves just as it sometimes does in all young things at times and they must have decided to have a bit of fun with Father's youngsters. They deliberately kept walking closer but very cautiously as they approached the line. Then one stepped over - CHARGE! The calves turned and tore back to their mothers ... Then they all seemed to have a conference, and apparently decided on a plan of action to chastise those Emus for frightening their babies ... The next thing the whole herd was advancing towards Father and his brood ... as the distance decreased the advance became more cautious. Again, two or three were more brave than the rest and these were now leading the advance ... but very cautiously ... then the line was breached - CHARGE!!! Well, the whole herd turned and with their tails in the air and the Old Boy in hot pursuit they went hell for leather down down the track, out the gate, and into the next paddock!!

All about snakes

We have a copious supply of Tiger snakes and Coppreheads. They are most noticeable in Spring, early summer and again in the Autumn.

Contact with snakes in Deni was rather rare and they were always things to dispatch promptly. For some time after we came to Portland that attitude persisted. However as there was more contact with them here and we have learned more about them they have been accepted as part of the environment, and as such helping to keep all things in balance. We discovered, contrary to what had always been accepted, that they were not aggressive and would quickly get out of the way unless cornered. Now only on rare occasions if one persists in being where it shouldn't be is it disposed of.

Walking through the bush for many years one has pretty close contact with all creatures, including snakes. On more than one occasion I have had a snake between my legs and have never been bitten – their greatest concern is to escape. Another generally accepted assumption is that snakes inhabit dense vegetation and that one must exercise extra precautions when walking in such places. They do go into such places but it is not very often, and then only to stalk food. The places snakes do like are small sheltered open areas where they can coil up and sun themselves. So if a bush walker spends too much

time looking up into tree tops and not enough where he is going the chances of stepping on a snake are greatly increased.

Our most intimate contact with snakes is when digging potatoes – one or two usually come up the chain each season. Mostly they are seen before they get too far and can be dealt with. Occasionally one is dumped on the table with the spuds, but when it does happen there are yells from behind and men scatter in all directions.

Michael has a piece of 3/8" round metal about four feet long. One end is bent at a right angle, the other end bent for a handle. It is used to feed tops and other rubbish onto the digging chain to prevent the mouth of the digger blocking up. He does this as he is driving the tractor. It is also very effective in dealing with snakes. If one is seen going up the chain he can stop, fish the snake off the chain and dispatch it. This is the usual practice on the digger because if one is let go it may be picked up again on the next round, besides some people have a holy terror of snakes.

On one occasion Michael hooked one off the chain onto open ground and made a swipe at it. He missed and quickly made a second swipe but the snake had disappeared! He couldn't understand where it had gone ... then two or three seconds later it fell to earth! With the upward movement for the second swipe the snake was hooked and thrown high in the air! [I was there. I have a vision of a snake stretched full length and doing slow cartwheels in the air. Fortunately it didn't land too close to Michael. - GD]

On another occasion when Julie was driving a snake started to go up the chain, didn't like the idea and reversed direction, over the drawbar, through the linkage, and between Julie's legs! She promptly abandoned tractor. Michael had to leave the machine, come around and get on the tractor to stop it! By this time the snake had disappeared. Couldn't be located anywhere. It was nowhere on the ground. It was eventually discovered on a ledge of the mainframe of the tractor under the bonnet. Some prodding shifted it and it disappeared again. Couldn't be located anywhere. Nothing else now but to take the bonnet off - but how to unhook the bonnet without getting bitten? Michael manoeuvered the catches undone and the bonnet was carefully lifted, and there was snake lying quite comfortably on top of the motor! By this time I had the hook and was ready to make a mighty swipe when Michael YELLED!!! I had forgotten all the fuel pipes that fed the Motor!

One more snake story. Some time ago I went out the back door of my den with thoughts miles away, and stood on a tiger snake's tail! I When I realised what was wrong he had reared and head was flattened. He could have struck but didn't, all he wanted to do was to get away, I thought that was fair enough and let him go on his way.

Nigger (the dog)

Shortly after stock came to the place there seemed to be need for some kind of help for rounding them up. With 10 and 15 acre paddocks the acquisition of a horse did not seem warranted. Then we thought some sort of a heeler would be appropriate for the task. It did not take long to locate what we thought would be suitable help, a black pup which looked like a cross between a sheep dog and a heeler.

The new acquisition was three or four months old when he arrived and because of his jet black coat was promptly called Nigger. [This was the late 1950s and the term was still in casual use, in this case with no malice, however racist attitudes may have been at the time.] We soon discovered that that part of Nigger's brain which related to people was most alert and active, but that part which should relate to sheep and/or cattle was a complete blank. It took a while to discover this and by that time Nigger was part of the farm.

One of his early lessons was not to jump from a moving vehicle. Down the paddock one day in the Ute with Nigger in the back, fortunately only traveling slowly, he must have spotted something he wanted to chase and set off! It was a disastrous move to make and when he hit the ground rolled two or three times. There were howls but he picked himself up, unhurt except for his dignity, and was put back in the truck. Nigger never jumped from a moving vehicle again.

He quickly learned to play ball and would play for hours if anyone had that much time to waste. This was especially so when Judy's youngsters came out.

At plowing time the plow would turn up lots of juicy worms and of course the Magpies, Crows, and on occasions the Sea Gulls had a wonderful time. When Nigger came down he would run up and down the paddock, always several rounds ahead of the plow and setting himself the task making sure those birds did not remove too many worms from the soil.

When visitors arrived Nigger was alert and full of expectations. If a move was made towards the Land Rover he was off like a shot, down the track and away out around the cattle (he never ventured into the same paddock as the cattle – they chased him) and would appear almost from the opposite direction at our first stop. [Another vision: a small black dog emerging from the bush and unexpectedly into the middle of a mob of big black cattle. He put his ears back and ran for his life, with the herd falling in behind him as he passed. The dog streaked under a fence and escaped a thundering herd of around 100 black Angus.]

One day we headed for the Land Rover and Nigger could hardly be seen for dust. We stopped and went through the first gate and were just ready to move off when Nigger was seen coming down the track hell for leather with a big Emu right on his tail! Nigger dived under the L.R. and the Emu had to brake hard to stop before hitting the truck. Apparently Father Emu had chicks and Nigger had breached the demarcation line!

On another occasion, Nigger came down the paddock with us and when we were ready to go home Nigger was not to be seen. We called and whistled ... but to no avail. Just as we were about to move we saw a black streak coming across the paddock. Fortunately the tailboard of the truck was down. When about ten yards out he took a flying leap, landed in the back of the truck and applied his brakes ... but with a speed approaching that of light and the slippery bottom of the truck the brakes didn't work and he crashed into the back of the cabin ... After two or three seconds he gathered himself together and looked all around ... very ... very sheepishly ... to see who had been looking! [Sometimes he leapt too soon and straddled the tailboard with his chest. It must have hurt.]

Nigger lived a long, happy and sometimes exciting life before departing to the land of his Dreamtime ...

The koala

Not so long ago Michael was driving an anchor post for the traveling irrigator [machine]. Looking up into a nearby tree he saw a koala watching proceedings. He went home and got Julie with her camera. They drove as near as advisable so as not to disturb the Koala. Julie got out and took a picture ... a bit closer ... another picture. Julie got up on the bonnet, took another picture ... Closer ... Closer, Julie very carefully put out hand and touched the back of its head. Koala liked the idea and bowed his head for more scratches!!

A small property adjoining us recently changed hands. A little more than half was still bush and because bush had no place in the new owner's scheme of things nearly all of it was bulldozed! A new wire netting fence was erected around the boundary at great cost to keep out the VERMIN - Kangaroos and Emus, an aspect of nature which has given us so much satisfaction and pleasure in recent times.

The owner even admitted to taking his visitors out into the bush so they could see Kangaroos and Emus. This is a very uncertain procedure because these creatures are rarely seen in the bush in daytime. He was surprised to learn that many visitors come to our place to see these creatures, and they can be seen at any time of the day!

There are country homes around where the house and garden are meticulous - not a blade of grass or a twig are allowed to be out of place. In some places where the house faces a road Landscaping is oriented towards showing off the house in all its glory! To us such homes are cold, dead places, they lack the warmth of a home set in the bush or scrub where everything is LIVING bubbling over with life!

We have come a long way since the days of the Cobden bush, the tin hut, the Lease block, the mud house, the Yanco Landscape, Glengower, Glenview, and finally Portland. We have traced the gradual dawning of the beauty of the landscape and its creatures. Of the infinite variety of species and their interdependence, and ultimately the importance of the environment to the existence of man himself.

We have seen landscapes destroyed - not for need but for greed. It has been shown that we can live with Nature, with her creatures, and enjoy their company and the relaxation this association provides. Only those few who have had the experience can know how it feels to step outside the back door and see Nature's creatures with free access to their old home - a situation which rarely exists in the settled parts of our country because THEIR homes have been destroyed.

Our farm is by no means a show place but it is ALIVE and LIVING!! There is still much to be done ... Maybe some day all those things will be done.

We have tried to live with Nature – with our environment, in return both have been very kind to us ...

3. Old Faces and Places Revisited, 1927–1987

For a number of years I had wanted to go back and see faces and places I had known 50 - 60 years ago and to include some mud brick houses which I had built in the 30s.

After living in Deni (Deniliquin) for a number of years Dad decided [in 1927] to build on the farm (incidentally our house was the cement brick one "Coniston" on the right after crossing the creek at the Sportsmans Arms Hotel going into town). I had left school in 1922 and Frank and Florrie had almost finished.

On the subdivision and sale of "Lindifferon" station property, the Danckert family had bought the 600 acre block adjoining Glenview on the west side. They built their mud brick home amongst the sand hills in a well sheltered spot. It was an excellent site for a home. By contrast our original home on Glenview was on top of a fairly exposed sand rise. There were much better sites nearby!

Mum wanted the house on Naringal, Glenview was too HOT full stop. Dad wanted a mud brick house because it would be cheapest. Mum and I were not greatly rapt in a mud brick house, but Dad wouldn't budge. A couple of chaps from Dandenong who said they knew all about mud houses, Bert and Ol Jarvis, were lined up to do the job. I am quite sure they hadn't seen a mud brick before. Anyway they went about the job like old hands and when finished it was quite presentable.

When the walls were well under way the question arose, How to finish them? The old traditional method was to scrape the walls down, to knock off the rough bits of mortar and them bag the walls down. This process involved rubbing the walls down with a wet bag, kept wet by having a bucket of water near by. This left what we now know as a sand finish, but all the bumps and hollows in the walls caused by the rough bricks were clearly visible. Mum and I wouldn't have a bar of it, we reckoned we had progressed a bit beyond the Dad and Dave days, of wattle and daub!

Wattle and daub was an invention of the first settlers, This involved a wall of rails laid horizontally and halved at the corners so that the rails around the corner would be on the same level. The cracks between the rails were filled with mud to eliminate draughts. It was quite surprising how long some of these illustrious houses lasted!

Anyway back to Naringal. Alternatives to finishing the walls by bagging was to plaster them. But then would conventional lime plaster stick to mud? A third alternative was to plaster with mud itself. The matter was debated for weeks and lime plaster was the final decision. I have mentioned something about farmer's ego in another paper. Looking back now, this debate on wall finishes was farmer's ego at its supremacy! In a very few years Frank and I were able to take both interior and exterior wall finishes on mud brick equal to the conventional finishes of lime or cement rendering (Plastering) and the smooth Plaster of Paris finish. We could even texture and tint interior walls and when finished. Anyone who didn't know would never know it was good old mud!

Things on this planet are never static and the wheel has turned the full circle! Mud brick Buffs now would never dream of anything but a bagged finish for the walls!!

Not long after the house on Naringal had started the builders gave me a job, and by the time the house was finished they had three more to do in the district. I worked with them right through.

After all the discussion and argument in 1927 about the finish on walls of mud brick it was understandable that I should want to go back after 60 years and evaluate what we had done. After some preliminary doubt in 1927 the mud brick home was accepted, basically on what had been built at Naringal. I think I could say that this was the first [mud brick] house built anywhere in the region, perhaps a wider field for many years. Looking back now over more recent times it seems to me that as farmer's ego grew so did mud as a building material fade out. Used in the right climatic conditions it is still a very good material for building homes.

Frank and I as mentioned previously, following the Jarvis Brothers, lifted the mud brick home out of the Dad and Dave era and brought it up to date. So that our knowledge of mud as a building medium, gained the hard way, is not lost I have set down on a separate paper what we learned. As this paper has just been written after my return from a trip to evaluate our work after so many years it contains some very sound advice. It will be included in this book.

The real purpose of this paper is to record reactions of a trip to see faces and places of so many years ago. However, I think the foregoing is a necessary introduction, it puts faces and places in better perspective.

I set out in mid September 1987 in the Land Rover. Tossed in a bunk and a tucker box, in case either or both were needed. Besides people and houses I wanted to have another look at Wyperfield National Park, and Pink Lakes and Hattah Lakes which I had not seen before. The latter had received a lot of attention from the Farming community and the animal lobby per Media on Management, perhaps I should say lack of management!

The first stop was Kaniva to see two cousins Bessie Crouch and Jean Brookes, sisters. Their mother was Mum's sister. They were two of a family of nine, and our families had always been close since early days. I had seen Bessie not so long ago but had not seen Jean for about 25 years. Both were interested in Conservation work, Jean being a real Greenie! Bessie's son CLive had been well to the fore in the Little Desert debate of the late 60s, so there was plenty to talk about! I arrived at Bessie's place about four in the afternoon. She rang Jean who came around and we had tea together. She also rang Clive who is a school teacher at Nhil but he wasn't answering. With so much to talk about we had a real session and didn't break up until midnight.

Next morning to Wail Nursery to try and find out to germinate and grow Blackwood. Didn't get much. What I had been doing seemed to be right except the potting mix. They were just about at the end of the season for planting seeds. Perhaps I am too late by waiting until near the end of January before sowing seed.

Back to Dimboola and up to Wyperfield. Drove the five miles into the camping area. This certainly had a neglected appearance since I was here last in Len Smith's day. It had the appearance of being used very little, and this was Springtime! There was no sign of a Ranger. I had a long talk with a young chap who had just started cutting grass which was

a foot high. He had a small hand push power mower and by the look of the job ahead it would be the equivalent to a farmer going into a 100 acre hay paddock to cut it with a scythe! The young chap was pretty forthcoming. He confirmed what I had suspected for a long time there was far too much brass at the Top and in the Office and not nearly enough personnel out in the Park doing some spade work, and very little, if any, Public Relations. I looked for regeneration of native species but there was nothing evident. There was far too much stock - Rabbits and Kangaroos.

Then on to Ouyen where I stayed the night at a Motel. Come bed time I boiled the kettle and made a cup of tea and couldn't drink the B. stuff. Complained to the Owner the next morning and he was surprised that I even tried to make tea – "The tap water comes from the Mallee Stock and Domestic Water system, we have tank water for drinking and cooking". I wonder how much longer the Mallee people will have to tolerate such a slovenly water supply. Something will be said about this later.

Went out to the Pink Lakes National Park the next morning and was disgusted at what I saw. The Park is about 40 miles along the Ouyen Highway towards Murrayville. I had often wondered about the country out this way. Apparently the road runs through a strip of reasonably good country because the country to North and South has not been settled. Even so my reaction was the same as when traveling in the arid zone in Central Australia why on earth do people come to this God forsaken country to make a living? In its natural state it carries a Flora and Fauna remarkable for its diversity and adaptation to an arid landscape. Cleared of its natural vegetation for farming the land is unstable and there is plenty of evidence of wind drift both in the plowed paddocks and along fence lines. The country seemed to be having a reasonable season, but rain was needed.

Pink Lakes were a disappointment. There was evidence of gross overstocking, this time with the neighbour's sheep! There could be rabbits and kangaroos but I didn't see any. There was no natural regeneration and the Park was dying. There was some evidence of extensive tree planting. Many individual trees and some small areas had been netted in. A pretty expensive and inefficient way to keep Joe Blows sheep out! There was no sign of a Ranger.

Back to Ouyen and up to Hattah National Park and in to the information centre. The Information Centre was a pleasant surprise. Comparatively new, the building and furnishings were made from materials on the spot. The building itself is mud brick and has a protective verandah right around, which ensures a much longer life and with less repairing than walls exposed to the elements. The interior fittings and furniture were made from rough dead sawn timber gathered in the Park. A unique setting completely at one with the landscape. A number of people were present but no Ranger.

Back to the highway and up to Colignan to see an old friend - Bruce Dean. About 20 years ago Bruce had a produce business in Mildura and we used to supply him with potatoes. We talked for a while, he said his wife was in town and asked what my plans were. I wanted to have a good look at Hattah Park, had a bunk and a tucker box in the truck and could camp anywhere. He apologised for not asking me to stay the night, but in fairness to his wife would leave it until she came home. He had a few chores to do so he directed me to a track leading to and following the River to see the River and some pretty

big Red Gums. Also pointed out a spot to camp opposite the house. Found my way to the River a most delightful spot and saw some mighty Red Gums - the biggest I have ever seen! Back to the camping spot and walked up to the house. Bruce introduced me to his wife Judy, and said "Judy, this man is starving and has nowhere to sleep"! Needless to say the truck was brought up to the front of the house, and the hospitality was most enjoyable!

Bruce had said earlier he was sorry but he had a couple of jobs to do tomorrow otherwise he could have shown me round the Park. Later in the evening he made a couple of phone calls came back and said "I'll be right for tomorrow!"

Next morning we headed off with a barbecue lunch and didn't get back until four in the afternoon. There was little regeneration in the Park - too much stock, rabbits and kangaroos. There was evidence that extensive work was being carried out to try and control the rabbits. The landscape is very similar to Pine Hills but with a slightly lower rainfall. In the sandy rises the rabbits really display their skills at digging. Being used for grazing since first settlement, and so still carrying the usual amount of timber and associated vegetation, it is extremely difficult to control rabbits. By contrast, in agricultural country most of the land has been cleared and rabbit control is much easier.

The kangaroo population, having no competition with domestic stock, has exploded. The solution is to reduce kangaroo numbers drastically, and Park management are trying to do this. The result has been numerous confrontations with the kangaroo lobby! This is one of the problems in trying to preserve and regenerate natural vegetation where it has been destroyed by domestic stock, especially in National Parks. After all, this is one of the prime purposes of National Parks. Until the Kangaroo lobby do their home work on Ecology, and properly understand how nature maintains its balance there will be confrontations.

Left Colignan next morning – destination Swan Hill.

I followed the river road down to the Murray Valley Highway. About five miles before the Highway on Chalka Creek I found Maurie Streeter's shack (an old friend) but had missed him by a few days. I had along talk with his mate who showed me three wall clocks he was making. One was in Black Box and was really outstanding. It was dark when I got to Swan Hill. It was about 150 miles and there wasn't a pub or motel in all that distance. Called in at the first Motel on the outskirts but it was booked out and I had to go through the town to get a bed on the other side. About one O'Clock in the morning the Police knocked me up to tell me my Brother-in-Law had died, Molly's brother [Bill – Wilfred McIlvenna]. Michael calculated from the time table that I had left that I should be in Swan Hill that night. The Police must have been on patrol and looking for something to do because Michael had said a call in the morning would be OK.

I wanted to see a chap I went to school with and for whom I built a mud brick house in 1934 when he was to be married. I hadn't seen him since. Next morning I went to the main street and parked the truck. Opposite was Dalgety's, as good a place as any to start inquiries. I went over and a chap came out of the Office and I said "Would you know a chap named Dick Martin?" He gave a bit of a grin and said "See the chap at the counterwell that's his Nephew" From there it was plain sailing. Dick was about 12 miles out on the Deni road with a mob of sheep. The Nephew said he was going that way and I could

follow. Dick wasn't sure of me but I knew him. His wife Maizie was with him. Said she often goes for company.

We filled in a few gaps in the years since we last met, and by this time the sheep were well ahead. He directed me to the house a bit further along the same road, and to come back later in the afternoon have tea and stay the night. It wasn't hard to find the mud brick house, the roads had all been opened up since I was last there. When built it seemed to be away in the back blocks. Dick and Maizie had lived in it until 1974 when they moved into town, and it had hardly been lived in since. The verandah was in bad shape, but the mud brick work was just as solid as the day it was put there! The walls had been plastered to a sand finish with mud.

The morning I met Dick and Maizie he said a new Arts Centre had been built near the Pioneer Settlement in Mud Brick so I went along to have a look. It had been up about twelve months and the walls exposed to the weather were showing signs of failing. The walls had been scraped fairly level and then bagged down. The finish was checkering and the weather was already causing flaking.

The evening at Dick's place passed all too quickly but we were able to catch up on a lot of happenings since we last met.

Next stop was Numurkah, with two or three hours at Echuca to try and catch up on some early family history.

For some time after leaving Swan Hill I drove perhaps 8 or 10 miles with what appeared to be flood water on the North side of the road. Several thousand acres of farmland seemed to be flooded. Inquiries at Kerang disclosed that it was flood water from the Avoca River. What is now farmland must have been marshland originally - home to thousands of water birds senselessly destroyed in the name of progress (?) - waterbirds which provided an excellent Biological control for the myriads of pests which play havoc with the crops and livestock of those very same farmers!

Charlie Jago (a cousin) had told me that the big Red Gum log on display at the top end of High Street Echuca was brought out of the Moira Forest by the Davies Brothers in the early days. One of those brothers was Jack Davies, my Grandfather, and I wanted to try and get some confirmation of this story, also find out the first name of the second brother. After about three hours I had to give it away. The Historical Museum was closed so that cut off one possible source of information. I saw one of the Evans Brothers, who were sawmillers at Echuca for many years but he couldn't give me anything. Time was running out and I didn't want to be late getting to Numurkah.

I crossed the bridge and went up the Deni road and took the road to Barmah and what I thought to be the Barmah Ferry. There was no ferry. It had been replaced with a bridge. I also thought I would drive through the Barmah Forest. This did not eventuate either. There was farmland all the way from the Deni road to Numurkah, most of it irrigation. When I descended the geological fault not far from the Deni road there was irrigation all the way to the river, obviously pumped from the river, while on the other side was the older irrigation areas of N.E. Victoria.

Inquiries at Maurice McNamara's stock and station agent in the main street revealed that Lex Adams, for whom I had built the house had died some years previously but his son Jock still had the property. The place was only a mile or two north of the town and was easy to find even though I had not been there for half a century.

I knocked on the front door and a lady answered. I asked if this was where Jock Adams lived, the answer was "Yes come through I think he is out the back". I introduced myself and said "I hoped I would be in safe territory when I say I built your house and came to see if it was still standing up". I never saw two more surprised people!

Jock's wife came straight in and fired all the questions imaginable. How was it built? where were the bricks made? How did we make them? Did we camp on the job, and where? Jock chipped in and said "I think we still have the original contract". Sure enough a little rummaging later on produced the contract, plans and specifications.

After talking for about an hour it was getting near sundown, and Elizabeth asked what my plans were. "I said I thought I would go on to Strathmerton (about 20 miles north) and stay the night". "Would you like to stay the night with us? "I'd love to." She said her younger daughter, Heather, would be home later in the evening.

Heather, earlier in the year, had started a course of Forestry – another session! Both Jock and Elizabeth were keen conservationists, and as members of a group, leaders really, had been able to have 800 acres of Murray River frontage reserved as a State Park!

After tea Jock, with little trouble, found the plans and species of the house and a couple of Lex's old cheque books and sure enough there were the payments to F. Davies! Elizabeth went to meet the train about 9. Heather's appearance prompted further interesting discussion. As one would expect coming from a Greenie family her ideas on Forest management were more in line with mine thad those of Conservation Forests and Lands. I suggested to Heather there was room for a good deal of "Greenie" infiltration into Forest management. I was to send a copy of our Conservation work around Portland, also a copy of the paper "Fire in Forest". These have been sent.

Mrs Adams senior had planted a lot of trees around the house and these had grown remarkably well. A palm tree in front of the house would be 30 or 40 feet high and others had grown accordingly. There were very few native trees in the area where we had built the house, most had been cleared for agriculture.

Apart from a rather bad crack in a kitchen wall the house was in excellent condition. The irrigation channel was not too far away and the house being on a gravel bed I suspect that was the cause. Outside the house both the mud work and the wood work had been freshly painted. The south wall had no verandah to protect it from the weather and it was in very good condition. Jock said one or two sections had started to peel but he repaired them prior to painting. The walls inside and out had been finished with mud plaster,

Called at the Monichino Winery a few miles north of Adam's place the next morning to get some Muscat. It's only about half the price in the shops!

Went through Strathmerton, Tocumwal and headed for Deni. A new bridge had just been built across the Murray at Tocumwal but the approaches had not yet been finished. The old bridge was in a shocking state.

Had some lunch on the banks of the Murray and took the wrong road to Deni. I meant to take the Aratula road which is the lower river road but took the Tocumwal road which is between the lower road and the Riverine Highway. Anyway it was an interesting drive almost all the country is under irrigation!

Arrived in Deni about 4 and went over to Edna's place (cousin) to get the key to Auntie Hannah's house but it was already open so I set up camp and went around and saw Auntie after tea. She was bright enough and it was no trouble to talk. (Auntie [Hannah Dixon] was Mum's youngest sister, was 93 years of age and had recently been taken to Hospital.)

A few weeks previously, when at Frank's funeral, I was talking to Allan Barker (previously identified [son of early neighbours Harry and Aunty Nell]) and said I was hoping to make this trip. He said if I let him know in time he would show me over the sawmill, take me out to his farm at Boorooban and down to the Red Gum forest, so I was looking forward to seeing Allan.

I looked him up the next morning and arranged to meet him at the mill on the following morning (Monday). Went out to Glengower, Harry [junior?] and Max's place and filled in an hour or so. Harry's wife Lynn was not home (Max had never married but they lived in the one home). Back to town and had tea with Edna and Harry (Marshall).

Was at the mill at 8 the next morning and Allan arrived shortly afterwards. I had seen the Mill about twelve months previously and wondered how it could be improved, it was all push button then! Where it had been mostly push button and worked with compressed air it had been converted to hydraulics, computerised and worked with lasers! I He had also set up a horizontal saw on the breaking down bench and where needed could cut a straight edge on the flitch at the same time and save an extra cut later. It was fascinating to watch the logs, one about 4 ft 6" in diameter, being positioned on the breaking down bench. They were pushed or rolled around like toys and all done by pushing buttons!

Some years previously Allan had invented an automatic docker for cutting firewood. He now has a chipper to chip waste not good enough for firewood. All this means that there is very little real waste in the whole of the mill operations. Allan has planned it that way, he doesn't believe in waste. If a piece of backing will cut a fence dropper, it is cut. Certainly a change from the old days when there was nearly as much waste as there was timber and it was all burnt!!. An interesting point is that all wood and chips are sold locally!

About mid morning we headed for Boorooban about 45 miles out on the Hay road. The farm is about 8000 acres and 500 are irrigated. He gets the drainage water from the Coleambally scheme south of Darlington Point on the Murrumbidgee. Drainage from this scheme runs into a creek which runs through Allan's property at Boorooban. He gets the water for a very nominal charge, the Water Commission's view is that it has already been paid for once. With all the salting problems in the irrigation areas one would think it would be too brackish for re-use, but it is quite fresh. It has to be lifted 9 feet with a 10 inch pump to be high enough for flood irrigation.

Allan has made the same positive approach to the farm as he has to the mill. The property had been grossly overstocked in lean years and erosion was rife. Old house sheds and fences all banked up with drifting sand. This had all been levelled and he was getting an extensive tree planting scheme under way. It is an excellent illustration of what could be done on a National scale. But for as long as we believe the drivel which the Politicians and economists put out about there being no money for such work it will never be done. As pointed out in more than one place in this story there is plenty of money, labor and materials to do this work.

About 12 miles of channel had been put in to take stock water to all paddocks. The irrigated area has been set out with a laser and the main channel set on a pad of dirt above ground level. This means that when pumping stops water in the channels drains out instead of remaining for most of the irrigation season and causing weed problems.

Back to Glengower late afternoon and stayed for tea. Still hadn't finished talking so suggested I could stay the night before I went to Griffith, wasn't sure if it would be tomorrow night or Wednesday. Anyway Lynn said come which ever night. Back to town and went around and saw Auntie. She was still the same, bright enough and looked good for a long time yet.

Back to the Mill the next morning about 8. Allan was there and we headed off for the Forest. Out the Aratula road and turned in about 14 or 15 miles out. In the forest there was regeneration everywhere, vastly different to the dying National Parks in the Mallee. In to where the logs were being loaded. They were not dragged into heaps with the bulldozer as in our part of Victoria but were picked up with a rubber tyred tractor with a grab and virtually carried out to the loading point. Allan said the trees being loaded were 70 years old, which would date them from the big flood of 1917. Most were 30" to 36" in diameter

Logging in the forest is dependent on dry conditions because there are creeks everywhere. With so much water tied up in irrigation the gum forests are not always getting as much water as they need. With this in mind Allan persuaded the Forests Commission to let him have the best part of a year's supply of logs in advance. This meant that if water was available in the logging season to flood the forest it could be done without upsetting work at the mill. Meanwhile the extra logs are stored in the log yard at the mill and sprayed continuously with water to keep them in good condition.

Another point Allan made with the Commission was not to let him over cut the forest. If this looked like happening cut his quota back. He wanted a permanent supply of logs for all time. We passed a couple of small areas, there are others, where trees are marked and measured each year to calculate growth rate. We drove many miles through the forest and the regeneration was the same everywhere. The forest was tidy. Sleeper cutters take logs not suitable for milling. A private company goes through with a chipper and takes the residue of mill and sleeper logs. There is no wholesale chipping. The residue of the logs after chipping, the leaves and small twigs which contain most of the nutrients of the tree, are left on the ground to break down and nourish the newly establishing forest. They are not burnt as in Victoria! We saw no domestic stock or rabbits, although I believe some grazing is permitted.

It was most refreshing to see a hard headed business man nurturing his environment – at the mill, on the farm and in the forest. Allan made the point: He wanted the environment he was using to maintain, even increase production for the coming generations!

We drove past Picnic Point on the Murray just east of Mathoura and on to the Highway, then towards Deni, and turned into the Gulpa Forest. He showed me the sight of the first Gulpa sawmill, then to the last site near the Cobb Highway, before the drive to Deni. The Cobb Highway site was where the mill was when Allan's Dad bought it in 1838, and it has been in the family ever since. [1938 would make sense here; Allan's Dad could not have been born before about 1875.]

Back to town a bit after midday. Decided to go to Griffith the next day to see Ruth and John (cousins) and have a look at one or two mud houses we had built in the thirties. Filled in a bit of time, and left for Glengower.

Called in to Naringal on the way. Hadn't seen the old home since we left Glenview in 1951. The property had changed hands two or three times since Frank sold it so I expected to see a somewhat uncared for home. The place is now owned by Cliff Gough and his two sons; they are dairying. The home itself is much the same as when it was built in 1927. The walls seem to be just as sound as when they were put there. The lime plaster, about which there was so much argument when the place was being built was still in place, although it had never really stuck to the mud. It was obvious a few small areas had flaked off but they had been repaired

The verandah right around was still in good condition, much better than Dick Martin's. It was obvious that over the years the home had been well looked after. Mum and Dad had lived at Naringal for 20 years and it seemed an eternity! Double that time has elapsed since we built them a home in town, yet that 40 years doesn't seem any time!

On and out to Glengower and arrived about 5. This upset Lynn's plans, she reckoned it would be tomorrow night and intended getting a leg of lamb out of the freezer for the occasion! "Now you will jolly well have to have snags." "Lynn when one is hungry snags are excellent"!

Went for a drive towards Geoff Ball's place and showed Harry, Max and Lynn where the tin hut was when we first arrived at Pine Hills; also where the big pine tree was not far from the hut. It is not there now. Talking to Geoff Ball the next day and he said it was recently blown down and he cut over 100 fence posts from it!! It was the biggest Murray pine I have ever seen, must have been three feet in diameter near the butt. It was an old tree when we arrived. We went as far as Ball's home but didn't call.

I showed them where I sat all one day at a draughting gate separating Boy sheep from Girl sheep. Dad and Ted Hay must have been crutching, or marking. Back for tea and the snags were excellent!

I rang Ruth in the evening and she said neither she nor John would be home before 4 the next afternoon. This gave me more time at Glengower with enough left to call on Geoff and Shirley Ball.

Had a good look around the Glengower home the next morning. I had built it in cement brick in 1936 and it took a whole year. The cement was an interesting change from mud. It was built on a clear piece of rather deep loamy soil. It is now surrounded by trees, many of them massive. The old oleanda which was in front of the old settler's home in which we lived is still there and hasn't grown more than a foot in 70 years! It's not long since Harry and Max pulled the old place down. The pepper trees at the back of the old house are still there and although larger haven't grown any more in proportion to the oleanda. The mud brick dairy which I built for Nell three years prior to the house is still there, and although not used is still in good condition. Where it was built on open ground it can hardly be seen now for trees. I didn't have a camera but lined up a picture at the front of the house which Lynn said she would get for me. Also lined up a picture of the lounge room fire place. I couldn't get over this – to think I had designed and built it. It was really outstanding. After being away from it for so long it had a completely different perspective.

All things must come to an end. Like my visit to the Adams at Numurkah my visit to Glengower was a two way affair. I am sure Lynn got as much from my visit as I did going back after all those years!

Got away a bit after 10 the next morning, Wednesday, and went to see Geoff and Shirley Ball. Geoff had lost his first wife some years previously and his new wife, Shirley, is a lovely person. Geoff is a very religious person, my opposite number! In spite of this we can always fill in a few interesting hours, besides we both have a yen for wood work. Like me he is interested in social and human problems but our approach to the practicalities of these problems are different. Geoff believes the Christian approach is the right one. But then the Christians have been pursuing their Line of approach in trying to eliminate Graft, Greed and create compatibility within the human race for 2000 years and humanity is in a far worse state than it has ever been. My approach is to keep one's conscience clear and help wherever possible. I believe the human race has gone too far down the road of licenciousness to be brought back by human endeavor. We would need either a super Dictator or a massive Geological upheaval which would have the effect of eliminating large areas of population and by so doing restore some compatibility between those left.

Geoff has been having some Arthritis trouble but was able to build a sun room and made a really professional job of it. It is on the N.E, corner of the home and is a very cosy spot. He has also done a considerable amount of painting, mostly landscapes since I was there two or three years ago. Time disappeared all too quickly and Shirley wondered if I would stay for lunch. As there was no hurry to get to Griffith I accepted. Shirley can certainly make a salad!!

Eventually got away from Balls about 2 and arrived in Griffith about 5. Had a bit of trouble finding Ruth's place but she was home by that time and John arrived home not long afterwards. Both were out again after tea, Ruth to a stall at the hospital, and John to see his Father who was ill in Hospital.

Grant (Ruth's son by her first husband) came around late evening and we talked for an hour or more. He had started off in the Bank, didn't like it so left and took up an apprenticeship in carpentering and is now a builder of some note. He has been in the last

two or three Murray River canoe races from Yarrowonga to Swan Hill. He was third in one section last year. He is now building an ultra light model for the next race.

John left for work at 7.30 next morning and Ruth had an appointment later in the morning so I didn't see a great deal of them. Hohn did direct me to Benerembah about 12 miles out west where we built three mud brick houses in the 30s. The first one was for David Reseigh about 20 squares. It had been pulled down and replaced with a brick home. Italians now owned the place.

The second place was for Ben Rimmer about a mile north of Reseigh's but not as big. It is now owned by a Mrs Kelly. I called in and she showed me through the place with considerable misgivings. I had built it in a box flat against my advice. However there were plenty of trees around and the shelter was the main attraction for the Rimmers. There is no shelter there now. All the original trees have gone and none have been replanted. The walls had badly cracked and a few years ago a heavy thunderstorm dumped 7 inches of rain around it. During the storm either lightening or a thunderbolt had hit the front wall and it crashed inside. It must have created one hell of a mess. The front wall had been replaced with bricks and other repairs effected and Mrs Kelly is still there. She is well on in years and thinks it will see her out. After that it doesn't matter. The Italians have bought all the land around and want to buy her place but she won't sell!

Ruth and John had told me, when there, to be sure and ask to see the Grandfather clock. I couldn't help but see it. It was a massive affair, 200 years old, but had only about a 9" dial but was a good 9 feet high. There were massive carvings all over it, Deer, Dogs, Hunters and so on. Each of the carvings would be 18 or 20 inches in length. Three were fixed to the door and the rest scattered around. Considerable restoration would make it a superb antique, but as a clock it didn't appeal to me.

Kelleher's place about a mile south of Reseigh's had disappeared completely.

John had directed me how to get to the Carathool road from Benerembah but I missed a turn and wasted about half an hour. Near Carathool I saw a mob of sheep turn down a side lane. As I got closer there was a motorbike on its side and a chap underneath it. He had missed his footing when turning, but apart from a bruise or two wasn't hurt.

Following the Jarvis Brothers' four houses around and including Naringal, Frank and I lifted mud bricks from a rather despised building material of almost forgotten ages into the present century and gave it the refinements for which the people of the time were looking.

After 50 or 60 years of habitation bad building mistakes will be glaringly obvious, minor mistakes will be visible to the practiced eye. Like any work there are certain basics which must be followed, diverge from these and trouble follows. A paper on the work at the time and an assessment on condition after half a century of use is being written following this and for those interested in mud as a building material some very sound advice is given.

The art of mud brick work

The purpose of this chapter is to record a little bit of history on the use of mud bricks as a medium for building houses and other structures in the drier parts of the country where soil suitable for making bricks was freely available. The period covered is the late 1920s and the 1930s when due to the depression little money was available to build houses with the more conventional materials, timber, brick, stone etc. and to record the know how of those days on how we went about the work.

While mud brick houses are still being built the know how seems to be a lost art. Perhaps most mud brick houses were built in the early days of settlement. It was a building material on the spot and of all building materials it is the best insulator against heat and cold. As most of these houses were built in the hotter climate this was an important factor in its use. Almost any amateur could build one providing he had the stamina to do the job because it was hard work. If it was rough and ready that didn't matter it was in keeping with the times.

I haven't heard of mud brick homes being built in the country for a long time. Perhaps the farming community has become more sophisticated. However, there has been an increasing interest in this type of home in other places. City people have been mud conscious and a few have been built there. Two information centres have been built in National Parks, and Swan Hill people have built an Arts Centre in mud brick, and there could be others.

The use of mud brick at the present time seems to be an urge to plan buildings to blend more into the environment. People also think that mud brick is cheap This is not so. It was cheap for the outback settler where suitable soil was on the spot, where there were no building regulations and where one could do most of the work oneself. But where building regulations apply, which means that only tradesmen can be employed and where the bricks have to be made a considerable distance from the site and have to be transported, perhaps miles, the costs escalate enormously and far out weigh the insulation factor, which these days is a comparatively minor cost.

I have seen a number of these houses built in recent times and must say they are viewed with certain misgivings. In most cases most people do not have the capacity to chose the right soil. In other cases where walls have not been protected by a verandah walls have net been properly finished and protected from the weather.

My earliest but scanty information on mud brick buildings came from books or papers illustrating the use of this material in the Arab world. I remember a long time ago reading that the Arabs mixed straw with the mud, supposedly to reinforce it. After working some time with mud the idea seemed a fallacy, and it is! If a mud brick will not stay in one piece when it is dry then the wrong soil is being used. It's as simple as that. My reply to people who persist in mixing straw with mud "Would you reinforce concrete with straw"?

A chap on the outskirts of Portland recently built a mud brick house and his approach to the project would be a good example of present day thinking on the subject. His first move was to remove the top soil and use the clay to make the bricks! He had the bricks made when I saw the project. They were about 9" square and 5 or 6"deep, and straw was

mixed in with the clay. As the bricks dried they cracked into many pieces with only the straw holding them together. One had to lift a brick very carefully or the straw reinforcing would break and leave many pieces lying on the ground. It would be impossible to seal these bricks against the weather.

From the above it would be a good idea to set down my experience with mud brick work and those people seeking advice can use it. Association with the work extends from the late 20s to the end of 1938. Sometimes I worked with my brother Frank and sometimes he worked with me, and between us we would have built 15 or 20 homes besides numerous smaller buildings.

It started in 1926 in the roaring 20s when there was plenty of money, it had little value and was spent like water. We lived in Deniliquin and had been there for a number of years for the convenience of schooling. Dad had two smallish farms 6 and 7 miles out of town. Near the end of schooling he decided to build on one of the farms for convenience of work. It was to be mud brick because it was the cheapest although Mum and I were not at all rapt in the idea. Our ego seemed to tell us that it savoured too much of the indifferent housing of early settlement days.

Anyway Dad found two chaps from Dandenong, Bert and Ol Jarvis who said they knew all about mud brick work, and gave them the job. They started early January 1927. Hadn't been going long when I was asked if I would take a job. This suited me because Dad could manage the cropping. By the time the house was finished, early April, the chaps had three more houses to do in the surrounding district. I stayed with them right through and this brought us to early December and harvest time.

Building the houses involved everything, making the bricks, putting up the walls, plastering, plumbing, painting, cabinet work. This offered a tremendous opportunity to gain wide experience and I made the most of it.

When it came time to finish the walls the old-time procedure was to bag them down. This involved scraping the loose bits of mud from the walls and rubbing them down with a wet bag which was kept wet by having a bucket of water nearby. To scrape the rough bits off he walls we drove nails into a piece of pine board and put a handle on. A later development was a piece of 4" by 1" three feet long with a long handle. The use of this and by keeping the walls wet allowed us to get a fairly level surface suitable for plastering.

The bagged finish did not appeal to Mum or me, we wanted something better. Well, the walls could be plastered with mud or plastered with conventional lime plaster and set with plaster of Paris. We settled for the latter. There was some doubt about the lime plaster sticking to the mud but we took the risk. The discussion of the wall finish of our home in 1927 has been detailed to some extent because it set the scene for improved wall finishes in mud in later years.

The name of the property where the house was to be built was Naringal. When the chaps came to start they wanted a strip of ground plowed about half a chain wide and about 100 yards long. They wanted a quiet horse and a furphy to cart water. Dad had built a two roomed place years before and had a good idea of the type of soil required.

Experience has shown that the best soil is on plain country, that is where there was no natural timber. There would be 3 or 4 inches of topsoil above the clay. This could be described as a fine grained loam. If properly mixed and cured it sets very hard and the bricks never crack in the process of drying. The mould for the bricks was 18 inches long by 9 wide and 6 deep in wood. Steel was used in later days. It would be very hard for the amateur to walk out into a paddock and pick this type of soil because it has now all been cultivated. The answer is to take home samples, mix them up, separately of course, mould them out and pick the most suitable. Many samples may have to be brought home before the best one can be selected. A good dry brick could be dropped from about two feet without breaking.

There is a fairly large range of soils which will make good bricks. What I have described above is the best. For example in the early 30s a chap named Thomas Millear had a station property west of Deniliquin and decided to build a new homestead in pisé. This is mud mixed and placed in forms as for concrete. The walls are usually 18 inches thick. Because if the extra mass of dirt the soil has to be of a coarser type with sufficient loam to bind it. If the same soil was used as for bricks the walls would crack in the process of drying. The homestead was about 80 squares.

I knew the chap who was building it and was asked to come out and have a look. I went out in due course and was shown all over the building. The walls had been completed and the carpenters were just starting. Finally I was given a roofing nail and a hammer "now see if you can drive it into the wall". I drove it in but it took as much effort as driving the same nail into a piece of hardwood!

The above is mentioned because it illustrates the wide difference in the soils for bricks or pisé. To stress again, thoroughly test soil before making bricks, after all people want a home to last at least a hundred years.

Back to Naringal. To mix the mud for the bricks the chaps put a solid post in the ground in the centre of a 33' by 33' of plowed ground and left it 8" or 9" above ground level. A hole 5/8" or 3/4" was bored in the top of the post then a hole of same size was bored in one end of a good piece of 4" by 3" and this end was pinned to the top of the post. A hole was also bored at the other end of the piece of timber and a wire loop attached, to this was hooked a swingle tree and pair of chains. The horse was backed into position, chains hooked up to the hame hooks and a rope tied from the horses' winkers to the pin in the centre post, so that when the horse walked it had to go round and round. A series of holes was bored on the piece of hardwood from the outside towards the centre, 5 or 6. More wire loops to which could be attached a small garden scarifier. Ready for business!

It was a three man job, one to apply water, one to shed boots and work the cultivator and the third to throw in dry dirt from outside and centre. When the ring was sufficiently mixed and of the right consistency the horse was taken away and all three tossed in the mixture from outside and inside circle to form a heap 5 or 6 feet wide and about 18" deep. The last rite was to smooth the whole heap with the backs of the shovels and leave overnight to mature. This whole operation took about two hours.

First job next morning was to mould out the heap which would yield 450 to 500 bricks. Prior to moulding the ground where the bricks were to be laid out was levelled. Horse and

a heavy drag would usually do this. For moulding a table about two feet high to accommodate the two moulds was needed. At one end was half a 44 gallon drum of water. The moulds had false bottoms. One man put the mud in the mould, the second man belted it down with the back of the shovel and cut off surplus mud, the third man took the mould of mud and turned it upside down on level ground, carefully lifted it off, returned and dipped it in the drum of water and by that time the second brick was ready to be taken away. Moulding usually took until mid afternoon, leaving enough time to mix the batch for the next day. When bricks were dry enough they were turned on edge to help the drying process.

Our method of making bricks would be extremely primitive by todays technology, but then this was 65 years ago and the method before that was all by hand, certainly a backbreaking job. However it does record a bit of history.

The site for the house was important. The best place was a sandy rise. Because of the nature of the sub-soil in inland Australia all brick houses crack. With the clay near the surface it expands in winter and contracts in summer. Even a concrete foundation will not overcome the trouble. The only answer to crack free walls is a pier and beam foundation, with the piers being deep enough to bottom where there is no movement in subsoil either summer or winter. The cost of such a foundation rules it out for ordinary home construction when careful siting of the building will keep cracking to a minimum. The only time when concrete foundations were used was under cement brick buildings,

Two of the mud brick homes I built came to grief. Both were built in box flats, one near Deniliquin, one near Griffith. In both cases I advised against the siting because there was a possibility of flooding and because the heavy grey soil was not a good foundation. I was assured the flats had never been known to have surface water. The main reason for building there was for shelter.

It is surprising the amount of water 6 or 7 inches in one downpour can spread around. The one at Griffith had 6 inches of water all around it. At the height of the storm either lightning or a thunderbolt hit the front wall and it crashed inside. The rest of the walls stood up. The crashed wall was rebuilt with brick. The one at Deniliquin just melted and settled down. Later the roof was jacked up and the walls rebuilt in brick.

The further the clay is below the surface the better the foundation. The first house I built was on a sandy rise. A trench about a foot deep at one corner was needed to get a level bottom. The first row of bricks was double, side by side, the next row crosswise with the single walls starting on top of this row. Before starting the single row a double row of barbed wire was laid around the walls and thereafter every second row to the top of the walls. This meant that the walls were taken up together instead of building up in sections as in brick work. Mortar used for laying the bricks was mud but considerably wetter than that used for the bricks. It was eventually found that the first double row in the foundation was not needed. One row cross wide[?] on a good, well rammed foundation was quite satisfactory.

In selecting soil for plastering it had to be more sandy than that used for bricks. Two main reasons - it is easier to work and it must not checker. For plastering the soil needs to be screened. The first few houses, including two in 1927, were finished to a sand finish

then troweled over while still damp. This gave a fairly flat even surface, but not as good as a plaster of Paris finish.

Then we had an idea: we found a very fine soil, put it through a 100 mesh screen and had a soil as fine as plaster of Paris. Mixed to a paste and a very thin skin troweled over a freshly plastered wall which had been allowed to dry slightly gave a perfectly smooth finish. This was the finish the people of the time wanted and for which we had been striving for some time.

From this point it was only a step to texturing and tinting the walls, another popular finish at the time. When the walls had been finished smooth another mix of the same soil was made in a bowl to the consistency of cream. This was stippled on to the wall either with a paint brush or a sponge. If a sponge was used it could be given a slight twist. This gave a finish of swirls. After drying a little the high peaks were flattened slightly with the trowel and this gave a perfect base for tinting.

Not all rooms were given this finish – a dining room, a sitting room, perhaps a bedroom.

Before painting the walls, inside and out were given a liberal coat of hot linseed oil. This sealed the surface and when dry left a hard crust about 1/8" thick - an excellent base for painting. Plain walls were finished with paints and colours of choice. Where walls had been textured they were given at least two base coats of fawn or beige according to taste. Then three matching colours were mixed separately and daubed randomly on an area, say a square metre, then vigorously rubbed over with a good thick cloth. This cleared the high spots down to the base colour and left the tints in the crevices.

In the thirties when we were building, to take a piece of open ground after designing a home with the owner and putting the house thereon, doing everything ourselves was a most satisfying experience. That was all there was to be had from it. Competition was fierce and no one made any money but we fed ourselves and made a contribution to the GNP. Sometimes we worked for wages, sometimes we took a contract. The first house I built was by wages - 3 pounds 10/- a week and keep. The owner laboured for me and we built it in 14 weeks. 49 pounds = total cost of wages!

For some time I had wanted to go back and see some of the houses on which I had worked between 1927 and 1938, and in 1987 I did just that. It was a most interesting experience to go back and assess their durability after all the discussion and arguments at the time of building when we were trying to build cheap houses, durable houses and bring mud as a building medium into the present age. It puts one in the position of being able to give sound advice to those people who still wish to use mud as a building material.

Does mud have a place in home building in the present age? The answer is yes, but don't take it out of context. In other words confine mud to its own environment - the drier parts of the continent. A brief look at history will show that mud has been used as a building medium for thousands of years, but only in the drier parts of the planet, the Sahara, Middle East and so on. Our experience with mud was north of the Divide. If suitable soil can be found there and costs are comparable with other materials then it is quite at home.

A lot of people now consider mud to be a more compatible material environmentally than other materials that are at hand and are using it south of the Divide. It should be remembered that soil is different where rainfall is heavier and would require greater protection from the elements than other materials which may be at hand.

Is mud the right material to use for a home? If one looks around any environment there will be suitable material for home building – mudstone, timber, palm leaves, burnt bricks, cement bricks and so on. One could use any one of these materials in any environment but would they be satisfactory from cost, insulation and durability angles?

As soil is one of the most basic materials on the planet people think it must be cheap. This is not so. *Mud is not cheap*. However if the prospective home builder thinks he can make the bricks, providing suitable soil is available close at hand, and build the walls he can save a considerable amount of money. But remember if he is building where building regulations apply and he has to employ tradesmen to do the work then his best option is to look for a cheaper material.

In the very early days of mud brick or pisé a verandah right around gave excellent protection to walls from the elements. In the hotter and drier climate it further reduces the internal temperature of the home. In considering a verandah right around other factors could be considered. For example: it provides more comfortable sleeping and dining facilities in the hotter nights and evenings, and it provides extensive space for recreation. However in the final analysis the amount of funds available to the home builder will be the final arbiter.

Spanning openings in mud walls.

We used reinforced concrete. Mud plaster sticks to the concrete as effectively as to the mud.

Fixing door jambs

Make a cement brick, 5 or 6 to one in the mud brick mould. Have some pieces of 3/4" pipe cut about 3 inches long. Put two pieces in each end of the brick. Vertical spacings – centre. Horizontal spacings according to width of jamb. Fill mould, tamp well and cut brick in half with trowel. Turn out of mould when slightly set. We used 6 halves to each door, one about 6" above floor, one at door lock level and one 6" to 9" below Lintel. When fitting door jamb simply plug pipes and nail or screw jamb to them. Pipe can be flattened slightly at inner end so it will not slip out of brick.

I think that just about sums it up. These notes were written at the end of 1987.

4. Conservation Work in South West Victoria, 1947-1984

Foreword

When Governor Phillip arrived at Botany Bay in 1788 his food supplies for the personnel, including the convicts, were not unlimited, so the need to supplement supplies and eventually become self sufficient was urgent. No one knew if the new country would grow the foods to which they had been accustomed.

Early attempts to grow crops were not encouraging. The "Bush" was hard to clear and the animals and birds thought the seeds were planted for their benefit. Besides, the Bush was completely alien and undisciplined compared to the orderly Landscape back "Home". Hence an early animosity towards the landscape and its inhabitants.

As time went on and free settlers began to arrive, and they also struggled to wrest a living from the land of the new country, they also developed an animosity towards the Bush and its creatures. Each succeeding generation has carried this attribute down to the present day. The late Jock Marshall summed up this animosity to the Bush when he said "If it moves shoot it, and if it is standing still, chop it down and burn it."

Add to this attitude the strange quirk that developed with the early settlers: that they were obliged to produce vast quantities of food and fibre for the "Old Country" and we can see why the basic ecosystems and many of the species endemic to this country and unique to the planet were, in many cases, altered beyond recognition or completely exterminated.

The early Botanists and Zoologists were enraptured with the Flora and Fauna of the new country but their enthusiasm was no match for the drive of the settlers to grab the land, clear it and make it productive. It is rather ironic that many times in the last 150 years the Old Country has seen fit to give these producers a mere pittance for the food and fibre they worked so hard to produce. The rough-shod methods of marketing have remained almost unchanged since the first settlement. To remain viable the settler has to clear more land to try and make ends meet,

This was roughly the situation at the end of the last war when the number of people questioning where our country was going and what was happening to the environment began to increase. However it was not until the early 60s that what became known as the environmental movement took off.

It was only realised then that the unmitigated assault on the natural environment since the first settlement had created an alarming situation. Most of the rainforests are in the Eastern States and most had been destroyed - plundered for the short term rich reward they gave. Our forest country generally had been mined rather than managed on a self sustaining basis. The Jarrah forests of Western Australia are, even now, in the process of being destroyed because they have the misfortune to be growing on a vast deposit of Bauxite, the base metal for Aluminium. Water in the Murray valley has been overused causing vast salting problems and no real attempt is being made to reverse the process. In fact the whole of the Murray Darling basin, comprising one seventh of the land mass of

our continent, is in an extremely degenerate state. Other rivers and streams throughout the country are polluted in various ways. Air over our cities is also polluted from burning enormous quantities of fossil fuels. Although there is legislation to control pollution, the greed of the Developers still predominate and controls are largely ineffective.

Erosion – sheet, gully and wind drift – is rampant in the grazing and agricultural areas, drastically reducing production. No major effort is being made to combat the situation. The Arid Zone which comprises two thirds of the Continent is gradually being reduced to desert by overstocking by both domestic and feral animals. These areas are owned or leased by absentee landlords whose aim is to make a fast buck and damn the environment.

The Australian environment by the very nature of the climate was in delicate balance before the white man came and was in no condition to withstand the onslaught to which it has been subjected.

Is the greed of the "Developers" to carry on unabated or can those people who are concerned about the environment, the preservation of which is basic to mans survival, bring about a rationalisation of the use of our natural resources and establish all primary industries including mining, fishing and forestry on at least a self sustaining basis?

The following pages tell of an effort by some of those concerned people to bring about a rationalism of land management in this south west corner of the State of Victoria.

Introduction

From the early 60s there was a groundswell of public opposition to the allocation of Crown land for various purposes, mainly for land settlement, whereby the farming and grazing communities, along with other development oriented people, wanted a much fuller utilisation of our public land for conventional purposes. The community was discovering that such land had many other values than simply farming and grazing.

It seemed that those other values would be championed by people and organisations whose primary aims were centred around natural history, i.e. Field Naturalists Clubs, Walking Clubs, Bird Observers and so on, as well as the many thousands of people who looked for the passive recreation that only the Bush can provide.

So it was the combination of these factors and people who brought about, in Victoria, one of the most revolutionary changes in the allocation for preservation of Public Land in the whole of Australia.

Two controversial land development schemes triggered the debate. First the Little Desert in the West Wimmera, and second, Kentbruck Heathland in the far S.W. of the State. City people and country people, city organisations and country organisations played their part. To a large extent it was one for all and all for one. However, it is the preservation of Kentbruck Heathland as a major component of the proposed Glenelg National Park which is the main concern of this outline.

It is hoped that someone with a personal knowledge of the Little Desert and the factors involved in its proposed clearing and settlement may like to set down that part of

the story. If this was done the records of the great debate of the time would be complete and complimentary.

Early days in Portland

The incentive and the drive to preserve representative areas of natural environment for future reference and recreation had their origins, for me, in the bush in the Cobden and Timboon area and the virgin landscape at Pine Hills between Deniliquin and Finley where we settled in 1913. This story has been told in an earlier chapter.

In the first two or three years at Portland I was able to have a good look around and was surprised at the amount of (apparent) natural vegetation still remaining, although Heathland was still being cleared at the rate of about 14,000 acres a year, and odd forest blocks were still being released.

Heathland had always been problem country for farming but by the mid 50s these problems had largely been overcome. The end of the virgin heathland was in sight and farmers were turning again towards the Kentbruck heathland, the last of such land and naturally the poorest for farming purposes. It was at a higher elevation and was very wet. In the early 50s the Lands Department which controlled the area was approached and asked to establish experimental pasture plots. They were not keen because of the poor soil type. However, they finally relented and plots were established in 1956. Reasonable results were obtained but at considerable economic cost.

With the above background and the existence of substantial areas of bushland in the district, it seemed desirable that some of this country should be reserved in its natural state. I joined the Portland Field Naturalists Club which seemed to be the natural medium for the purpose and found the idea of reserves already in circulation. Mount Richmond and the lower Glenelg had been mentioned. Being a member of the Field Naturalists gave an opportunity to learn something about the workings of Nature, an aspect which had been lacking in earlier years. In other words Ecology

By this time research was showing that areas of natural environment were valuable in improving our standard of living in various ways. The medical profession, which had considered the use of Herbs in the treatment of human ailments as quackery, was forced to take note of increasing discoveries of medicinal values in plant extracts. Amongst native peoples many different kinds of native plants were used to treat their ailments.

Most Primary Producers, always years behind in applying improved production methods to their industries, were openly hostile to the closing up of large areas of uncleared land for, as they put it, vermin (mostly kangaroos, emus and noxious weeds) to flourish and invade their crops and pastures. Forgetting that this vermin came from their own lack of control on their own properties. Also forgetting that the plants which made up their crops and pastures came originally from a natural environment also, and that only continued research in the original environment maintains the productivity of these plants!

For example, Strawberry Clover from Palestine, Wheat from the Middle East, Potatoes from South America and so on. The research works in reverse, because many overseas

scientists, besides our own researchers on the environment, visit this country continuously for similar work.

Indirectly, primary producers are contributing millions of dollars to the chemical industry to produce suitable chemicals to control the pests which attack their crops and pastures, and are poisoning their land in the process. Rather, they should be diverting time and money to finding the natural enemy of these pests in the environment - in other words Biological controls. In time primary producers may have to diversify their present Monocultures because of insect pests. If all the original landscapes have been destroyed where will the means to diversify come from?

Nothing has been said about the enormous tourist industry which natural reserves would help to create.

All the foregoing notes set the scene for the controversial landscape debate which started mildly about the mid 50s, reached a peak in the late 60s and early 70s, and is still a hot subject where natural landscape is threatened with drastic alteration or complete destruction.

Mount Richmond

Early settlement around Mount Richmond (named after Richmond Henty) followed closely on settlement at Cape Bridgewater, which in turn was settled shortly after the Hentys arrived at Portland. Early settlers at Cape Bridgewater included the Kitsons, Kennedys Lightbodys, Kenneys and others, and early settlers at Mt Richmond included the Hollis's, Marshalls, Beaugleholes, Malseeds, Vickerys, Hanns, Comptons, Thompsons and Plummers.

Although most of the roads we know now had been surveyed they were unmarked and unmade. Access was mostly by bush tracks. The Telegraph road was the main link between Portland to the east and Kentbruck and Nelson to the west. With the opening up of the surveyed roads, and in some cases their construction, the old bush tracks have become overgrown and are hard to locate. However White's track and Emu Hill track remain to this day and are still used but on a diminishing scale.

To all early settlers in Victoria the Church was one of the focal points of community life. One of the early community efforts at Mt Richmond was the erection of a Methodist Church on a small piece of Crown land in the corner of what is now Strachans property. This Church, still standing and badly in need of restoration as an Historical monument, can be seen on the map south west from the Lookout Tower. It was erected about 1870 and used until the early 1920s. It is not visible from the Lookout Tower or from Ocean View Walk, but anyone coming to Mt. Richmond by Kennedys road will pass close by. In recent years it has been used as a shearing shed!

A few hundred yards south of the Church, on top of a rise, is a heap of rubble where the Mt. Richmond School once stood. In order of establishment the schools in the area were: Lower Bridgewater, Cape Bridgewater, up from the beach, and Mt. Richmond. The school was built of bluestone and at times as many as 20 children attended. Following its closure as a school the building was bought by Sam and Willie (son) Thompson,

dismantled and rebuilt on one of the Bridgewater Lakes as a home. It is now the home of the Don Fords.

Early settlers at Cape Bridgewater and Mt. Richmond always had nutritional troubles with their stock. They discovered that if the stock were moved to the heavier soils around Gorae West for about three months of the year they would survive quite well for the other nine months at home. For decades the main movement of this stock between the Mount and Gorae West was along White's track and Emu Hill track on either side of the Mount. In recent times it has been discovered that the nutritional problem was a shortage of copper in the soil. Since this has been rectified the movement of stock along these two tracks has almost ceased, and are barely maintained. The lower picnic area at the top of the Mount and the cleared patch on Ocean View Walk and Malseed's Swamp in the N.W. of the Park were all cultivated in the early days. Potatoes would have been the obvious crop.

Some of the old home sites can still be located. A pile of rubble on a hill about 30 chains north of the old Church was the site of Beaugleholes' home, and about a mile further north and visible from the Lookout Tower with glasses is a stone chimney, the sight of Malseeds' old home. It is just outside the map area. About a quarter of a mile S.W. of Ocean View walk and now completely overgrown is Vickerys' old home.

Walking through the bush in the Park, one occasionally stumbles over an old wire fence line. Sometimes an old fence post can be seen – relics of early settlement. Such a fence line can, be seen on Forest Walk.

A disappointing aspect of the early history of Mt. Richmond is the absence of any of the old homes. They have been allowed either to disintegrate or the stone has been used for other purposes. However some of the early track names and place names have been retained and these will help perpetuate the memory and activities of a community dating almost from the first settlement.

In the interpretation of a National Park to visitors many branches of Natural History are involved. One branch which is always a source of interest is that of Geology. In the case of Mt. Richmond one might ask "how did it come to be where it is?" Is there any relationship to other low hills in the area? Is it of volcanic origin? If so why can't we see the evidence. Why is the vegetation so stunted on the western side and of forest proportions on the other?

It is estimated that volcanic activity began in the Portland area in the late Tertiary period and continued intermittently until only a few thousand years ago. Mt. Napier would have been one of the last active volcanoes in this corner of the state. Mt. Richmond is an old volcano, its active phase beginning in early Pleistocene times. It was associated with Mt. Kinkaid and Little Piccaninny. Evidence of volcanic activity can be seen in small outcroppings of basalt on the slopes and patches of heavy soil at various places on the Mount. This heavy soil is decomposed basalt and is a soil type favoured by Swamp Gums. In the beginning underground pressure builds to a certain point and blows at the weakest point in the crust – hence Mt Richmond. Kincaid and Little Piccanniny were formed at other weak points. Geologists have suggested that Black Waterhole (Malseed's Swamp) and Hann's sink hole were associated vents but not enough research has been done to say one way or the other.

The grey sandy soil which covers most of the Mount is wind blown from the seaward side. This would have occurred some thousands of years ago during a dry climatic period and when sea level was much lower than at present. There is evidence to suggest that the country in this part of Victoria has had periods of near-desert and at other times an almost tropical climate. The western slope of the mount is exposed to strong west to south west winds which drift in large amounts of salt-laden spray – hence the stunted nature of the vegetation and the predominance of Heath type vegetation, which is tolerant of such conditions. The Eastern side of the Mount is more sheltered and has better soil. In these conditions vegetation grows to forest proportions.

The upward and downward movement of the land surface by subterranean pressures and the formation and melting of the icecaps on more than one occasion have also had their effects. At one time Mt. Richmond was an Island! The pivot of these movements is a series of fault lines in the Earth's crust extending from Bridgewater in a North Westerly direction through Kentbruck, Dartmoor and Dergholm. The land to the East of this fault line has been stable for a much longer period than the lower land to the west. Coupled with this up and down movement and the period of no ice, sea level was about 150 feet higher than at present! At this time the coastline extended fanwise from Cape Bridgewater towards Casterton, Naracoorte and Northwards when the sea covered much of S.E. South Australia and part of the Murray basin. Conversely, during a period of maximum ice at the Poles sea level was about 340 feet below present levels! In one place Discovery Bay beach extended ten miles to seaward from its present position.

From the Lookout Tower on a clear day one can see a series of old volcanic cones. Beginning in the west with Mt. Schank (in South Australia), and traveling clockwise, one can see Mounts Gambier, Piccaninny, Kincaid, Deception and Van Dyke (both very low), Eckersley, Napier, Rouse, Clay and, although invisible now, there were two more major volcanoes, one in Nelson bay and one in Bridgewater Bay.

In addition to the above, nature has endowed Mt.Richmond with a prolific display, in season, of flowering plants and orchids. With such a wealth of natural history plus the history of early settlement Mount Richmond was a must for a Natural Park.

The main object of the Field Naturalists in the mid 50s was the establishment of Mt. Richmond as a National Park. Noel Learmonth, Birds, and Cliff Beauglehole, Botany, had done a lot of work in listing species. Cliff had 450 species of flowering plants and Noel just on 100 species of birds.

It should be noted that other Field Naturalists were also interested in plants, birds and other branches of natural history so that where lists were being compiled there could be, and was, a general contribution. However it was Noel and Cliff who accepted the responsibility for the lists and their accuracy.

Much of 1955 was spent in getting Mt. Richmond under way, Noel being the main instigator. Support was readily forthcoming from the National Parks Association, Field Naturalists Club of Victoria, Royal Australian Ornithologists Union and the Glenelg Regional Committee. An approach was made to the Lands Department who controlled the area. In August the Secretary for lands advised that the matter would be considered.

The main problem at the time, although Victoria had a number of National Parks, seemed to be that there was no satisfactory machinery available for the Administration of National Parks. The ones in existence were managed by Committees of Management, each having its own ideas on how a National Park should be run. However in 1956 the Government passed Legislation setting up a National Parks Authority. Although by no means perfect it was a giant step forward and opened the way for more National Parks to be added to the Victorian system.

In 1960 the Secretary for Lands and his party came to Portland and indicated the boundaries for a National Park of 1540 acres on Mt. Richmond. A most disturbing feature was that the south side of the Mount and the Trig point on the summit were privately owned and the south boundary was of a most irregular pattern! However a few years later the Forests Commission was persuaded to purchase this property and they gave the Park 140 acres. This included the summit and extended down the south side to include a permanent spring which gave an assured water supply to the Park. Fortunately none of this land had been cleared.

In 1961 a Committee of Management was appointed and in May the Director of National Parks, Dr. L.H. Smith, came to Portland and formally set the Committee on its way. I had been appointed to the Committee of Management but was absent for the inaugural meeting, so advantage was taken of my absence to elect me Secretary! Thus began a most rewarding association with Mount Richmond and National Parks generally. Involvement with Mt. Richmond ended in 1976 when I retired after three years as Ranger

Certain guidelines were set out by Dr. Smith for the supervision of the Park at the first meeting, and from there a very inexperienced Committee of management had to take up the task of managing a National Park.

It was decided that fire protection and Public Relations must have top priority. The Park had always been a fire hazard, at least the surrounding farmers thought so. Early settlers would drop a match periodically and burn out sections and occasionally these fires would reach major proportions. The last major fire was in 1956. It should be noted that not all farmers were anti-Park. In fact several were on the Committee of Management! A good show of fire protection work was the surest way to improve public relations.

Although the farmers had always burnt areas in and around the Park this was not allowed now. It was never allowed really, but Officialdom seemed to turn a blind eye.

The first decision was to clear a 45 foot wide break around the boundary. This met with some opposition from the Authority but when we pointed out its value as a public relations exercise they agreed. Also at the time the West and South boundaries had not been clearly defined.

I had a dumpy level [a basic survey instrument] and Noel had had survey experience. By working bees we ran a line along the south boundary. The Authority had no money for that sort of work. We only had hand tools but occasionally Norm Wade, a member of the Committee, brought along his tractor with a blade in front and a slasher behind. The Authority made a grant to do the bulldozing around the boundary and they paid the Lands Department to survey the west boundary.

Apart from this work, the Committee put in an enormous amount of voluntary work to get the Park going and to give it some credibility. After all, there were not many National Parks in Victoria at the time and the Committee were quite elated at having one so close to Portland. In spite of our efforts five fires started in the Park in the first few years, all in suspicious circumstances. Fortunately with the help of the Forests Commission all were controlled quickly and little damage was done.

Progress in the early years was slow. In 1967 the Authority made a grant to construct a gravel road from Stevens road to the summit. In 1969 a Lookout Tower was erected near the Trig Point at the summit and named in honour of Noel Learmonth for his work in getting the Park established, and later for his services as a member of the Committee of Management. In 1971 a water supply was established using the spring water near the summit, and in 1972 a toilet block was erected.

With the new road to the summit, which later was sealed, fire places and picnic tables were provided by the Authority and numerous walking tracks were made. By 1975 this work had become somewhat of a patchwork nature. With a substantial grant from the R.E.D. unemployment scheme the whole picnic area was re-designed and extended. Water was piped to all fireplaces to reduce fire risk. Walking tracks were extended, improved and well signposted. Fire fighting equipment was upgraded from the days of knapsacks and rakes.

On the retirement of Dr. Smith in 1974 the National Parks Act was revised, abolishing the old Authority and Committees of Management. With the new "National Parks Service" and John Brooks as Director a completely new Administrative structure was established. The day to day management of the Parks was decentralised. Victoria was divided into several "Districts" each with a superintendent responsible to Headquarters in Melbourne. This greatly facilitated the day to day management of the Parks

The new system destroyed forever the friendly co-operative working relationships, yet always within the confines of the Act, which existed from top management down to the Rangers, and created in its place a bureaucracy, each member of which, especially the Rangers, has to virtually carry a Bible of the rules to make sure not even minor deviations are made from instructions. When I was given the position of Ranger at Mt. Richmond my instructions from Trevor Arthur, Deputy Director were brief and to the point: "You will manage the Park according to the Act, and your priorities will be know your Park and Public Relations"

By this time it was nice to see former enemies of the Park bringing their families and friends to the Park to enjoy the quiet recreation that only the *Bush* can provide!

Eventually the Land Conservation Council added the adjoining Crown and Forest land to the Park making about 4400 acres in all. Many thousands of visitors now come to the Park each year including visitors from other States and overseas. Mount Richmond is fulfilling its role in providing bushland recreation for these people.

Mount Richmond is many things to many people. There are those who would clear the Mount and sow it to grass and at one stroke enhance those magical letters GNP and eliminate the fire and vermin hazard. Fortunately these people are a dying race. A few

have no interest and look upon it with disdain. But time works on them and they become curious. They come and have a look, are surprised ... note the picnic facilities ... the quiet atmosphere ... ask a few questions. They go away but come back this time bringing their steaks and something to drink ... The Park has won another friend! There are those who like a quiet day in the bush; sometimes they form a party ... bring their steaks, perhaps a few bottles or a flagon of Claret and while away an afternoon ... eating ... drinking ... walking – the sensible way. The lazy day, the quiet atmosphere rebuilds strength and jaded nerves for the renewed wrestle with the Gross National Product in the coming week. Then there are the travellers – the Park is on the map, therefore an attraction. They come, look ask questions, and always "Are there any animals in the Park?" They promise to come again.

But it is the animals and wildflowers which give Mt. Richmond its life, character and appeal. There are those who thrill at the sight of a spike of heath, the bell shaped blood red flowers marching up the stem in perfect unison, all facing the sunlight, the deep Pink of the Boronia buds, their wax like petals shading to a delicate pastel colour as they open ... the great banks of Golden Wattle with myriads of bobbins dancing in the sunlight ... the masses of yellow flowers of the bush pea ... the creamy mass of the Beaked Hakea in flower ... the small greenhood orchid only two or three inches high ... or the flower spike of the large Blue Sun Orchid two feet and more in height.

Driving along a service track in the Land Rover - suddenly there is a swoosh ... an emu is underway ... a chick no bigger than the egg! The foot eases off the accelerator ... another ... another until seven are counted. Seven pairs of little legs moving faster than the eye can follow. One by one they squat by the side of the track almost invisible in their protective colouring! On a walking track ... suddenly one freezes ... not twenty yards away a Red necked Wallaby is also frozen – erect, alert ... to see a Wallaby thus is to see a head beautifully proportioned, delicately moulded ... a superb example of Nature's craftsmanship! A flash of red and a crimson Rosella weaves in and out of trees and limbs at incredible speed!

The day is perfect ... Wonder what can be seen from the Tower? Glasses adjusted ... Ah yes, Mount Schank to the west ... then slowly clockwise, Mt.Gambier ... the checkered farmland, with miniature sheep and cattle dotted thickly on the lush pastures, with the whole outline of the Grampians in the background ... Round past Mts. Napier, Eccles and Clay to Portland Bay ... Julia Percy Island seems to be floating on top of the waves! Lawrence Rocks with their Gannet Rookery, these great birds are another example of Nature's craftsmanship ... Round again ... Cape Nelson, Bridgewater Bay, unfortunately we cannot see the beach ... a little further and Cape Bridgewater. The high point on the east side of Cape Bridgewater is the highest point on the Victorian coastline, about 430 feet. It is the side of an old volcanic crater. Round ... Discovery Bay ... the sea is as blue as blue. The thin line of white is the waves breaking onto a dazzling white beach and curving away into the distance ... Mt. Schank ...

Many people walk the Ocean View Walk and when they come to a small clearing on the return - surely this must have been cultivated at some time! When ... by whom? It was probably cultivated by one of the first settlers whose old home was nearby. A few lines written on the walls of the old Mt. Richmond Church are appropriate: "Where are they ... these men we knew?

Gone to the earth from whence they came leaving only their deeds.

I sit within the battered door of this hall of meditation and their names come to me borne on the winds of memory. I bow my head in sad reflection

and long for the days that shall never come again".

The old Church is indelibly linked with early settlement at Mt. Richmond. It needs a Craftsman's loving caresses.

Stay back one evening. Just on dusk two or three Jackies decide to release their pent up mirth on the day's funny bits ... Their laughter echoes and re-echoes down the Mountain side. Will have a look at Portland lights from the Tower before going home ... half way up met a possum coming down! He turned and scuttled back ... followed and stood down a few steps with eyes on a level with the decking ... possum went round and round ... we played Peep-O for two or three minutes, sometimes our eyes only inches apart! The day was hot ... Koala was spread-eagled along an almost horizontal branch, arms and legs hanging limp in mid air, Junior a body length behind, same posture! Boy its Hot!!

A photographic expedition. Ah, an Echidna crossing the track. Stalk him and make position just as he starts to dig ... He decides to have a peep! Click ... nothing ... damn. Forgot to wind film on. Echidna decides he does not like the look of the interloper and digs in earnest ... the seconds pass ... "Down, down deeper down he must be nearin' Satan's dwelling" (with apologies to Banjo) All that can be seen now is a small mound of freshly dug earth ... Somewhere down there ... is an Echidna!

Gale force winds and rain squalls. Wonder what can be seen from the Tower? At the top one has to lean into the wind to stay upright. It is cold, penetrating ... cuts the eyes. No blue sea or glistening white sand this day. Instead row upon row of huge breakers ending their long journey from the Antarctic and thundering on to the beach. A shaft of sunlight lights the sea between squalls ... Whitecaps to the horizon! Slowly left and the hazy outline of Cape Bridgewater comes into view. The huge seas are breaking onto the limestone and basalt cliffs with incredible fury! Round ... a small cairn in memory of those who lost their lives when their sailing ship foundered in just such a storm ... No wireless in those days ... no radar ... no lighthouse ...

Occasionally, a young couple will come in to the Park after hours and select a quiet nook ... Noel Learmonth once said that if we don't leave a few acres of bush our young people will have to make love under a barbed wire fence!

For the animals the bush provides all their needs, food, shelter and fibre. Fibre ... ? yes to build their love nests!

... Mount Richmond is many things to many people ...

Bats Ridge Fauna Reserve

When our property was purchased in 1951 part of it, six small blocks, extended along Bats Ridge, which is old consolidated dune limestone, and Bats Ridge drain for over a mile. There was Crown land on both West and South sides. The whole area was rich in plant and bird life, and two rare Marsupials, Antechinus minimus and the Potoroo had been recorded there. Three small blocks at the western end with a total area of 64 acres had the most and the best of the Bats Ridge caves. We explored all the caves in the late 50s and found many interesting formations. One cave had a large colony of bats. There was also a large swamp which held a fair amount of water in the winter time and was home to quite a number of water fowl.

The late Tom Taylor told me when he owned the adjoining property that the people who lived near by at the turn of the century and worked the old lime kiln used to keep a boat on the swamp. There would be much more water in it in those days because it was before the Cashmore drainage scheme had been put in. If it could be filled to that level it would make an excellent refuge for wildfowl.

Remembering the destruction of the virgin landscape at Pine Hills and being well aware of the farmers grab for land, the idea of a Flora and Fauna Reserve was born. Although there was still a lot of uncleared Crown Land and Forest in this part of the State almost nothing had been secured as reserves. While we had the property the area was safe, but then the Davies family would not always own the property. The area would be much more secure as a constituted Reserve.

I thought about it for some time and decided to approach Fisheries and Wildlife with the proposition that I would return the 64 acres to the Crown providing I was given an equal area of adjoining Crown land but nearer the home. Also that the Government release 150 acres to the west of my blocks add it to my 64 and establish a Reserve of just over 200 acres. Fisheries and Wildlife was interested, but the Government, under extreme pressure at the time to release uncleared land for farming purposes, was not keen.

The matter dragged on for some time. Driving out the gate one morning I found that a number of cars had gathered at this point. It was obvious that representatives from Fisheries and Wildlife, the Lands Department and Portland Shire Council were present, and it was equally obvious that the topic under discussion was the proposed Reserve. I was annoyed at not being asked to be present, wrote to Alf Butcher, Director of Fisheries and Wildlife, and told him so. I also told him it was not the first time people trying to get a few reserves before all the land was cleared had been snubbed by Officialdom.

On another occasion, a field Officer of Fisheries and Wildlife while trapping in the area, showed me a map of the proposed Reserve. It contained little more than my 64 acres.

Once Butcher jumped on me for procrastinating and came very close to being told to go to hell! Another bone of contention was that I was to hand over Title to the 64 acres and await Officialdom's pleasure for the title to the new area. In a previous encounter I had waited seven years for a Title!

In spite of all this I persisted and the Bats Ridge Fauna Reserve of 150 acres came into being in 1968. The first thing Gavan Cerini, Fisheries and Wildlife Officer at Warrnambool, did was to open Bats Ridge drain and fill the swamp. It has only been dry on two or three occasions since, and is home to many hundreds of wildfowl.

If any prodding was needed to dig my toes in on the next story the experience here was it!

A dream is born. The first moves.

Prior to the second World War about two thirds of all land in Victoria had been settled, that is converted to use for Agriculture, Grazing or Intensive Farming. Naturally this was the best land and/or the easiest to convert. The remaining one third was not considered particularly viable for this purpose, having poor soils, low rainfall or steep slopes. It was not until the early 50s that much interest was taken in the poor soils of the better rainfall areas. Research in the decade mid 40s to mid 50s established that besides basic fertiliser certain trace elements were missing. With the application of these supplements quite good results were obtained for both crops and pasture. This led to a further depletion of Victoria's uncleared bushland, especially heathland.

Up till this time the farming community seemed to have assumed the prerogative of determining land use. Further, the Lands Department since its inception seemed to have established the role of presiding over the patchwork distribution of Crown Land There seemed to be very little opposition to and few complaints against this arrangement.

Victoria had three main National Parks, Wilson's Promontory, Mount Buffalo and Wyperfield, plus a few smaller Reserves. There had been no great interest in National Parks up to the mid 1940s despite bushland recreation being quite popular. However, from this point on and for three decades there was a tremendous surge in demand for more reserves before all suitable land had been cleared. The demand was two-pronged, first for increased bushland recreation and the second for far greater areas of bushland to be reserved to meet future needs and to preserve something of Australiana for future generations.

A further reason for this plea was a similarly timed, but even greater surge for bushland to be cleared for the broad-acre planting of pine trees to try and cope with a projected shortage of timber for the domestic market over the next two or three decades. The Forest lobby, not satisfied with extra timber for the domestic market saw possibilities for substantial export trade. On top of this, Governments were persuaded that there was a further good export market for most of the timber on the so called useless bushland if it was converted to wood chips. Besides all this and because of new technology there was a tremendous scramble for more bushland for farming and grazing purposes.

All of a sudden vast areas of Victoria's remaining bushland, which had remained virtually secure for decades was threatened with destruction. The Victorian people reacted in a positive way to prevent this happening.

All this set the stage for more and and larger permanent Reserves. This culminated in an all out peaceful confrontation with the Government of the day between 1968 and 1971

The result for Victoria was the placing on the Statutes of far reaching Land Conservation Legislation. This legislation froze all Crown land until it could be reviewed by a Land Conservation Council, a special group set up by the Government and having all the expertise necessary to carry out the duties assigned to it.

The first move for a major reserve on the Lower Glenelg River was made in 1947, When Noel Learmonth, Vice President of the Portland Field Naturalists Club, invited a group from the Field Naturalists Club of Victoria to visit the area and assess its potential for a reserve. The initial proposal was for a Forest Sanctuary under the management of the Forests Commission as the most satisfactory method of preserving the indigenous flora and fauna. The area in mind was approximately the present Park - plus an extensive area to the north of the river.

Even at this early stage Noel and Cliff [Beauglehole] had done extensive work on the plant and bird life in the area. Enough to say that the Geology and the great diversity of ecosystems and the geological features made it very different to any of the major reserves of the time. It is interesting to note that a few days before this visit the rare ground parrot had been sighted within the area. This species was not mentioned in the bird list appended to "The Case for a Lower Glenelg National Park" in 1968. Apparently it is one more species that has been unable to adapt to the changed environment created by European man.

The visit by the Melbourne Field Naturalists was over the Easter week end 1947. The party comprised five members from the Melbourne Club, Mr & Mrs Eric Muir of Dimboola and Noel and Cliff. On the Monday the party was joined at the Moleside [Creek?] by Norm Wade and other Field Naturalists from the Portland Club in a couple of jeeps. There is an excellent record of this excursion in the Victorian Field Naturalist of the time.

The matter of a Forest Sanctuary was pursued for some time by the Melbourne members with the Forests Commission, but to no avail. Apparently the Commission did not want to tie itself up with a different management technique which the proposed Reserve would require.

The next mention of a reserve on the Lower Glenelg is in Noel's correspondence on Mt. Richmond in 1955. Again no progress.

In 1963, with the Forests Commission plan to clear 11,000 acres of Kentbruck for pines getting under way, Noel again took up the matter of a lower Glenelg Reserve, this time a National Park of substantial proportions, with Geoff Shepherd, Forest Officer at Rennick. Geoff was not very helpful, indicating that when Kentbruck was planted it was proposed to clear and plant substantial areas of pines along both the north and south banks of the river. This, of course, would destroy any hope of preserving the environs of the river. Only the three chain Crown Reserve along both banks of the river would remain.

About this time too, the Lands Department released about 3000 acres of Kentbruck heathland for six new farms. The land was on the northern slopes of Little Piccaninny, an old volcano. The release of these blocks followed the results of the experimental plots mentioned earlier. If these blocks proved viable as farmland it was proposed to make available the rest of Kentbruck heathland for settlement.

By way of explanation, Kentbruck comprised two distinct soil types. One was the heathland – wet, swampy, poor soil and at a higher elevation than normal. It carried an enormous number of plant species – a most valuable area for preservation. The second soil

type was what Gibbons and Downes [see below] called orange sands, well drained, dry and carrying a preponderance of Brown Stringy Bark plus associated species. This is where the pines were planted.

We had great difficulty in preserving a few small areas of orange sands because the Forests Commission insisted that every acre of this country be planted with pines.

The chances of preserving the environs of the magnificent river gorge, the tree ferns and associated vegetation, the small waterfalls along the permanent running streams of the Moleside system which drained the heathland, the heathland itself with its enormous wealth of wildflowers, fungi, mosses and animal life were very grim indeed. We realised that if the area was to be saved we had to assemble and present an unassailable case. Public support for increased agricultural production and increased pine planting was running near 100%. Development of the Portland "Hinterland" to make full use of the new harbour was the "in" thing.

Cliff decided that lists of all species had to be updated. An assessment of the farming capabilities of the heathland would have to be made, together with a long term assessment of the pine industry, and these weighed against the value of the area as a National Park. The sentiments of the bugs and beetles people, as the Field Naturalists were known at the time, had no place in the great schemes of development which were to get under way, not only here, but right across Victoria. Everything had to have a dollar value.

Gibbons and Downes, of the Soil Conservation Authority, had just published "A Study of the Land in S.W. Victoria", with particular reference to Kentbruck. This was of little help because it was ambiguous. Being Public Servants this was understandable, although we knew they were against turning Kentbruck into farmland.

Ammunition for the cause

So we set to. Every weekend for almost three years we combed the area, mostly Kentbruck because it was under the greatest threat. Cliff on Botany, Noel on birds, Eugene Finck, diverse expertise, and myself off-siding. As time permitted other members of the Field Nats. came out. At different times we were joined by many other people from all over Victoria and interstate, especially the S.E. of South Australia, such was the interest.

One of Cliff's early discoveries was a patch of the rare Blue Tinsel Lily just off the heath road. Two or three plants were growing on the side of the road and in full flower. Cliff nearly cried as he pulled them out so the main patch would not be discovered. One or two patches were known on Mt. Clay but nowhere else in eastern Australia. It is a West Australian plant and reaches its eastern most limit in the Portland area. Eventually we discovered many patches of the Lily and some of the plants were magnificent specimens.

To test Public reaction to the idea of a National Park on the Lower Glenelg the Portland Field Naturalists called a public meeting in April 1964 to which representatives of all public organisations in the area were invited. Response was good, with representatives from the Town Council, Portland Shire Council. Numerous local organisations, Field Naturalists Clubs around the region and the Victorian National Parks Association. In

addition Claude Austin, Ornothologist from Coleraine, and Dewar Goode of the National Parks Authority. The following motion was carried unanimously:

"That this meeting considers that a considerable area on each bank of the Glenelg River, from Jones Cliff to the south Australian border, plus the fern gullies of the Moleside creeks and the feeder swamps should be preserved in their natural state as a National Park. It requests the Government to take the necessary requisite action to prevent the Forests Commission from planting pines thereon and other Departments from effecting swamp drainage of the feeder creeks".

From this it was obvious – the community wanted a National Park in the area – but what size and where to put the boundaries? Any attempt to define boundaries at the Public meeting would have vetoed the whole project. The Forests Commission still wanted a lot of country for pines, and the farmers had been talking of settling the heathland for 50 or 60 years! It was shown later that the sort of Park they would accept was precisely the National Park Sir William McDonald, as Minister for Lands, established in 1969. That was unacceptable to us.

Following the public meeting the Field Naturalists appointed a Committee of four to pursue the goal of a National Park for the lower Glenelg. The four were: Noel Learmonth, Cliff Beauglehole, Eugene Finck and myself.

We knew the kind of park which would suit the farmers and the pine people would not suit us. To use Noel's words "They would pick the eyes out of the landscape and fling the remnants at our feet".

By this time our exploration had given us a fair idea of where the boundaries of a National Park should be. We drew a map and included the main ecosystems which we considered should be preserved. It included about half a mile buffer zone on the north bank of the river between the river and the pines. Also all the country south of the river, Crown land, to the Drik Drik – Nelson road and the Portland–Nelson road; the narrow neck of land east of the Drik Drik road to connect the river end of the Park with the heathland; about 6000 acres of indifferent forest in the Gallows creek area; and most of the heathland. The north boundary was to follow the Inkpot road and the east boundary to follow the Heath road. We left out about 1500 acres west of the recently allocated Kentbruck blocks in the interests of agriculture. In all about 48,000 acres.

We reasoned that as far as Kentbruck was concerned anything less would be useless. If more farms were made available drainage would go straight into the Moleside creeks and their rich plant life would be destroyed. If this happened the creeks would simply become drains like the upper reaches of the Fitzroy and Surrey rivers - flooding in winter and dry in summer.

At this time I had been farming on the heathland for twelve or thirteen years and this experience was a good base for assessing the farming potential of Kentbruck heathland. An environmental library was also being assembled. This provided good research material, not only local, but overseas as well.

We put together a case for a major National Park, and circulated this with the map. It was well received by the surrounding Field Naturalists and our supporters in Melbourne.

It gave the farmer/developers a bit of a bump at first, but they just shrugged it off as a pipe dream of a bunch of nit-wits. But *they* also had to promote the idea of further land settlement on Kentbruck.

The six blocks recently allocated were quickly bulldozed, sown to pasture, fenced and provided with stock water. Contrary to normal Lands Department practice they were given to farmers who already had farms or could afford to buy their own.

About this time the Bolte Government set up what it called a "Land Utilisation Advisory Committee". It was composed of members of Government Departments – Soil Conservation Authority, Lands Department, State Rivers and Water Supply Commission, Forests Commission, Department of Agriculture, Department of Mines and Fisheries and Wildlife Department. The National Parks Authority was not represented! Being composed of Government Servants it was obviously a secret organisation set up to dispose of John Citizen's land without John Citizen having any say whatever as to what he may want to do with his land!

This Committee in turn set up a study group to investigate the Kentbruck and Little Desert land settlement proposals. The study did not take long and the report was handed to the L.U.A.C. which in turn handed it to the Government. The Government would not release the report, because obviously it did not play the game the right way. And so the matter dragged on. No one outside the Government knew what was in the report and despite many devious approaches no one could find out the findings of the report. It was some years before the report was released to Parliament.

Likewise we could not make any headway with our Park proposal We spent a good deal of time trying to get local support but the community generally were not interested. A small minority of farmers supported our proposal, and the National Parks Association were doing what they could at their end in Melbourne. Meanwhile the Portland Shire Council was pushing the land settlement proposal as hard as it could.

We wrote to the then Minister for Lands, Mr Balfour, and asked if he could come to Portland and have a look at Kentbruck from our point of view. He replied that he had received an invitation from the Portland Shire Council to inspect the area in the near future, and had accepted it. He suggested we contact the Shire which had charge of arrangements, he was sure agreeably mutual arrangements could be made for us to join the inspection party. The Shire didn't beat about the bush: "It would not be desirable to bring the two opposing factions together in the presence of the Minister"!

In 1967 a few progressive Portland people organised a Trade Fair and held it in Dalgetty's enormous wool store. Portland Field Naturalists and the Portland Camera Club took a stand jointly. The Camera Club had been doing a slide show in the holiday season for the past three years highlighting Portland's attractions, and they saw an opportunity to publicise the show at the Trade Fair, and we took the opportunity to promote the proposed Park. As a member of the Camera Club Committee running the show I was able to organise two sections dealing with the proposed Park - Glenelg River and Cobboboonee Forest. We each put together about 100 slides and with commentary ran them alternatively and continuously throughout the Fair. We also had suitable posters and other exhibits.

But this was not the only publicity for the Park. Members of the Park Committee gave talks to various organisations in Portland and surrounding district. The local Branch of the C.W.A. asked us to summarise some points on conservation for one of their meetings.

Exploration of Kentbruck was still going well. Cliff had amassed impressive floral lists, with the moss flora of the Moleside creeks quite outstanding. Bird and mammal lists were also growing. Jim Willis, senior Botanist at the Melbourne Herbarium, came up one weekend to have a look at some of Cliff's collections, so we organised a trip across the heathland. We hadn't gone far when Jim called a halt, got down and picked a very rare and beautiful fungus.

That started Cliff on another tangent. Over the next six or eight weeks he collected and named just on 300 species and barely scratched the surface. The total number of fungus species would be several times that number! On the same trip Jim discovered a group of Tassel Cord rushes with trunks like trees – a most unusual occurrence.

Prior to the work of exploring the heathland, Cliff had been researching owl roosts to try and establish a pattern of small mammal distribution in the district over the last 100 years or so and had had a fair amount of success. While exploring Kentbruck he heard of a death trap cave near the Glenelg and within the proposed Park. After extensive enquiries he was told to contact Keith McEachern of Carpenters Rocks in S.A. He did this and established that there was such a cave. Arrangements were made to meet Keith and see if the cave could be re-discovered. We met at Sandy Waterhole and used Keith's boat to cross the river. After about an hour it was found, well inside the boundary of the Park.

Keith and his brother had a grazing lease over the area prior to the second world war during which they found the cave and left their names on the wall after climbing down. We had a rope so one of Keith's boys climbed down and encountered a tiger snake coiled up at the bottom! Someone had to re-cross the river and get a rifle and return. I don't know how the young chap held on for so long, but he dispatched the snake and finished the descent. He gathered a few bones at the bottom and showed them to Cliff, who was most impressed. During the next week I made a rope ladder. We returned at the weekend and went down. Cliff was staggered at the amount of bone material which was scattered around on the floor and cemented in the walls. Not wanting to disturb anything unduly we left them just as they lay.

Realising the potential importance of this find Cliff contacted Norm Wakefield, a Biologist at Monash University, who later confirmed that it was a major find. The surface bones were carefully collected and catalogued and then we started digging and screening. The screening was done in the cave and the residue hauled to the surface in four gallon tins. We soon got tired of this and made a winch by jacking up the back wheel of the Land Rover, fitted an extra wheel rim and with a puppy over the cave head we had a power winch.

Excavation work was carried out over two summers, 1964-65 and 1965-66, always under the supervision of Norm Wakefield, although he was not always there. When Cliff decided to call a halt we had screened about 140 yards of dirt and recovered the remains of about 2000 animals! This included 40 species, 20 of which are now extinct. In one section when we finished digging we were almost twelve feet below the original floor level of the

cave. Norm had a full account of this work published and the evolution of the cave morphology was written up by Albie Link of Melbourne University. After this initial work no one seemed to have the time or money to proceed further. Unfortunately Norm Wakefield met with a fatal accident a few years ago and the four original bags of bones were lost for some time. When found further sorting found the remains of two more animals now extinct.

A few years ago a Biologist came over from the Australian National University with half a dozen students to do some more work but their stay was too short to accomplish much. There is still a lot of information on the animals of pre-historic times waiting to be dug out. The discovery of the cave gave us a little more ammunition for our cause, because when land is cleared for farming caves are filled in.

Working with Cliff one never ceased to marvel at his capacity to know and understand Botany. His keen eyesight could pick out a minute plant growing in a conglomerate of vegetation. Another aspect of his work which amazed me was his capacity to write down the common and botanical names of plants with never a mistake! On occasions, as Secretary, I had to type plant lists. Typing the common names was easy but the botanical names were a nightmare! Cliff always checked and with a quick glance down a full page of names could pick a mistake immediately.

Cliff had botanical contacts throughout Australia and overseas as well. On numerous occasions, when we were exploring the heathland, overseas botanists were referred to him and all were impressed with the richness of the heathland plant life.

In late 1963 Dr Richard Howard, Director of the Arnold Aboretum, Harvard University, U.S.A., was in Portland collecting cuttings from selected plants for special study in America.

Dr Clive Jeremy, British Museum, London, was particularly keen to see the fern Selaginella uliginosa in the field and to collect specimens. This fern is growing in the extreme south east corner of the heathland and is the only record in the proposed Park.

Dr Robert Belcher, of Eastern Michigan University, U.S.A. was greatly interested in the genus Senecio and was amazed to see seven different species growing in this area.

Dr Roland Melville, of Kew Gardens, England, was also making collections of scientific importance for study on his return. He claimed that the profusion of flowering spikes of the grass trees in the Bullies Range area was one of the finest sights he had seen in his twelve months' stay in Australia. We tried hard to save this section of Bullies Range, but it was bulldozed for pines!

The list of plants which was appended to "The Case for a Lower Glenelg National Park" illustrated the profusion of plant species within the proposed Park with most in the heathland. The above paragraphs highlight their value to science, and we hammered this aspect hard.

Later on when our pressure persuaded the Government to give us half the heathland, Cliff re-checked the area that was to be farmland and listed all the plants that would be lost. The extent and importance of this work is recorded in our brochure "Boundaries of Kentbruck heathland".

The composition of the old National Parks Authority was mainly heads of Government Departments, but included three or four members who were outside the Public Service and had a particular interest in National Parks. Apart form these members the Authority was completely out of touch with what the community wanted from its public land. This was a strange situation for a body charged with formulating policy for our National Parks, considering that National Parks were gaining rapidly in status for community recreational purposes, even at that time.

In 1966 Members of the National Parks Authority, including the Director, Dr Smith, visited the area and were shown the highlights. Don Saunders was chief Technical Officer at the time. He had been to the Park area on more than one occasion and was well aware of the great environmental diversity of our proposal. When the members returned to Melbourne Don was given the task of preparing a submission for the Authority on the proposed Park. When presented to the Authority for consideration there was uproar at the thought of a Park of such magnitude! This was understandable, because as previously mentioned the Government Members of the Authority were out of touch with community thinking on reserves. The independent members, who were a minority on the Authority were much more conversant with what the community wanted. Dewar Goode, an independent member of the Authority, missed no opportunity to press for our proposal.

The unfortunate Don was given a thorough dressing down by the Chairman of the Forests Commission for daring to suggest a Park of such proportions, and further for daring to suggest that the Princess Margaret Rose Cave should be included in the Park!

Don's proposal closely followed our proposed boundaries for the Park.

Taking the fight to the people

All this brought us to early 1968. The special Field Nats. Committee had been in existence for four years and we had given a lot of time to the Park proposal. Our progress to date: NIL. We seemed to be no nearer the Park we wanted than when we started. Fortunately the land settlement proposals had also ground to a halt, but the bulldozing program for the pines ground relentlessly on.

At the State election the previous year the Bolte Government had been returned to office. Sir William McDonald, member for Dundas, adjoining Portland electorate, had asked for and been given the Lands portfolio. Sir William was a "Developer" so it was all stops out for land settlement. Sir William was also the new Minister for Soldier Settlement and Conservation!

Cliff rang one day and said "What about expanding our Committee (Portland Field Naturalists) to get better community representation"? He had been in touch with Claude Austin, a very keen Ornithologist from Coleraine, told him what he had in mind and asked if he, Claude, would preside over such a Committee. The answer was yes! The old Committee discussed the idea and it was mentioned to Field Nats. who were happy to go along. So we decided to give it a try. It was not hard to acquire members. With our four years of experience we knew who were for us and who were against us, and we wanted members who would pitch in and work for the project. Approaches were made to various

people and all agreed to serve on such a Committee. The new Committee had a wide representation of community interests. Perhaps other people would liked to have been on the Committee, but we wanted it to be representative and did not want it to become unwieldy.

We met at Cliff's place on June 3 1968, and formed a Committee which would be known as "The Western Victorian Conservation Committee" (WVCC). Claude was elected Chairman and myself as Secretary. The Committee numbered 13. I had revised "The Case for a Lower Glenelg National Park". It was read to the meeting and with some alterations was accepted as the basis for our campaign. It was agreed that 500 copies be printed and circulated. Copies to Official sources were to be sent as printed, while copies to supporting people and organisations would include an appeal for funds.

We had no money, but the Field Nats. offered to lend us \$100. The Chairman and Secretary were appointed as a delegation to the Premier when the Case was to be released. The Case was to be circulated to politicians, all regional organisations, Town, City, and Shire Councils in the region, all natural history organisations in both country and city, newspapers, radio and T.V. stations. In addition to this we were to look at the possibility of running conducted tours of the proposed Park

The Committee decided on two main lines of attack. 1) by circulating the Case to all politicians the prerogative of determining what is politically acceptable is taken away from a Minister, or even Cabinet. Often propositions can be made to a Minister and if they are not politically acceptable there is procrastination and eventually they are swept under the carpet with no one having any idea of what has been going on. By circulating ALL members of Parliament we put our case squarely in the lap of Parliament. 2) to toss Henry Bolte and his Minister for Lands and Land Settlement we needed massive public support. By circulating community leaders, newspapers, radio and TV we put our case squarely in the lap of the community.

If the community was not ready to oppose land settlement proposals and defend their bushland then the campaign would fail, but if it was there would be a vigorous public debate involving the whole community and Parliament. Rumblings of community concern on the Government's conservation policy had been growing for some time and with the surfacing of the Little Desert and Kentbruck land settlement proposals their volume grew. We thought we had a good chance but ALL conservationists across Victoria would have to work and pull together as one team.

Ina Watson, a member of the Committee, typed the Case History and the Portland Observer did the printing. We organised working bees to collate the pages and staple them together. The first booklet was to the Premier when the deputation waited on him. Other working bees were needed to get the booklets into envelopes and address them. A fair amount of research was needed to put together a mailing list; the operation went off smoothly.

The reception given to the booklet staggered us. In a very short time there were only a few copies left and we couldn't do a reprint because we had no more money. The reaction to our appeal also staggered us. Within a few weeks we had donations totalling almost \$1000. Donations ranged from 50 cents to \$100. We did a reprint of 250 and these were

almost enough to tide us over the campaign. Later on we made a further appeal for funds and another \$140 came in.

There was another Trade Fair in August 1968 so we joined the Camera Club again and took a stand between us. This was to be an all-out effort. We bought some timber and sheeting, erected and painted it, and made quite an attractive corner. A working bee of 6 or 8 made up over a weekend a relief map of the proposed park. It was to scale both horizontally and vertically. It was 4 feet by 2 feet and Ina Painted it. Later the Melbourne Field Naturalists borrowed it for one of their exhibitions and from there it did the rounds of Melbourne. It was given to the Glenelg Information centre but about two years ago I asked to see it and it was found in one of their machinery sheds. I requested that it be returned. Apparently the Parks Authority considered it of no value. It is now housed in my Den. I had a couple of viewing boxes, light under opal glass, for 2¼ by 2¼ slides. These were set up with some botanical specimens and all the other knick knacks which go to make up an attractive display. The slide show and commentary of the previous year were updated and shown with the Camera Club's section throughout the duration of the fair, which ran for five days. 5000 leaflets were printed and distributed.

The WVCC set up a small committee to run field tours to the proposed Park during the spring months. These were also repeated the next year. They were run fortnightly, five each season, and were advertised in the press and radio throughout the region. The public response was tremendous. On more than one occasion there were up to 30 cars and around 100 people. Many people to whom we sent the Case availed themselves of the opportunity to see the proposed Park at first hand. Being spring time the wildflowers and the tree fern gullies were the highlights

The Shire Council's promotion of farms for Kentbruck was conducted in a very hush hush way, but there is no certainty that the Minister viewed the promotion this way. He agreed to inspect the Heathland with Council in the spring of 1968 and informed the Council that the WVCC was to be given the opportunity to join the inspection. Claude and I went along. We assembled near Little Piccanniny and sprayed our Land Rovers liberally with sealant to seal the ignition system against water. After following the bark cutters track for about half way we turned right onto another track and finally came out on to the Heath road slightly east of Darts block. It had been a wet winter and water was everywhere. All the swamps were full and water was running down the tracks. One vehicle became bogged about half way through. We stopped a couple of times and Sir William informed all and sundry that this would make excellent farmland! There was no drainage problem and the eastern section could be farmed without any interference to the proposed Park! I am quite sure that that inspection was Sir William's only first hand experience of the heathland. It should be noted that when Sir William became Minister for Lands he compromised on the heathland by giving one section to the Park and the other half for settlement. But of course, nothing had been finalised yet.

With due respect to Sir William's sincerity in promoting land settlement, he was not a practical farmer. Many of the figures he quoted throughout the campaign were suspect and he lacked the intuition so necessary to assess a land settlement proposition. He tended to gloss over the most obvious problems. I believe that apart from ourselves, Gibbons and

Downes were the only other people who had an intimate knowledge of the heathland, but unfortunately because they were public servants their opinions never surfaced.

The inspection of the heathland passed off quite amicably. There were no pugilistic demonstrations by the "Opposing Faction", and the Shire provided a chicken lunch!

Not long after the inspection we had word from the Lands Department to meet the Chief Surveyor on site to see just where the demarkation line, dividing the heathland, half to the Park and half for farming, was to be placed.

With this meeting coming up we organised the next brochure to counter the move. It was all complete with map except the demarkation line. We met the Chief Surveyor and he plotted the demarkation line on our map! All we had to do was to plot the line on the other brochures and put the lot in the post, including copies to the media. The local paper received its copy that evening, took the map and a few notes from the brochure, that was all they were interested in, and set it up. It appeared in next morning's paper and was at the Council office before they got their copy from the post! There was consternation in Council circles that morning! Someone had breached the confidential nature of the land settlement proposals with the Minister! The conservationists knew where the demarkation line was to be before they did! A four-man delegation was despatched forthwith to interview the Minister to confirm what we already knew. We had an occasional win!

About this time John Fenton of Branxholme very kindly had his agricultural advisor prepare an assessment of the farming capabilities and costs of Kentbruck heathland. This was interesting because his figures were very close to, but slightly in excess of ours, both ruling out settlement proposals as non-viable. This of course greatly reinforced our figures. More ammunition!

Apparently Sir William was getting worried about the growing strength of the conservationists, so he circulated a question and answer paper venting his wrath, mostly, on the Melbourne press, which was very much on our side, but quoting to some extent from our brochures. A seminar was held at Kaniva in Little Desert country and both Sir William and Claude were asked to speak. The indications were that the conservationists got the better hearing. We replied to the Minister's statement with "Kentbruck heathland: Comments on a statement by the Minister".

In the early part of 1969 Noel persuaded Stuart Sayers, literary Editor of the Age, to come and have a look at our problem. He wrote a very good article for the Age Literary Supplement. Tom Mitchell, M.L.A. for Benambra, came to get some first hand information on the problem. Later in Parliament he very strongly opposed to the proposed Kentbruck settlement. Dick Piesse and Geoff Mosley, Director and deputy Director of the Australian Conservation Foundation, also came to have a look at the problem. Edmund Gill, President of the Royal Society, took up our cause through that organisation. Councilor Tom Johnstone of Minhamite Shire Council gave worthy support and used his column in Stock and Land many times to good effect. Hugh Learmonth, Town Clerk at Camperdown and Chairman if the Corangamite Regional Council, worked hard for us in his area.

At the end of September 1969 I took Garry Trotter, Editor of the Portland Observer, out to where Sir William's demarkation line crossed the Moleside creek. An estimated 80 to 100

cu-secs was running from the proposed farmland into the Park (one cu-sec = one cubic foot of water per second). Because the water was coming from undisturbed heathland it was crystal clear. It would be a very different story if the land was cleared. Garry wrote a very good article in a subsequent edition of the paper. I think it was about the only time we got any help from his paper.

Clive Mitchell was the Country member for Western Province at the time and he held the balance of power in the Legislative Council. I had known Clive for a long time and he made no secret of the fact that he was a very good conservationist. This may have been right, but he was on a slightly different tangent to us. His idea of the perfect environment was endless paddocks of grass waving in the wind with stock up to their knees in it and haystacks everywhere! Clive was always available and needless to say I was a frequent visitor. Prior to being M.L.C. he was a Portland Shire Councillor and of course a committed land developer. I never seemed to be able to put the slightest dent in Clive's armour. However, because of our contact there is good reason to believe that he learnt an awful lot about conservation of which he knew nothing before, and that towards the end he thawed considerably.

On one occasion I persuaded Clive to have a look at Kentbruck heathland from our point of view. I rang Claude and he agreed to join us. The morning we set out it was raining and it never let up all day. After we had been traveling for some time and during one of the few pauses in conversation, Clive looked slyly at Claude and quipped "Not many birds". Claude never batted an eyelid and just as dryly stated "Have counted 20 species since we started"!

We approached Portland Town Council to present our side of the heathland story, but were told that Council would adhere to its previously pledged support for the Shire of Portland's land settlement proposal for the area.

Claude was a tower of strength to our Committee. He had excellent contacts in Melbourne and was able to iron out many problems for us. He is one of those rare Australians who is at home in any company. Together with Graham Pizzy, they put together a very good submission to the Premier, Sir Henry Bolte. On the occasion of the delegation's visit to the Premier, whom he knew very well, I was at the meeting place first. In a few minutes Claude appeared carrying a not too presentable cardboard box tied up with a strand of baler twine! As he approached he lifted the box slightly and said "Eggs for my daughter"! The eggs accompanied the delegation to see the Premier, then to see the Minister for Lands, followed by the Chairman of the Forests Commission, and finally to see the Director of the National Parks Authority. After leaving the Director and walking a couple of hundred yards Claude raised his hands in disbelief! No eggs! He had to beat a hasty retreat to retrieve them!

Other groups were becoming active in supporting our case. LaTrobe Valley Field Naturalists approached the A.B.C. to do a program on Kentbruck and the Little Desert on This Day Tonight or Four Corners. However, a programme had already appeared on Four Corners. The Blackburn Tree Preservation Society wrote asking if we would send some wildflowers from Kentbruck for their annual wildflower show. They were featuring

special stands on the Little Desert and Kentbruck. Our contribution was quickly dispatched.

Early in 1969 Sir William said a small section of the Melbourne Botanic Gardens would be made available to a developer to erect a restaurant thereon. This certainly did not endear him to the Melbourne people, and gained more support for us.

About this time the Naturalists and Conservation groups in Melbourne joined together and formed the "Save our Bushlands Committee". This Committee held a meeting in the lower Town Hall to protest against the further clearing of bushland. About 1000 people turned up. The Hall would only hold 800 so the overflow went to Scots Hall where the Town Hall proceedings were relayed. A few weeks later the Committee held another public meeting at the St Kilda Palais. Our group received an invitation to send representatives and to provide a speaker. We certainly accepted the invitation. It had been suggested that I should put a paper together for presentation. This was done and it was well received by the 1500 people present.

Widespread support for the Park was becoming more evident. At the 1969 Country Women's Association's annual conference 1400 of the 1500 delegates present signed a petition protesting against the Government's land settlement policy and the proposal to take part of the Melbourne Botanic Gardens for a restaurant. The Bendigo branch of the National Council of Women had written for information on Kentbruck, and also supported us.

In October 1969 Sir William McDonald introduced into Parliament a National Parks Bill. It established a 22,400 acre Lower Glenelg National Park and an 84,000 acre National Park in the Little Desert. The Glenelg Park broke every rule in the book of ecology and would never have maintained itself. The Glenelg River section of the Park had little more than the three chain Crown Reserve on either side of the river. The worst feature was that four areas with river frontages, about 80 acres in all, were to be sub-divided into ¼ acre blocks and the freehold sold to placate those who felt frustrated at not having a shack on the river! The Kentbruck heathland had been decapitated. The half which was to be cleared for farming would create excessive flooding in the Moleside Creeks and eventually destroy their ecosystems completely. The natural drainage from the cleared farms would have to go into the creeks – there was nowhere else for it to go.

The Forests Commission's involvement

So far very little has been said about the Forests Commission and its involvement in the establishment of the Lower Glenelg National Park, although it controlled most of the country involved. Our contact with the Commission involved many discussions and one confrontation.

Early in our quest for a National Park, about 1966, Ken Morrison, who was Forest Officer at Heywood at the time, recommended to the Commission that an area of 6000 or 8000 acres of forest country in the vicinity of Gallows Creek should be released for the Park. This area extended, in places, into Kentbruck heathland which was controlled by the Lands Department. The Commission was prepared to release about 8000 acres south of the

river and extending east from the South Australian border. We wanted a half mile buffer zone on the north bank of the river to preserve the environments of the river, but they wouldn't hear of this.

The Commission had started clearing the Kentbruck block, as distinct from the heathland, about twelve months before we got started on the Park project. This was in 1963. It took several years to clear and plant this block of about 11,000 acres before they started on the north bank of the river, at the border. Their intention was to plant eastwards to Keagan's bend leaving only the three chain Crown reserve along the river. We wanted a wider margin, but they were adamant!

They cleared to the reserve for the first couple of miles or so. In a short period of time quite a lot of trees within the reserve died or were battered by exposure. They were making some headway towards re-establishment when the Caroline fire started near Mt Gambier in 1979 and burnt out the reserve. We wanted a much larger area of bush left around Princess Margaret Rose Cave but they insisted that every acre suitable for pines must be planted.

Eventually the Commission became more aware of the threat to the gorge environment the clearing was having, and agreed not to clear the internal bends but to go straight from point to point, and not to clear land sloping to the river. This was more reasonable for the next two or three miles and the wider margin has maintained itself much better. In the last section cleared communication between field staff and administration must have broken down. They cleared hard on the three chain margin and all internal bends, even bulldozed the vegetation in an attractive small creek which runs into the river. The whole section was just one hell of a mess!

We raised a storm about the destruction and the result was that the Chairman, Dr Moulds, sent three of his top men to discuss the situation on the spot. The Commission admitted the section had been over-cleared. They promised to carry out restoration work, including re-seeding of some areas. Other areas were to be allowed to re-generate. A recent trip to this area showed that a fair amount of re-generation had taken place, but it will be at least half a century before the eucalypts are fully restored.

At this point it is still many miles to Keagan's bend. The Commission showed us maps where margins of ten to twenty chains were to be left along the river!

Perhaps the main gain from this confrontation was a new set of guide lines when clearing bushland. Margins of natural vegetation were to be left along roadsides and around all swampland, enough to blot out clearing. This was an acknowledgement by the Commission that the community had much more interest in the quality of the environment than had previously been assumed!

Several smaller areas were in dispute. I went out one week end and pegs had been driven along the high bank of the Little Moleside Creek indicating the line to be cleared to. I rang Claude and he contacted the Commission and had them moved back ten or twelve chains. As mentioned earlier we tried to save an important block in the Bullies Range area, but the Commission wouldn't hear of it and it was bulldozed – about 600 acres. We did, or rather Claude did, save a small but important ecosystem between the Little Moleside and

the eastern boundary of the Hurdle Flats block of pines. The block linking the Glenelg end of the Park with the heathland was still in dispute when the new Land Conservation Act froze development on all public land. This was eventually added to the Park.

The block immediately north of the Inkpot road, the Balrook block, and extending to Baggate road was of open type peppermint country, excellent pine country and an ecosystem well worthy of preservation. At the northern end, in from Baggate road was Red Gum Swamp, an unusual and isolated ecosystem which we particularly wanted to preserve. The whole block was about 7000 acres in area and was controlled by the Lands Department. This block and about 8000 acres in Palpara to the west was to be another of Sir William's land settlement schemes. Fortunately for us work started on Palpara first. Incidentally, this Palpara section was cleared and some improvements made, then due to a downturn in farm economics it was left unfinished for years before the improvements were finished and the blocks allocated.

The Balrook block was surveyed for farmland, and Sir William, true to form, ran a survey line through the middle of Red Gum Swamp! For unknown reasons Sir William delayed work on this block beyond the survey stage, and it was also frozen by the Land Conservation Act. It was eventually added to the Park. Another bone of contention was the Heath road. In season it was a most attractive wildflower drive and we wanted the Commission to give us a margin on their side of the road to preserve this drive, but they wouldn't hear of it. The Land Conservation Council eventually gave us a 20 chain margin!

According to the Forests Commission wildfire in the area under discussion has been more prevalent and the area at greater risk than any other part of Victoria. After having been associated with the area for two decades and observing closely just what goes on management wise, the great fire risk has simply been the creation of the Forests Commission itself! It has been a no mans land since the white man arrived, and only in the late 50s was serious thought given to its development.

The forest country around the Gallows Creek area provided some excellent timber in the early days and, along with the Cobboboonee forest, kept a number of sawmills going even to the present time, although the quantity and quality of the timber has gradually declined because of exploitive management practices. The eastern section of the proposed park was burnt out periodically to give fire protection to the better timber areas to the east. In the decade 1963 to 1973 there were at least six major fires all within the proposed Park and all started by the Forests Commission itself! Some escaped from so called protective burns while some were just lit and left to burn wherever the wind might take them. In the latter cases no one patrolled the fires and no attempts were made to put them out.

With the start of the Kentbruck pine planting programme one would have thought that wildfire would have been uppermost in the minds of the planners. Not a bit of it! By the time the 11000 acres of the block had been planted no firebreak as such had been provided either within or around the perimeter of the block. Roads are not firebreaks! The ones within the block and around the perimeter were not wide enough. The coast road and the airstrip road, north-south and east-west, roughly bisect the block into four and are 16 yards wide. The Kentbruck Plantation road running north-south in the eastern section of the block is mostly 30 yards wide, timber to timber. On the western boundary along the

Drik Drik – Nelson road the cleared space is mostly 30 yards, timber to timber. This means that only 30 yards separate the pines from the Park.

In 1979 a wildfire started near Mt Gambier and travelled east. It burnt several thousand acres of the Caroline pine plantation near the Victorian border, crossed the border, burnt several hundred acres of Forest Commission pines, crossed the Glenelg river and burnt seven or eight thousand acres of the National Park. I had a look at the damaged Caroline pines after the fire and found it had crossed one cleared and plowed firebreak 50 yards wide and the pines were only about 35 feet high.

Recently I drove along the north bank of the Glenelg and noted that the pines the Forest Commission had lost had been replanted. A row of pine debris had been placed between the first two rows of pines next to the border. Kindling for the next fire that comes along? Where the clearance timber to timber had been 30 yards at the border it was now no more than 30 metres!

Between the establishment of Sir William McDonald's first Lower Glenelg National Park and the establishment of the present Park several years elapsed. When the Land Conservation Act was passed in 1970 it was obvious that Sir William's Park would be extended. The Forests Commission still had control of all areas it previously managed except the new Park. The Kentbruck pines were making good progress. In the absence of satisfactory management for the new Park, The Forests Commission sought a meeting with us as representatives of the Conservationists to work out a fire protection plan to cover the pines and the new Park that would be acceptable to both parties. We were in the invidious position of being obliged to accept this invitation and subsequently met at Heywood.

We were not happy with the resulting fire protection plan as we considered the Commission should have made an equal contribution to the protection of the Kentbruck pines on their side of the road. Under no circumstances would they accept this, which meant that all the fuel reduction burning had to be done within the Park. The plan was accepted under protest, and we hoped time would bring about a more acceptable scheme that would protect the Park as the Act requires.

A recent trip to the area shows that the area to be burnt as agreed in the plan has been exceeded. A large area south of the river is already a burnt out skeleton of what a National Park should be. Ironically the much-vaunted protective burning plan is providing little, if any, protection for the pine block. There are far too many leads, or areas that have not been burnt in the burning process, and a wildfire could cross these easily. In effect the present fire protection plan would be completely useless against wildfire and if one came through on a day of even only near-extreme conditions most of the Kentbruck pines could be lost in one day and the fire would not stop until it reached farmland near Portland and Heywood, a distance of 30 miles.

As this script is being re-typed in 1992, almost twenty years on, Kentbruck pines are still there and it is 29 years since the first were planted. Early last year a fire started near Tremaine Swamp and burnt for four days, first N.E., then N.W., and for the next two days in a general westerly direction. It burnt 35,000 acres of Cobboboonee forest. Early this year

another fire started near the Moleside and burnt for two days, mostly in the Moleside, Pannican Creek, big bend area, south of the river.

Events leading to the Land Conservation Act

Sir William McDonald introduced into Parliament a Bill to amend the Land Act. This was to clear the way for the Kentbruck and Little Desert land settlement proposals. The Bill was extensively debated in Parliament in April 1969 without result. It was represented on and off for twelve months and was finally abandoned at the end of March 1970. The Opposition attack was led by John Wilton, Member for Broadmeadows. It was heartening to see that Sir William's figures on costs and returns for his land settlement proposals did not seem to stand up to critical analysis.

On December 6 1969 Sir William introduced into Parliament a "Land Resources Act". By this time it must have become apparent that the amendment to the Land Act to facilitate the land settlement proposals for the Little Desert and Kentbruck would not be passed by Parliament, so the Minister was attacking from another angle. The purpose of the Land Resources act was to update and strengthen the Land Utilisation Advisory Committee by extending membership to include a couple of conservationists, a Representative of the National Parks Authority and to give it more authority and investigative power. For example it would have made the Soil Conservation Authority, the Forests Commission, State Rivers and Water Supply and other Government Departments all subservient to the Lands Department and the Minister! In other words it gave the Minister for Lands dictatorial powers. The Western Victorian Conservation Committee attacked this Bill with everything we had in the brochure "Conservation in Victoria - is there a future? In February 1970 this Bill did not make much headway and was abandoned almost before it got off the ground.

Early in the autumn session of Parliament in 1970 Sir William introduced a second Land Conservation Act. It differed little from the first Bill, and was also abandoned. The State election was due and there was no further discussion of conservation matters until Parliament met in September. With the election in mind I sought and received permission from the W.V.C.C. to contact the candidates opposing Sir William in his seat of Dundas, adjoining Portland: Alex McLennan, Country Party, and Eddie Lewis, Labor Party. Both agreed to make conservation an issue. I put together two identical bundles of information on environmental matters and sent one to each. I also suggested they might exchange preferences. The W.V.C.C. put a \$20 advertisement in the Hamilton Spectator and a similar one in the Wimmera Mail Times. We reasoned that with the tremendous public support we had been receiving we had a good chance of toppling Sir William. And that is what happened. Sir William lost his seat and vindicated all the hard work the conservationists had put in at District, Regional and State level over the past two years.

The Bolte Government was returned at the election, but the conservation vote across Victoria was very strong. The loss of Sir William McDonald was a severe bump to Henry Bolte, who had supported his Minister throughout the Parliamentary debates on the land settlement proposals. Feedback told us that at the first executive meeting after the election, main business of which was to elect a new Cabinet, Henry Bolte said to Bill Borthwick

"You had better take Conservation and see what you can do with these bloody conservationists"!

By this time conservationists had realised that the fragmented nature of their organisation was not giving them the consideration in Parliamentary circles to which their numbers entitled them. So, a meeting was called inviting delegates from all conservation organisations with the idea of speaking with a single voice. The result was the formation of the Victorian Conservation Council. The Government agreed to recognise the Council as the voice of all conservationists, and also agreed to make a small amount of public funding towards the running expenses of the new organisation.

This was not the complete answer to the uneven contest with the multi-nationals, who had millions of dollars to promote their point of view on any environmental problem which may be in dispute. However, it did recognise the principle that conservationists were putting forward the views of a large section of the community, and that up to now it had been by voluntary effort. Its establishment also acknowledged that some form of public funding was appropriate. To date the Council has done a tremendous amount of work and I am quite sure has well justified its existence. However the main differences of opinion with the Government have been, and still are, on wood chipping, pine afforestation and the proper placing of ecological boundaries for National Parks and other reserves.

In early September 1970 Mr Borthwick, the new Minister for Conservation, introduced a Land Conservation Act into Parliament. The Act was a giant step forward in the method of determining the most rational use of public land. What it did was to set up a Land Conservation Council (L.C.C.). Members of the Council were much the same as the old Land Utilisation Advisory Committee, plus a nominee from the National Parks Authority. In addition there were two conservationists selected from a panel of five names submitted to the Governor in Council by the Victorian Conservation Council. The Government appointed a permanent Chairman and one other member with expertise in land settlement. The two latter appointments were to be outside the Public Service. The L.C.C. was given power to co-opt persons with particular expertise from most Government Departments, and was given the staff and resources to carry out the work specified by the Act.

Victoria was divided into a number of "Districts" and the L.C.C. was to investigate the uncommitted public land in each District. Priorities were determined between the L.C.C. and the Governor in Council, in other words, Cabinet.

The investigations were to include Botanical survey, Fauna survey, the potential of the uncommitted land in the District for land settlement, forestry, mining, water catchment, recreation including National Parks, wild life Reserves and so on. The complete assessment of all the uncommitted land in each District was to be published, together with appropriate maps, diagrams etc. The survey information was to be made available, at a nominal cost, to any organisation or person who had an interest in the way all or part of any uncommitted land should be used.

Within 60 days of the publication of the assessment, John Citizen was given the opportunity to make a submission to the L.C.C. as to how he/she considered the

uncommitted land should be used, and the L.C.C. was bound to give each submission equal consideration with all others.

Some time after the expiration of 60 days the Council published its recommendations on the use of the uncommitted land. Copies were sent to all who made submissions and a copy tabled in Parliament. John Citizen was given a further 60 days to comment on the recommendations and some time after the expiry of that period the Council made its final recommendations. Again copies were sent to all who made submissions and a copy tabled in Parliament. The final recommendations usually had minor alterations on the first recommendations and were handed to Parliament for Legislative action. Of course, it is Parliament's prerogative to dis-allow part or all of the recommendations, but at least the final decisions are made in Parliament where John Citizen still has a chance of influencing the Parliamentary decision.

Perhaps the three most important aspects of the Land Conservation Act are:

- 1. The Land Conservation Council makes a complete assessment of of the capabilities of all uncommitted land in a District, and this is a basis for John Citizen to make an informed submission from information that was not previously available
- 2. Clauses 9, 10, and 11, in the Act bring discussion and decision-making right out into the open. Nothing is behind closed doors.
- 3. The Land Conservation leaves a fair percentage of uncommitted public land in a Land Bank, still uncommitted, so that a future generation may share in the decision making on this land.

By contrast, two sinister aspects of Sir William McDonald's approach were 1) Decision making would be behind closed doors and 2) All Victoria's public land was to be committed within three years!

After being in operation for a decade the Land Conservation Act has worked very well, perhaps better than the personnel composition of the Council would indicate because it is predominantly Departmental men.

The Government has basically accepted the recommendations for Western Victoria and enacted the necessary Legislation. Since the L.C.C. has been investigating the Alpine Region and East Gippsland there has been some conflict of opinion with the cattlemen, who lease areas there, the saw millers and those promoting the wood chip industry.

In the final analysis, one must say that although the Land Conservation Act may not be perfect it has been a most valuable medium for determining Victoria's uncommitted public land, and certainly way ahead of other methods of determining the use of public land in this country.

The Land Conservation Council's first study area was District 1 in far south west Victoria which included the proposal for a Glenelg National Park. The report on the investigation in the study area was available in August 1972. The first recommendations were made in December 1972, and the final recommendations in February 1973. The Government accepted the final recommendations and the Lower Glenelg National Park was gazetted in 1974.

The new Park included all those areas we had recommended, except those areas which the Forests Commission had cleared, plus numerous ecological associations which we left out because of development pressures. In all, 64,000 acres - a magnificent Park and well worth the battle it took to achieve.

Besides the Glenelg National Park, numerous other reserves were recommended. A 20,000 acre Coastal Park behind Discovery Bay This has since been extended to include the Bridgewater Lakes. The balance of the Crown Land around Mt Richmond was added to that Park, making about 4400 acres in all. The balance of the Crown Land around Bats Ridge Reserve was added to that area making about 800 acres in all. Other Parks and wildlife Reserves were established in the northern and eastern parts of District. Large areas were allocated for timber production, and within this area one or two Forest Parks were established. A Forest Park is somewhat meaningless as its status can be altered by a stroke of the pen and no one but those concerned would know anything about the change. In contrast, if the status of a National Park or its boundaries are to be altered it requires an act of Parliament, which in turn alerts John Citizen to the proposed change.

It is interesting to reflect on the six pilot heathland blocks which were released for settlement in 1964. Back in the early 60s the new Portland Harbour had just been opened, and of course everything had to be oriented towards building up trade for the Port. Community thinking was that the easiest way to do this was to increase farm production. So the developer farmers jumped on the bandwagon. It did not occur to them that farming is one of the most unstable industries, or that the most stable communities, towns and cities in the country were those with diverse fields of production.

These farmers were able to persuade the Government to alter the rules for the release of the six blocks. Previously, Crown Land was allocated to those farmers or other people wanting to take up farming as a career, who had limited finance or were unable to buy a farm on the open market. In such cases the Crown Blocks were allocated on a small rental and the potential farmer had to live on the block and to work out an acceptable plan of development before the allocation was made. His labor in carrying out this development substituted for capital. The process of establishing a viable farm was slower, but very effective in getting people with limited capital on the land.

Upon allocation the Kentbruck blocks were given to farmers who either had farms or were able to buy a farm on the open market. The blocks were quickly cleared, sown to pasture, fenced and stock water provided. In the 18 years that has since elapsed no home has been built on any block! They are still being run by absentee Landlords! Production is in the lowest category, grazing, certainly a bonanza for the lucky ones. One wonders what happened to the greatly increased employment and production such settlements were to provide!

In the early days of the settlement the service road provided a magnificent wildflower display in season. The Shire Council allowed the adjoining farmers to plow the road and keep it plowed because it was supposed to be a fire hazard! John Citizen can't win!

5. Fire in the Australian Environment – Management Tool or Menace?

The surface environment of our planet is made up of four basic components – Soil, Water, Plants and wildlife in that order. The last two cannot exist without the first two so management priorities should be established accordingly. In all States except Victoria separate Government Departments exist for the management of all components. In all cases, Victoria excepted, the Departments responsible for the management of the first two components have an insignificant role, while in all cases the Departments concerned with the management of the third component, *plants*, is a major one, with little orientation towards the other three. It is time proper priorities were established.

A few years ago Victoria passed Legislation amalgamating all four Departments as one, and created the Department of Conservation, Forests and Lands. Administration was decentralised into a number of Districts with Headquarters in Melbourne. This should have been a forward move but the old Forest Commission personnel still dominate and the hope that the four components would be given proper ecological priorities has vanished.

In setting up the D.C.F.&L. the Government chose an English Administrator to organise the new Department. Fine for the Administration of the new Department, but tragedy for the management of the environment which is the central object of the whole exercise! One would expect the head of such a Department to be an Ecologist! One who fully understands the dependence of the four components, one upon the other in the composition of the total environment. This did not happen, and since the first Administrator retired two more Administrators have occupied the position. In effect we have since the Department was established a cumbersome Administration using about two thirds of total personnel and resources, while the field staff is starved of both personnel and resources. This is particularly reflected in the management of our National Parks which have been drastically downgraded under the new Department.

The management of our emaciated environment, with salting, destruction of trees, wind and water erosion and the degradation of forest soils by fuel reduction burning, needs to be lifted to its proper place in the overall management of nation instead of being continually swept under the carpet. After all it is the basis of our existence.

Wildfire in the Australian environment has been of concern to European man ever since he settled here. It is generally accepted that fire moulded the Australian environment. This may be so, the hard fruits on most of our woodland species readily open and release ALL their seeds after a fire, and the ability of eucalypts to send out new shoots from all parts of the tree after a fire may lead to this belief. However, there is evidence to show that our woodland may not be all that dependent on fire for regeneration, in which case the excessive burning which European man has indulged in needs to be critically examined. Our Victorian forest managers who have been, and still are, burning our woodland extensively with the object of minimising wildfires have

admitted that there is no evidence that this burning is doing what it is supposed to do – minimise wildfire! In fact in our part of Victoria, over many years, most wildfires have started by escaping from fuel reduction burns!

European mans' management of our woodland environment has been a haphazard operation. In the early days no thought was given as to whether management was right or wrong. If the environment was damaged or destroyed it didn't matter, there was plenty more. This attitude has prevailed until the present time. With the continued prevalence of burning, accompanied by the decline in the quality of timber products and the general degrading of the environment, present management practices are causing concern.

It was very quickly discovered by the early settlers that the Australian hardwoods were equal to the finest in the world for all-round uses, including cabinet and furniture making. The timber industry from the beginning followed the same exploitive pattern as did land settlement. It did not occur to those involved that our continent was poorly endowed with forests.

From earliest times the woodland environment was leased for grazing. The lease holders soon discovered that the green growth after a fire provided good feed for their stock, irrespective of whether it was grass, secondary vegetation or the young plants of the permanent vegetation, all were consumed! From this time on the Bush, as it was called, was burnt as often as it would carry a fire, and this practice still continues.

The Forest Departments in the various States, especially in N.S.W., Victoria and Western Australia, do a lot of what is known as "prescribed" burning in timber areas supposedly to control or minimise wildfires. This type of burning has increased over the years since the introduction of fuel reduction burning (FRB) to become a major operation each spring and autumn. This FRB has been with us now for twenty five years and wildfires are still just as prevalent.

Early settlers had to have wood, timber, poles and so on which meant that trees had to be cut down. The effect was to open up the overhead leaf canopy and let the sunlight down to ground level. The result was an explosive growth of all kinds of plants reaching for the sunlight. This increased the fire hazard and of necessity the need to burn the excess growth. And so it has been going on for 200 years.

The moguls of management, to justify their management by fire, tell us the aborigines burnt the environment extensively. Yes, but the aborigines managed the environment much more intelligently than we do. The affinity of the aborigines with their Environment, which is much better understood now, is ample proof of intelligent use.

Writing in the "Mallacoota Mouth" in 1981 on this subject, Ken Morrison had this to say: "We are told the aborigines used bush fires for hunting food, and that their fires must have burnt large areas because they would not be able to control them. Not so, they may have lost some, but the Kurnai at Mallacoota would have been no more popular for burning out the Coast Marrang at Cape Howe than a Mallacoota lit fire would be appreciated for wiping out, say, Eden in this day and age. The aborigines used slow small fires, burning with the right weather conditions, and lit so they stopped at natural features such as creeks. While the fire was burning all available people worked around the fire

edges catching anything that tried to escape, and afterwards picking up anything the fire killed. The tribal groups were usually small, so that the fire had to be small. When the burnt area started to grow again, game moved back onto the fresh food and were easily hunted on small burnt areas. When big areas regenerated, the wildlife was too scattered to hunt easily and there was no cover for the hunter. Even today, wise cattlemen do not burn big areas because their stock will stray too far. The earliest explorers, the real ones such as Hamilton Hume and Howitt, who really tried to understand the bush, did not find signs of large wild fires that had occurred before European settlement. Sorry about that, but the aborigines used fire sparingly and on a small scale".

When major Mitchell came to Portland in 1834 he had a number of drays to carry provisions. He would never have got his drays through the forest in this day and age! The late Noel Learmonth that as a young man used to ride horseback over Mt Clay (near Portland) and could see for half a mile or more. Only the contour of the mount obscured the view after that. The growth of secondary vegetation caused by excessive burning prevents such a view today.

Val Peterson has lived all his life on the edge of the Gorae forest, near Portland. He says the changes in the forest in his time have been extensive. In the early days there were large areas of Kangaroo grass, both on the flats and the rises. This grass provided feed for the wildlife, even the aborigines used the seed which was processed for food. It also provided good feed for the settlers' stock as most of the forest was leased for grazing. Mustering stock was no problem, the forest was much more open than now and wildlife was more plentiful. At the present time almost all the Kangaroo grass has disappeared and its place taken by a thick jungle of scrub. Wild life has found it difficult to adapt to the changed conditions and numbers are nowhere near as great as in the early days.

Lindsay Finck selected a forest block not far from Val Peterson and when it was cleared in the late 40s 100,000 super feet of timber was cut from it and there were no gum veins!

In our travels up north we have seen enormous areas of burnt out country. From what we have seen there would be far greater areas burnt out up north than in the south east.

Our first contact with northern burning was in 1965 on our way from Alice Springs to Darwin. After passing through Larrimah 330 miles south of Darwin, we noticed on the outskirts a sign requesting travellers to be careful with fire and prescribing penalties. A few hundred yards further on we drove past an extensive fire on one side of the road. No one was in attendance, and obviously no attempt was being made to put it out. From that point to near the outskirts of Darwin the whole countryside had either been burnt out or was burning. We camped that night at Katherine Gorge and listening to the Darwin news a pilot reported 40 fires burning in the area just mentioned, some with an estimated 40 mile front! Apparently this was the annual burn to get that "Green" pick for the miserable "Boners" which is all that country is capable of producing!

The story is the same right across the North. In 1976 we drove across the Tanami from Alice Springs to Halls Creek – the same story! Miles and miles of country burnt out. Burning in desert country is the worst kind of vandalism. Later that season reports in the media indicated that in excess of 90 million acres of country had been burnt out. In the

south west of Western Australia the forest management people are carrying out an even more vicious burning program than our forest managers. They have been employing helicopters to burn out thousands of acres of forest on a grid system – and the reason: *fuel on the forest floor must be reduced to retard or prevent wildfires*! More recently our own forest managers have adopted the same tactic! A giant stride from the recommendations of early researchers. I guess our woodland will be tamed all the quicker and by next generation no such landscape will exist!

Fuel reduction burning

About 20 years ago our forest managers came up with a better idea to control wild fires. It was called *fuel reduction burning*. The idea was adopted as management policy and has been used ever since with increasing expansion and intensity of the operation.

The theory of fuel reduction burning (FRB) needs some explanation. The original method conceived was to remove the accumulation of litter on the forest floor by burning. The method was for a number of men, each with a fire stick, to move across the ground and light small fires on a grid. The spacing of the fires would be determined by the amount of litter to be burnt, so that each little fire burnt up to its neighbour and went out before the flames gained the strength to reach the tree canopy. For reasons of time and cost the idea never got off the ground.

What happens now is that an area to be burnt, it may be a block of several hundred acres or a wide strip on a bigger block, is as far as possible burnt on a day when it will not flare but creep slowly across the forest floor, in other words what is called a clod burn. For this idea to work safely without major fire, temperature, humidity, moisture content of fuel, wind and general atmospheric conditions must be precisely right. Nature is never very co-operative and these conditions can be very rarely expected.

For our forest managers, charged with the management of half a million acres of forest in this corner of the State, apart from the rest of Victoria, the task is impossible. The result is that risks are taken with their burning program, sometimes they come off, at other times the fires either escape or restart from a burning stump weeks later. If such fires were subtracted from the total in the area in the last 30 years or so we would have had very few major fires. The weakest point in the FRB program, apart from the fact that the ecology of our woodland landscape is being slowly destroyed, is that the burns are not continuous but on a patchwork basis. This leaves too many leads for wildfire to cross. Very rarely do wildfires burn up to a fuel reduction burn and go out. More often than not if a wildfire does burn up to a fuel reduced area it is either carried through by unburnt leads or goes around because its spread is wider than the burn. Forest managers may burn a number of areas this year in good conditions, fewer may be burnt next year because of bad conditions, and by the time they get around the half million acres quite a few years will have elapsed, and so the effectiveness of the whole program is lost - that is assuming the practice is effective.

In my experience with FRB at Mt Richmond I found that a good hot burn, that is everything from ground to tree crown, gave good protection the first year, some protection the the second year, that is assuming a wildfire burnt up to the burnt area, and little or no protection after that. The cold or patch burn was useless, it left too many leads which even a mild fire could cross. Incidentally, I was a keen advocate of FRB until first hand experience showed that it didn't work and never would. During a discussion on FRB by the Committee of Management, one of the members quoted a fire at Gorae West some time previously which burnt several hundred acres, and six weeks later a wildfire burnt over the same area and much more besides.

Recently someone did a FRB on the Portland–Nelson road two or three miles past Mt Richmond hall. It was a cold burn. There was no need to burn the area in the first place, the north and west sides backed onto farmland. Rather than prevent a fire it has created a lot of kindling wood, which the FRB killed, for any fire that may come along later in the season!

One day when I was Ranger at Mt Richmond the Forest Officer from Heywood bustled in and wanted right or wrong to start a fire in a particular section of the Park. I objected, not to the burn, but because no fire protection work had been done in that area. He harangued for some time and pointed out that as long as the farmers saw some smoke coming from the Park they would be quite happy. So much for the intelligence of the farmers and the forest manager! I referred him to the District Superintendent in Portland who backed me up. The Forester did not get his burn. Incidentally, he did not name an alternative area, in the Park. If lit where he wanted it to be lit it was extremely doubtful if it could have been contained.

It is possible FRB may work in the wet sclerophyll forests of East Gippsland or the Otways, my experience and observations do not extend there, but it certainly does not work in the dry sclerophyll forests of Western Victoria.

In spite of what the text books say and those who write them I have yet to see a FRB where the micro-systems on the forest floor were not either seriously damaged or completely destroyed!

Forest management

When driving through Cobboboonee forest on one occasion the Forests Commission had a notice board prominently displayed, adjoining an area of young eucalypts, which said "This area has had silvicultural treatment". This is the picture I saw: The young trees had stems four or five inches in diameter and they were fairly dense. All the poor quality trees, and this would be a big percentage of the total, had been cut off about three feet from the ground and just left where they fell. The trees which were left standing were good specimens and could be expected to grow into first class mill logs with proper treatment. As I saw it the area looked a mess. Apparently the last act in silvicultural work is to burn all unwanted material. A mile or two further along was another area, obviously treated the year before, and this had had the final treatment by fire. It had been a crown fire - everything burnt from ground to tree top! For quite a few years the young trees would sadly miss the nutrients which the micro-systems would have supplied.

Fire in forest

In order to show that forest Managers never heed the lessons to be learned from previous fires some of these will be detailed.

The first was the one that devastated Mt Richmond in 1956, mostly the area that is now the National Park. It burnt in a S.E. direction and stopped at farmland after burning the boundary fence. It had run out of fuel and was easily controlled.

Another was in Kentbruck heathland in 1965 when we were exploring for the Park. Early afternoon I saw smoke coming from a point where I was heading. It was a Saturday, and when I arrived, sure enough a fire had been lit on a North south track and was quietly burning back against a slight breeze. No one was in attendance. I called at the Forest Camp about a mile away on the way out but everyone had gone home for the weekend. I thought at the time if tomorrow was a stinker a lot of country would be burnt! The next day was a stinker and it drove the fire south for about a mile. Late afternoon the wind changed to the west and drove it across the heathland. It burned all day on the third day and reached farmland sometime on the fourth day and went out. It had run out of fuel! At no time was any attempt made to control it or put it out. It burned 5000 or 6000 acres of what was considered to be useless heathland.

The next was the Heywood fire in 1976. It started in the forest mid-morning and burnt in a south easterly direction most of the day. Late afternoon a wind change drove it in a N.E. direction all that day and most of the next day. It stopped when it reached farmland and ran out of fuel.

This fire burnt about 12,000 acres of forest including valuable regeneration areas. Conditions were bad but not extreme. A count of equipment which attended the fire included: 57 fire units, most if not all equipped with radio, 9 bulldozers, a radio field station at the fire and a base station at Heywood. All this sophisticated equipment was helpless against the fire. Backburning was successful in one or two places. Dozers tried to cut firebreaks but the fire jumped them as though they were not there.

There were no firebreaks as such, only narrow bush roads and tracks (this situation has not changed since then). One fire unit became bogged in the sand and had to be abandoned. It was burnt out but the crew escaped.

I was Ranger at Mt Richmond at the time and about a week later was asked if I would like to come to a meeting of the Gorae West fire brigade nearby. I went along and was given an opportunity to comment on events. I started off on the wrong foot by saying I had some very pertinent questions to ask. The Chairman immediately ruled me out of order – he would not have anything of a controversial nature discussed. I sat down and the questions were not asked.

The questions I wanted to ask were: How much longer were farmers going to allow the Forests Commission to use their farms as firebreaks? Had fuel reduction burning been carried out in the area in recent years? If not, why not? If fuel reduction burning had been carried out why didn't it stop the fire?

Next was the Caroline fire. It started near Mt Gambier and travelled east, burnt 5000 or 6000 acres of the Caroline pine plantation, crossed the Victorian border, burnt several

hundred acres of Forest Commission pines, crossed the Glenelg river and burnt several thousand acres of the Glenelg National Park. When the fire crossed the river a senior forest Officer was heard to say "Let the bloody thing burn"!

There was no firebreak as such along the border. There was a roadway and the distance timber to timber was 30 yards. The fire crossed it easily. Some time later I took the camera and had a look around. In the Caroline plantation the fire easily crossed a 50 yard wide plowed fire break and the pines were only about 35 feet high, half their mature height. I returned to the area about eighteen months later and found the dead Forest Commission pines had been bulldozed into rows and the area replanted. The distance from timber to timber at the border had been increased to 30 metres - no morel. A windrow of dead pines had been placed between the two rows next to the border!

The last fire was in December 1983. It escaped from a FRB at Heathmere, the same day as the ones near Colac and Lorne. The two latter received wide media publicity but the Heathmere one was not mentioned although it burnt about 1000 acres. An interesting feature was that it burnt a tongue of bush with farmland on both sides and stopped when it came to farmland! Some fencing was lost and a few bales of hay. Some wildlife was lost including Koalas.

Some notes on ecology

Why should there be such vigorous growth of vegetation after a fire, and how can this alter the content of the woodland areas?

When landscape is devastated by drought, fire or flood nature has made provision to restore it in the shortest possible time. It is in the form of annual plants and perennial shrubs and trees. The annual plants give quick shelter to the perennial plants and trees which have a comparatively short life, roughly 15 to 25 years. These in turn provide the conditions for the establishment of the permanent species, mainly trees. The perennial plants and trees, which we will call secondary vegetation, do not grow to the height of the permanent species. The most important of these is the Acacias which add nitrogen to the soil for use by other vegetation, especially the permanent vegetation, while it is establishing.

Central Australia from 1965 to 1978 provided an excellent example of drought-devastated country being rehabilitated by nature. We were in the Centre four times between 1965 and 1978. In 1965 the country had had no good rain for almost ten years and with overstocking with cattle the country was in a shocking condition. The drought broke in December of that year and we went back in September of 1966. The growth of annual vegetation was staggering and within two or three years the growth of secondary vegetation was also prolific.

The eucalypts, Desert Oaks and Mulga, the main permanent species had taken a battering. Many were dead. We were back again in 1967 and much of the dry cover of the annuals remained. The growth of the perennials was just taking off. The most notable of these were the Bell Fruit trees, which are legumes. There was the makings of a dense forest of these between the Rock [Uluru] and the Olgas [Kata Tjuta]. There was no sign of young

Desert Oaks or Mulgas. Most of the eucalypts were regenerating, some were dead. Back again in 1973 and the Bell Fruit trees were at their best and there were young Mulgas and Desert Oaks everywhere! Back again in 1978 and most of the Bell fruit trees were dead! They had done their work according to Nature's program and the permanent species were taking over. Stocking at this stage would have destroyed all the young permanent species, but being a National park all stock had been removed. According to theorists the vegetation should not have regenerated – there had been no fire!

Over millions of years Nature has worked out the most efficient way to restore degraded landscape. What happened in Central Australia is happening all over the Continent. Unfortunately, because of a one sided rural policy the program is never allowed to run its full course.

European man's lust for burning is never ending. When he first burnt the landscape to provide that green pick for his stock he found Nature reacting quickly to repair the damage, then in 3, 4, or 5 years time he burnt it again. When the landscape was burnt the second time, not only was the fast growing perennial vegetation destroyed but also the newly establishing permanent species. Back to square one. In a few years it is burnt again. Same result, and so it goes on and on. What we have now over much of the continent is a mongrel emaciated woodland instead of the luxuriant one we inherited two hundred years ago! Environmental managers should note *it is the secondary vegetation which leads the flames of a wildfire to the tree canopy, not the fuel on the forest floor*.

Looking a little further into the complex micro-system on the forest floor, it is a complex of chemicals, bacteria, moulds, fungi, etc. and is Nature's key tool in the cycle of birth, growth, death and decay. The system converts all residue which falls on the forest floor, leaves, twigs, dead birds and animals, their excretions and all other residue to reusable nutrients for the growing vegetation. Until 200 years age this system had stabilised, that is the decay of the lower layers equalled the new deposits on the surface. Continuous burning has either weakened this system or completely destroyed it.

A research paper by B.P. Springett in the book "A Nation Of Trees, Australian Forest Eco-Systems" confirms the above statement. He says:

"While the use of fire to regenerate forest or to burn logging waste is sensible, the frequent use of controlled burns is ecologically much less acceptable.

"Controlled burning usually depends for its success on igniting the forest litter when it is moist. In the litter the recycling organisms, which are responsible for the return of nutrients to the plants, are most active in warm moist conditions, and become inactive in hot dry conditions. It is the tragedy of controlled burning policy that the most successful burns are those that destroy the recycling organisms in their most active and vulnerable period. Springs burns in Western Australia, in addition to destroying the litter in its most active stage, stimulate the growth of banksia which is highly susceptible to the root fungus Phytophthora, rather than that of Acacia which is resistant to the fungus. Cool spring burns (or cool moist burns of any type) also reduce the number of animal species in the litter. Recent evidence suggests that some decomposition pathways are blocked by cool moist burns with the result that the decomposition process may become dominated by fungal activity. Under these

circumstances, when nutrients and the recycling organisms are being reduced and simplified, it is not surprising that outbreaks of pests such as Phytophthora occur."

Australian soils are generally low in fertility, especially in phosphorus, one of the most important nutrients needed for growth, hence the importance of the recycling by the ecosystems on the forest floor.

Our wheat growing industry provides an excellent example of what happens to soil where vegetation residue is repeatedly burnt. In the early days it was general practice to burn the stubble (straw) of a previous crop to facilitate ease of working the ground for the next crop. After 15 or 20 years of this treatment the soil, instead of being friable, was setting like cement! Crop yields were markedly effected. Long term research revealed that continuous burning was destroying one of the most important components of the soil humus (compost and mulch to the home gardener) and that the burning was denying nature the ingredients to replenish soil humus each year.

The answer was found in a new approach to agriculture called "Ley farming". It meant that machinery was adapted to handle the straw of a previous crop and return it to the soil. Also, rotation of crops were spaced at longer intervals and extensive use was made of high-producing grasses and clovers between crops to help build soil fertility. In the long term the result was dramatic. The present day farmer expects and gets at least double the yield of his predecessors. I had first hand experience with this problem.

I can remember walking into a near-virgin forest and the feeling underfoot was like walking on a carpet with a very deep pile. Walk into a forest that has just been burnt and it is like walking on concrete. The compost and mulch which has taken nature many years to accumulate has been destroyed. All that is left is a few bits and pieces which for some reason the fire has failed to consume, a few hard fruits from the tree tops and the bare earth. Environmental managers tell us the forest floor can be burnt without destroying the micro-systems. Such statements are made either to allay John Citizen's concern that the environment is not being managed properly, or it exposes their ignorance in the field of ecology!

A good garden is based on two major components - compost and mulch, and a good gardener nurtures these ingredients very carefully. Where the gardener can create his compost and mulch in a comparatively short time by bringing in outside material the process in nature can be very very slow. Burning and more burning denies nature the right to properly reconstruct soil and the result is the deterioration of the luxurious vegetation that was once so abundant.

A practice which has contributed to excessive growth of secondary vegetation is lazy logging methods. Where an area of forest is to be logged the saw millers have contractors to do the falling and other contractors to haul the logs to the mill. As far as I have seen forest managers have never exercised proper supervision over these people, especially the hauliers. These people barge into the forest with their dozers with no respect for the growing vegetation, and I believe more young trees are destroyed than are extracted! Of the trees felled only that part which is suitable for milling is taken. The rest is left where it falls. In due course the area is burnt to clean up rubbish and to regenerate. Unfortunately

the fire destroys the micro-systems and leaves the larger parts of the limbs intact. This is excellent cover for secondary vegetation and promotes fast growth.

About two years ago the proprietor of the Red Gum sawmill in Deniliquin took me for a drive through the forest where he gets his logs, on the North side of the Murray between Tocumwal and Mathoura. The stand where was getting his logs was 70 years old and the logs were up to a metre in diameter. All the mechanical equipment in the forest was rubber tyred! The logs were hauled to the loading point slung under two wheeled jinkers which hardly left a mark on the ground. After the log was removed sleeper cutters followed, then post cutters, and lastly a mobile chipper. Small limbs and leaves were left where they fell, nothing was burnt! A percentage of old trees was left for tree dwelling fauna There was regeneration everywhere. The forest floor was clean and fuel for a wildfire nonexistent.

Present forest managers seem to be satisfied with the quality of our hardwood timber. This is rather a poor approach because timber now is immature and full of gum veins, the latter caused by excessive burning. Immature trees indicate over cutting. Perhaps this satisfies the present generation who know no different. Half a century ago our hardwood timber was of excellent quality, mature, straight and clean. Managers who fail to aim for a return to this quality should not be managers.

Is the present concept of a fire-related ecology, the one we have adopted to suit *our* needs, the right one to use as a base for forest or woodland management?

If we take an area of woodland and burn it just once each 100 years, at the end of one million years it will have been burnt 10,000 times, an awful lot of burning in a very short period of geological time, one would think more than ample to establish a fire-related ecology *if* that is what nature intended.

From another angle: If we take the main species of vegetation which would be trees, and except for the larger species such as Ash, Kauri, Red Gum, etc., their average life would be around 100 years, perhaps a little longer. One wonders if nature established this cycle long ago and we have been too slow to pick it up?

Burning is not necessary to establish or maintain vegetation. Observations will show that there are always a few of the permanent species germinating and growing. They may be stunted looking but if a nearby tree dies or is blown down they take off and grow rapidly to fill the gap.

Subterranean Clover provides an excellent example of how nature ensures that her species are maintained. Sub. Clover is an important component of pasture in the agricultural zone and considerable research has been done on the ecology of the plant. It is an annual, and must depend on seed for survival. Mostly the seed head contains four seeds and the outer shell grades from soft to very hard. The first autumn rain is usually enough to germinate the seed with the softest shell. If follow up rains fail the germinated seed may die, but there are three left. With the next rain the second seed germinates and if more rain follows the plant will grow out its life cycle. The other two seeds, especially the last one, will remain dormant in the ground for many years and in the event of a drought or other catastrophe is there to carry on nature's cycle.

This prompts the question: has nature evolved the hard fruits on many of our native species to act in the same way as the Sub. Clover seed and be released into the soil gradually? In the event of a fire all seeds in the hard fruits are released simultaneously. This is a do or die option - is it what nature intended? Again, the example of the regeneration of the drought-devastated Central Australian landscape following drought breaking rains in 1965 indicates that fire is not necessary for this purpose. The real purpose of the hard fruits would be to release their seed gradually into the harsh, dry climate of our continent!

Is the theory of the fire related-ecology our forest managers' invention to justify their onslaught on our woodland landscape with a firestick?

The green firebreak

The academic and technical people responsible for the management of our woodland environment seem to spend their time playing around with technical jargon instead of getting on with the job of confronting wildfires. For almost three decades since the introduction of Fuel Reduction Burning Forest managers have persisted with the practice, knowing almost from the beginning that it was not doing what it was supposed to do, i.e. stop or minimise wildfire, and no real attempt has been made to find an alternative. A decade ago the Forests Commission prepared a report for the new Minister for Conservation, Rod Mackenzie, which indicated FRB was not doing its job, yet nothing was done to find an alternative. Numerous instances in the report also indicated that too little was known about the ecology of our woodland, yet nothing has been done about it! A recent report in the local paper from the Conservation Department said that after seven years of research in the Wombat State Forest FRB had no effect on the ecology of the area. We are getting far too much such half-baked research which is propping up half-baked management practices. The mention of the word Forest clearly indicates that at least half a century of research would be needed to get a reasonable lead on the effects of FRB. The detrimental effects of FRB are clearly visible to any observer who walks the forest. On occasions Forest Managers seek advice from their counterparts overseas on burning woodland. What would THESE people know about the ecology of a continent on the other side of the world with no counterpart anywhere on the Planet?

The control of wildfire is quite simple - *deny it fuel*! This technique has proved itself many times as quoted earlier in this paper! Why then don't we deny fuel to wildfires at strategic points? The idea would be to establish firebreaks. They would deny fuel to any wildfire passing that way and help to control it. The breaks would have to be wide enough to allow firemen and their units to face up to a wildfire in complete safety.

To environmentalists the thought of a cleared firebreak stretching to the horizon would be as horrific as the skeleton of a burnt out forest. This need not be so. Ideally, the break would follow a meandering forest track. In width it would need to be about ten times the height of the vegetation, this being the point where air resumes its normal flow after striking a Barrier. Initially the trees would be thinned to a point where the crowns of the remainder would not carry a fire across the break. All other vegetation would be cleared and disposed of. If necessary the ground should be plowed and levelled so that

crews and their tankers can move safely at high speed anywhere on the break. All vegetation should be allowed to regenerate and thereafter maintained near ground level with a slasher.

At Mt Richmond this was done on a small scale. Within two or three years there were magnificent areas of small flowering plants - Boronia, Heath, riceflowers, orchids and so on. With the absence of competition from the taller plants they grew and flowered profusely. They were not continuous along the break but grew in those areas where they were previously established. As the taller vegetation begins to take over the area has to be slashed. Such areas were always a prime attraction for tourists.

On a major firebreak these flowering areas could be maintained on a rotational basis so that there would always be attractive wildflower areas, subject of course to the seasons. A break of this nature would be continuous, positive and permanent. The present hit and miss method of FRB would be eliminated. The slow destruction and emaciation of woodland vegetation would cease. The micro-systems on the forest floor would be allowed to get on with the job of building soil fertility according to nature's code. Acceptable restoration may take up to a century

A critical point would be reached in 15 to 25 years when there would be a massive growth of secondary vegetation. As the more permanent species became better established the secondary growth would gradually choke itself out, and would finally reach a compatible level with the new environment.

Management

Although, basically, the woodland would be left to look after itself some form of management would be required. As well as the firebreak there would be need to look after the wellbeing of the country behind the break. In this part of the State, taking the half million acres mentioned, many families could easily find work. The job of the breadwinner would be to look after his section of the forest. This would involve eliminating any hazards which promote rapid growth of secondary vegetation and extracting minor forest products, posts, poles, wood, etc. He would maintain his section of the firebreak and give closer attention to the extraction of mill logs. He would have a mobile chipper and chip all parts of a tree not required for timber or other purposes and would return the chips to the ground around where the tree grew. One very important point would be just to have a presence in the forest. His five day week must include weekends and holidays so as to be around when most recreational activity is taking place. Such management would greatly reduce the incidence of wildfires.

Cost

The capital cost of the firebreak would be considered a fire insurance premium. In calculating the funding for the extra staff the following items would be considered: The Social Service payments the breadwinner receives now, he would be receiving a full wage, he may be paying wages tax, there would be a small amount of royalty accruing from minor forest products. For housing, funds would simply be diverted from present city

projects. By putting these items on the respective sides of the ledger the cost to the taxpayer would be little if anything. It would be reasonable to assume that hundreds of breadwinners would jump at the chance to get themselves and their families out of the rat race in the cities to a working life in the quiet atmosphere of the bush, and the people involved would have the satisfaction of making a real contribution to the welfare of the society in which they live.

In the long term, the project would pay handsome dividends of increased productivity, a greatly diminished bill for losses through fire, and a more accessible and attractive environment for those who take their recreation in the Bush.

Looking at the problem another way, the hundreds of millions of dollars which fires in Victoria have cost in the last decade may have been enough to implement the plan right across the State. A plea from Governments that funds are not available would not be accepted. Basically funds for the project simply involves diverting money from nonproductive areas to fully productive ones.

The National Parks people have started to put in two green fire breaks in the Glenelg National Park, one in the Bullies Range area and the other along the skyline road. These will need to be made wider and fully maintained to be fully effective.

Forest managers have been aware for a long time that the present practice of FRB is unsatisfactory. Why hasn't research been carried out into more effective ways of combating wildfire?

6. Our Most Valuable Resource – Water

The assumption that because we live in the driest continent water must be our most valuable resource has led to its over use and wasteful use.

The total runoff of our continent is a mere 370 million acre feet annually compared to South America, for example, which has the heaviest runoff of 7833 million acre feet annually. This has been ample for our needs to date and if the management of our water resources was brought into proper perspective it would be ample for our needs for a long time to come.

From the earliest days when the idea of irrigation surfaced it was assumed by settlers and Governments alike that because the continent was so dry the impounding of runoff water to be used in the dry seasons for watering crops and pastures must be a gilt edged proposition, and from earliest times to the present day this approach has been dominant. It was not considered necessary to even conduct feasibility studies to find out if the use of runoff water in this way would be an economical proposition.

The discovery of gold in the 1850s led to an almost trebling of the population in a little more than a decade. At this time the main production from the land was wool from large holdings. With increased population it was thought desirable to encourage people to settle on the land. The Governments of the time thought the best way to do this would be to subdivide the large sheep runs (these were occupied on a leasehold basis) in the better rainfall areas into smaller units to encourage a more intensive type of farming.

The basic structure for this kind of farming was taken from overseas countries with better and more reliable rainfall. Settlers were allocated blocks accordingly. It was quickly found that the settlers had to farm their land much more intensively than anticipated. Because of the drier climate the blocks were too small. This led to overstocking and over cropping in efforts to remain viable, which in turn led to a decline in soil fertility - drifting top soil, loss of humus where crops were grown and the creation of a hardpan a few inches below the surface which prevented plants having access to soil moisture in the subsoil.

This failure to provide settlers with a large enough area of land from which they can expect to make a comfortable living without degrading the soil has plagued land settlement down to the present day. The situation has not been helped by the type of settlers who took up the land. Many had no previous farming experience, but the opportunity to make a living from an independent life style and at the same time lift themselves a rung or two up the social ladder had an irresistible appeal.

From the beginning politics intruded heavily into land settlement. Governments were eager to "open up" the land irrespective of whether they or the settlers made a profit. In effect it was providing homes for people, adding resources to the country, and out of this – revenue for the Government. However, the Governments expected the settlers to repay in full, in the long term, all money which they had to borrow from the Government. It did not occur to anyone involved that of the extra production only a small percentage would

be needed to satisfy the local market and that any surplus would have to be exported to European markets 12,000 miles away – that is if such a market could be found! .

The wool industry successfully established itself because it could produce a fibre that was in demand mainly because the European countries did not have the expanse of rangeland for its production. Besides, to some extent it was a concentrated product, easy to handle, it stored well and although transport posed some difficulty, especially from the inland areas, the ingenuity of the new breed of Australians soon overcame this problem. The initial haulage was done by wagon, drawn by horses, bullocks or camels to the rail heads or, in the case of the outback, to shipping points along the Darling and Murray rivers, which were extensively used in the early days. Likewise, the new breed of Australians soon evolved better methods of shearing sheep, first with the blades then with mechanical shearing machines.

The ready overseas market was the main factor in the establishment of this industry. It allowed the production, transport and marketing of this product to be refined to a high degree. Not so with other primary products because European countries were to a large extent self-sufficient. This made the export and distribution of these products on the European market a gamble of varying degrees. Sometimes a local shortage gave excellent returns, at other times there were gluts with corresponding down grading of returns!

As early as 1865 settlers were having trouble making ends meet, mainly because of uncertain markets as outlined and because the new environment was not responding to traditional cultural practices which European settlers had always known. Rainfall was not nearly as abundant, there were too many droughts and the soil was harder to work in preparing for the various crops. In time the farmers did work out the most efficient and practical methods of farm husbandry, but it took almost 100 years. Now the cereal growers in the better rainfall areas are possibly the most efficient in the world!

Governments had been eager to sub-divide the large sheep runs in northern Victoria for a more intensive closer settlement economy. When they found out the projects were not working to plan, and after investing so much money, they could hardly walk out and leave the settlements to revert to large sheep runs! The uncertainty of seasons finally set the scene for irrigation. The settlers saw it as a means of increasing productivity, of eliminating the effects of droughts and stabilising production on the farms. Governments were quick to see this, and it would also ensure the repayment of farm debts.

The establishment of irrigation in Victoria was approached in the same disoriented way as land settlement, and the elapse of over 100 years in time has not altered this method of approach. In the beginning water trusts were established in the various areas and the Government advanced money to these Trusts to carry out the various schemes. The main condition was that the Trusts were to collect certain charges from the land holders to repay advanced capital plus interest. No one knew much about irrigation at the time, but a few people had been overseas and inspected schemes on the Continent and America.

Initially, weirs were placed across rivers to raise the water level high enough to flood irrigate nearby land. Channel systems were constructed to deliver the water. Fine, but in the lean seasons when the water was needed most the weirs did not hold nearly enough

and dried up! What had been overlooked was that in overseas countries rainfall runoff was much greater. Most of the water needed for irrigation could be pumped directly from the rivers because they maintained their flow, without drastic alteration, throughout the year.

In those days the improved technology and the high producing species of pasture plants and cereals we have today did not exist. After a decade or two it was back to square one. The settlers were in just as much trouble as ever and the Government was just as far away in recouping capital expenditure and interest. It was obvious that if irrigation was to be successful larger storages would have to be built, and they would have to be large enough to tide settlers over the dry years.

This unsatisfactory state of affairs was brought to a head in 1895 when the Government appointed a Royal Commission to inquire into the operation of water Trusts. The Commission presented its report to the Government in 1896. It found that the Department of Water Supply, the Department responsible for irrigation work in Victoria, had been advancing money to Trusts on irrigation plans that had not been properly researched, some had not even been surveyed. Some Trusts were taking the initiative and proposing schemes and having them funded without specific requests from the settlers concerned! The Chief Engineer of the Department of Water Supply defended this approach on the grounds that if requests from Trusts were refused political pressure was brought to bear to force the issue!

The Chief Engineer, in evidence to the Royal Commission, pointed out that irrigation tends to promote settlement, to increase profitable production, extend local industries and make settlers' living more assured. In effect this could be construed as saying that if irrigation did not succeed it was the fault of economics and not the irrigation!

In 1905 the Government passed legislation abolishing the Water Trusts and vesting their assets in the Crown. Control of all future irrigation was to be given to a State appointed body of three – The State Rivers and Water supply Commission (S.R.& W.S.C.). In introducing the new Act the Minister for Water Supply insisted that irrigation must be treated as a profit making concern by the State and not as a service to the community like roads. After an initial period of twelve years farmers would have to pay the interest and the irrigation Districts were expected to return a profit to the State. The Minister also pointed out that large markets existed for fodder and butter and that droughts made irrigation essential.

The story in South Australia was much the same as in Victoria. In 1887 the Chaffey Brothers, Canadians, set up a private irrigation project at Renmark similar to the one they had established at Mildura. The settlement, as at Mildura, was for vine fruits. The brothers supplied the water to the settlers by pumping from the Murray. But in 1893 both Mildura and the Renmark settlements collapsed and the Chaffey's dream of a profitable irrigation venture came to an end.

In Renmark the settlers formed a Trust and took over the operation of the venture. The S.A. Government set up other similar settlements further down stream, the water being pumped from the Murray. By 1925 the settlers, as in Victoria, were unable to meet their commitments and were getting further and further behind. A Royal Commission in that

year found that there was an entire lack of business acumen and foresight in establishing the irrigation areas.

New South Wales was a little slower to jump on the irrigation bandwagon. Droughts in the early 1880s led to the appointment of a Royal Commission to examine the water resources of the whole Colony. The Commission concentrated mainly on the feasibility of irrigating the plains west of the Divide, especially in the Riverina. The recommendation was: that the water in all rivers should be controlled by the Crown, but that any projected schemes should be constructed and administered by local Trusts as in Victoria and that the area in question could be operated profitably. It was pointed out to the Commission by several Graziers that it was not worth irrigating to feed sheep in a drought! However, the Commission decided that if any grazing property of 20,000 acres could irrigate 100 acres of lucerne it would have complete protection against drought! One wonders about the capital cost of delivering water to a series of holdings of around 20,000 acres!

Over the next three decades the possibility of irrigating west of the Dividing Range was debated by Conferences, Commissions and individuals. By this time the experiences of both Victoria and South Australia with irrigation were available and when the final decisions were made to launch the Murrumbidgee Irrigation Area project (M.I.A.) there was no excuse for the scheme to be other than successful. But this was not to be.

The main outcome of the Royal Commission of 1880, which was headed by Sir William Lyne, was the establishment of the Water Conservation and Irrigation Commission and an engineer, H.G. McKinney, was appointed as Director. McKinney reported in 1891 it would be possible to irrigate about 300,000 acres between the Murray and the Billabong Creek by putting a weir across the Murray at Albury. On the Murrumbidgee he suggested 50,000 acres could be irrigated by putting a weir near Wagga and diverting the water to fill a series of lakes to act as storages. South of the river he suggested that 100,000 acres could be irrigated by putting a weir at Narrandera and also using lakes as storages. He also,, outlined smaller schemes on the Lachlan, Macquarie and Darling rivers using weirs to divert the water.

The N.S.W. Government did not act on McKinney's report but instead invited an irrigation expert from India, F.J. Home to report on the prospects for irrigation. Home pointed out that McKinney's schemes would not work because the storage lakes were too shallow and in the driest seasons when the water was needed most it would not be there – it would have evaporated! He also reported that irrigation on the Lachlan was feasible if a storage was constructed. He ruled out the Darling because no storage sites were available. Home stressed that if irrigation was established the water must be used for specialised purposes otherwise if irrigation was looked upon as an insurance against drought the water would not return its full value.

Following Home's report McKinney carried out a series of investigations and selected the site of Burrinjuk for a storage dam on the Murrumbidgee. Nothing further was done for several years. In the 1902 drought sheep numbers in N.S.W. dropped from 48 million to 27 million. The irrigation question was again raised, and at a conference at Corowa of interested persons and Politicians the whole question was again discussed extensively.

At this stage South Australia was becoming concerned that N.S.W. and Victoria seemed to be monopolising the waters of the Murray–Darling system. As the water from the whole system finished its flow in the section of the Murray which flowed through S.A. and entered the sea in S.A. their concern was very real. At the Corowa conference the Premiers of Vic, S.A. and N.S.W. proposed a resolution which the conference carried that the Federal Government appoint an Interstate Royal Commission to examine and recommend the best and fairest method of utilising the waters of the Murray river.

The Commission noted the failure of irrigation schemes in both Victoria and South Australia up to this time and doubted if irrigators would ever be able to pay interest on Storage works. In spite of this it recommended a storage dam at Cumberooma just above Albury and a further one at lake Victoria near Wentworth. The Commission also set the theme for water to be supplied to irrigators free of interest charges for capital works by saying that irrigation schemes were desirable in Australia even if they could not be operated profitably.

From this time on the N.S.W. Government concentrated on developing irrigation along the Murrumbidgee because no firm agreement had been reached between the three States and the Commonwealth as to how the river Murray waters were to be shared

A further conference of interested parties was held in 1905 and was chaired by C.A. Lee, Secretary for Public Works. The conference moved strongly for the construction of the Barran Jack reservoir (the original name of Burrinjuck) as the basis of an irrigation scheme on the north side of the Murrumbidgee. The recommendation was based largely on the evidence of Sir Samuel McCaughy, M.L.A., a large Riverina land owner who was irrigating about 400 acres of wheat and lucerne. He claimed to be getting six tons of lucerne hay per acre. Lee stressed that the cost of the scheme should not be a charge on the State. The N.S.W. Premier at the time, J.H. Carruthers, made the same point when he said there could be no sound scheme of water conservation if it is simply to be treated as a gift to the prospective irrigators.

Early planning for the scheme, which was to be some distance downstream from Narrandera, envisaged an irrigated area of 100,000 acres. The best 10,000 acres was to be subdivided into 20 acre horticultural blocks and the balance to be divided into 80 to 100 acre blocks to produce fodder or to fatten live stock. Again Sir Samuel McCaughey strongly influenced planning by declaring that 50 to 100 acres of lucerne used for fat lamb or pig raising would be ample for a settler to make a living, and that such farms would produce sufficient fodder to help graziers all over the State through years of drought!

Details of the initial scheme were prepared by L.A.B. Wade the N.S.W. Government engineer and placed before a Parliamentary Committee for evaluation for the Government. Wade was doubtful about the scheme. Stuart Murray, at that time Secretary of the Victorian Department of Land and Works, was asked to comment. He also was extremely doubtful about the economics of the scheme. W.B. Chaffey, of the Mildura and Renmark schemes, was also sceptical. A number of Victorian irrigators informed the Parliamentary Committee which was evaluating the project that 350 acre farms were needed for dairying!

Perhaps the most classical piece of evidence placed before the Committee indicating the double standards of the day, which perhaps had the most influence in persuading the Parliamentary Committee to recommend the scheme to the Government, was by E.W. Sullivan M.L.A. He said "I would like to say that I consider it a terrible mistake to attempt to reduce land settlement to a commercial basis. You have something far more important than obtaining profit out of people to consider when promoting land settlement. You are making homes for people, adding to the resources of the country, and above all you are giving people something they can cherish as their own, whether it is theirs by leasehold or freehold. It is a big mistake to talk about getting so much profit in a certain time, and being able within 14 years to be able to pay off a certain amount of cost. What we have to do is to put people on the land, and when they are there give them a fair period within which to pay for it. The Government does not want to grind money out of people so long as they pay the State eventually what it lays out on people".

Work began on the Burrinjuck Reservoir in 1906 and the first water for irrigation was available in 1913. In the beginning the Murrumbidgee Irrigation Area (M.I.A.) was to be managed by a Trust of three – the Secretary for Lands, the Secretary for Public Works and the Minister for Agriculture. This Trust was abolished soon afterwards and a single Irrigation Commissioner appointed to manage the project.

Initially 300,000 acres of land was resumed for the project and the land divided into two irrigation areas, Yanco and Mirrool, centred on the newly established towns of Leeton and Griffith. Farm sizes in close proximity to the towns were to range from two acres to 50 acres. The smaller for Horticultural production and the larger for dairying.

The Irrigation Commissioner arranged to advance substantial amounts of finance to get the settlers established. This was to cover housing costs, stock purchase and costs incurred in laying out the land for flood irrigation. All this money was to be repaid over ten years with interest at 5%. Both Wade and Murray pointed out that the farmers would not be able to pay interest in the initial years, and Wade suggested that the scheme would only return 3.6% during its whole lifetime! The land was to be leased from the Commission at a rent equal to 2½% of the value of the land, and were to be charged 5/per acre foot for water, payable in advance. A new butter factory and cannery were established at Leeton to process the products of the new venture and before the scheme got under way an Agricultural College was set up at Leeton to advise the settlers.

So far so good - a lovely garden of roses almost for the taking!

Initially something over 400 farms were occupied. A big percentage of the settlers were miners from Broken Hill, and many others had no farming experience. In spite of all this the farmers were very quickly in difficulties. Only about 3/4 of a ton of lucerne hay could be harvested instead of the 5 or 6 tons previously mentioned. 50 acres would not support 40 cows which was the number estimated to provide a living for a family. To compound problems it was discovered early on that the underground water table was rising under the irrigation farms. If this continued underground drainage would be essential – thus adding more costs to the project. Very early it was obvious that farm sizes were too small and the 50 acre farms were doubled to 100. Time proved this area to be far too small. By 1915 only two years after the water became available there were about 900 settlers and

most were in trouble! A Royal Commission in 1916 resulted in the whole scheme being restructured. Farm size was again increased to 150 to 200 acres. (And still not enough! Remember the 350 acres recommended by the Victorians!)

By 1919 there were just over 800 settlers and in that year the Government decided to settle ex-service men on the scheme. By 1923 almost 900 service men had taken up blocks under much more favourable conditions than previously. Again, because of insufficient acreages the soldiers were soon in trouble.

At this time an American irrigation expert advised on the problems of the M.I.A. He considered that farm sizes should not be increased, but the scheme should be based on the original concept of small intensely productive units. He suggested that the settlers should not be charged interest on the capital cost of irrigation structures, storage dams, diversion weirs and distribution channels. He thought the small farms should be oriented towards producing lucerne as a basis for drought insurance. His advice was not accepted.

By 1928 almost 100 soldier settlers had abandoned their blocks and the W.C.&I.C. again had to consider the desirability of restructuring the whole scheme. At this time one of the soldier settlers applied to the Court to have his farm restructured. The result of this case, heard by Judge Pyke, was to determine the future status of settlement on the M.I.A. In giving his decision Judge Pyke said a settler was entitled to earn as much as a skilled worker, about 312 pounds at the time, after paying all costs associated with running the property. This meant that farms other than Horticultural holdings, would need to be increased to between 500 to 600 acres!.

By 1930 almost 2000 farmers were irrigating almost 100,000 acres and it did seem that after an agonising 20 years the scheme was at last on a firm footing!

The story of the Murrumbidgee Irrigation Area has been detailed to some extent to show the humbug and bungling that has plagued not only the M.I.A. but other irrigation areas and land settlement generally in south eastern Australia from the very beginning until the present day. Planners, Developers, Farmers never read or heed history. Each generation instead of profiting from the experiences and the mistakes of the previous one has to learn all over again! In the case of the M.I.A. Victorian irrigators had answers to most of the problems encountered as early as 1909 and advised the various conferences and enquiries leading up to the establishment of this scheme accordingly! This experience and advice was not heeded!

The greatest misconception about all irrigation schemes is that irrigation would, to a large extent eliminate the effects of drought. Fine in theory, but is the irrigation farmer going to stockpile lucerne hay or other fodder for several years, with little other income in the hope that the next year would be a drought when he can unload it all, at hopefully, a premium price! The idea is quite absurd.

What the irrigation settlers did was to take advantage of the water to increase their earning capacity by increased stocking hoping that when the unpredictable drought did come along they could pull through.

Perhaps in a few cases the farmers could pull through, but in most cases even with irrigation they were overstocked in a gamble to make ends meet and the drought hit them

just as hard as those dry farming. Strangely after over 100 years the misconception that irrigation is drought insurance still persists.

The only answer to periodical stock losses through drought is for the individual farmer, whether he has irrigation or not, is to conserve ample fodder in the good years and carry a few less stock and he will get through good years and bad on a more even keel. Unfortunately when drought hits the farmer the whole community in which he lives is also hit.

In 1913 my Dad, lured by the independent life the land offered went on to a property in Southern N.S.W. to grow wheat. His experience at that time included twelve months on a dairy farm, some saw milling, cheese making at a butter factory and general labouring. He had 100 pounds and plenty of enthusiasm. He bought 4 or 5 horses, a plow, cultivator and harrows. The first crop was broadcast by hand because there was no drill. The season was lean and there was not much wheat. The next year 1914 was the big drought, and he had to pay exorbitant prices for chaff to keep his horses alive. He survived that drought and from that time on for the next 30 years he always had enough fodder conserved to carry his stock through lean years and droughts, and sometimes enough to sell to a neighbour. There were times when the Bank manager queried the cutting of so much hay instead of concentrating more on the cash flow. To Dad's credit he stuck to his policy and in the long term it paid handsome dividends.

In the early 40s irrigation water came through our two small properties. When I took over management in 1943 the tradition was carried on. The 1944-45 drought was our best year ever!

We lived a few miles east of Deniliquin until 1951 when we moved to Portland, Victoria. By mid-60s I thought the carrying capacity could be increased and did so by about 15%. It was a mis-judgement and one load of hay had to be bought. In 70 years of farming covering three generations (Michael took over management in 1974) only that one load of hay had to be bought!

The above experience proven over a long period of time is the answer to the periodical droughts in this country. The original lesson was learned very quickly and never forgotten. Many farmers, both dryland and irrigation could tell a similar story, but their numbers are all too few. Only the individual farmers themselves can beat the recurring droughts in this dry continent. If a farmer, or a grazier hasn't the capacity to face a major drought head on and win – he shouldn't be farming or grazing. He is a burden to himself, to the community in which he lives and worst of all a burden to the environment upon which we all depend. The environment of our farms has never been abused except for some over-clearing in the early days. It provides our living, our way of life, we could not afford to ill-treat it.

When we acquired our Portland Property it was near virgin country, only a little more than a quarter had been cleared. This provided an excellent opportunity to develop a farm – not just a farm full stop, but something with character, something which provides contentment and somewhere where we can spend our declining years in the knowledge that we always tried to work with nature. Nature in return for this treatment has been very

generous. The productivity of the infertile soils with which we started has been increased dramatically.

It has been a long haul since 1913, but has been a most satisfying experience.

In the early days, apart from Government sponsored land settlement schemes, anyone could apply to the Department of Lands for an area of land upon which they thought they could make a living, by milking a few cows, selling milk or cream, perhaps some grain, vegetables, etc. They had no idea of how much land would be needed to make a living, and for some unknown reason the tendency was always to under-estimate the area needed for their purpose. It did not occur to these people, many were migrants, that the very nature of our climate required a different approach to that practiced in overseas countries. There was an awful lot of fumbling to try to come up with the best approach to farming practices generally.

These were the people who, because of their inability to cope with dry land farming, came to the conclusion that irrigation would be the answer to their problems. One wonders, if they couldn't make a success of dryland farming how they were going to succeed with irrigation? They didn't. Their experience to that time should have told them they were trying to farm areas that were much too small for their purpose, and that with irrigation the same criteria applied.

Apart from the inability of both government-sponsored settlement schemes and individuals to see that adequate acres were provided to create viable farms, the problem which was to have the most profound effect on land settlement was *markets*! the local market was, and still is, quite small by comparison with American and European countries with their greater populations. From the early days there was always a surplus of farm products above what was needed locally, and that surplus has been increasing percentagewise with extended land development. This surplus in increasing quantities has had to be shipped 12,000 miles to the other side of the planet to find a market and mostly compete with similar local produce. Is it any wonder then that with poorly developed land settlement and fickle markets our primary industries are always in trouble. In the last decade farm production has increased substantially in most countries where we were and still are hoping to sell our surplus products. Surely there must be a better way of managing a nation than the senseless downgrading of our environment to provide food and fibre that is not needed and in the process leaving our primary industries in a state of near bankruptcy?

The story of irrigation so far has brought us to about 1930. What has happened since then?

The depression played havoc with irrigation products, (all primary produce but we are speaking of irrigation) and with the economics of the industry generally. All through the hungry 30s the irrigation farmers needed more assistance, pro rata, than the dryland farmers. But did this deter the expansion of irrigation? Not a bit of it!

In 1933 the construction of the Wyangala dam on the Lachlan was started and about the same time the Stevens weir on the Edward river near Deniliquin was also started. The latter was to serve a new irrigation district – Wakool. From this time on, in spite of the uncertainty of markets, the expansion of irrigation proceeded apace. The capacity of the Hume and Eildon weirs were doubled! The huge Snowy Mountains project was constructed in the 50s and 60s adding substantially to storage capacity, but also generating large amounts of electricity. The Darling was dammed to permanently keep the Menindee Lakes full, and the huge Dartmouth dam in Victoria was completed only a few years ago.

The war years provided a respite for the economics of the industry by creating extra markets. Following the reconstruction of the war-devastated countries their people turned more and more towards becoming self sufficient in food production. As these countries increased their food production so did the markets for our surplus diminish. The greatest threat our primary industries are facing was the formation of the European Economic Community (E.E.C.) This is a combination of European countries set up nearly twenty years ago to help them become self sufficient in food production and especially to stabilise prices in the whole industry. The E.E.C. achieved their objective some years ago and now, apart from taking less of our produce, are dumping their surplus in our other traditional markets!

Yet, even today the fallacy of allowing more people on the land, whether for dryland farming or irrigation, still persists.

In the 1944-45 drought sheep numbers in Riverina, the most irrigated part of the country, declined almost 50% and it is interesting to note that in spite of the huge quantities of water that can be stored the Hume darn was dry in the 1945 drought, and the Burrinjuck low. In the 1965 drought both were dry!!

What has irrigation in south east Australia achieved, and where would we be without it?

The Pundits would stand to their full height and with chests out and point to Shepparton, Mildura, Leeton, Griffith. What they would not point out is that these centres were established over the backs of thousands of unfortunate individuals who tried to make the system work but failed because of incompetent Politicians, incompetent Planners and incompetent managers! They would not point out that these centres are existing more and more on a boom and bust basis because of uncertain markets, depressing prices! They would not point out the massive battering the environment has taken in the process, or the massive clearing of trees which kept the water table and salt pan at bay, or the damage to the Riverine environments by drastically reducing the normal water flow in the rivers, and that the water now, instead of being pure mountain water, is laden with salt, almost too salty in places to drink!

In spite of this the Pundits would put more people on the land to produce more of the rich cream upon which they live.

With an irrigation structure to cope with our own requirements plus a small surplus for contingencies, and the development of dryland farming to its full capacity, those centres would still be there, not quite as big perhaps, but with a more stable economy and a more contented people.

Background to this chapter was taken from the Book "Australia - Wet or Dry" by B.R. Davidson.

PART 2. Looking at Australia

I had always wanted to have a look at our country but we never seemed to have the time or the money for such luxuries. However in 1965 we had a good year and it seemed it would be now or never! We teamed up with a neighbour, Cliff Beauglehole, who was an amateur botanist, but a very good one, and started planning about three months prior to leaving. We each had new Land Rovers so were well equipped transport wise. We left about mid-June, Self, wife Molly and son Michael, and Cliff had his wife, Hilda, and a friend Keith.

We spent a month in the Centre, then up to Darwin, across the Kimberleys, down the west coast, about 3 weeks around Perth and the South West and home across the Nullarbor. 15 weeks!!

That trip gave us all itchy feet, so it was back to the Centre for a short trip in 1966 after the drought had broken. Back again in 1967 to have a really good look at the Centre. In 1969 Molly and I went up the East coast past Cairns to Daintree and back through Western Queensland and N.S.W. In 1971 Molly and I went back to the West. Up through Kalgoorlie, Leonora to Carnarvon and down the coast to Perth and the S.W. 1973 up north with a mate. Looked at Barclay Tableland, to Darwin, across the Kimberleys to Broome, back to Halls Creek and home through the Centre.

1976 to the Centre, across the Tanami and six weeks in the Kimberleys. 1978 up to the Centre, across the Plenty Highway to Urandangi and Mt Isa. 1980 across the Nullarbor to Kalgoorlie, to Leonora, Mt Magnet, Meekathoura, Hammersleys, Wittenoom, Marble Bar, Broome, across the Kimberleys to Mt Isa, Cloncurry, east to Mt Surprise and down west side of Divide.

As far as possible we always took a different route, especially in Western Queensland and Western N.S.W. All our trips were done the hard way – camping, but the best way, because it gave us intimate contact with the country and the people. We met and talked with people in all walks of life, from aborigines to Station managers and owners, and all those in between. On our property at Portland we run a small beef herd (by standards up north), and because I could talk the language of the north it opened up doors no end, and in almost every case everyone rolled out the red carpet!

For me, one of the greatest attractions was the Geology of perhaps the oldest continent on the Planet. Except for the Antarctic, certainly the most naked continent on the planet. This gave us glimpses of the old rocks, of the colouring and glimpses of thriving ecosystems in country which to outward appearances was desert.

Our travels were one of the highlights in a long lifetime. The following chapters tell of some of our experiences.

7. Drought

In this country the word drought, since the earliest days of the white man, has assumed a sinister meaning. By old world standards the dry nature of our continent, especially the two thirds which comprise the Arid Zone, would imply such a meaning. After 200 years the white man has still not come to terms with the Ecology of this country. What he has failed to realise is that droughts, by old world standards, are the norm in this country, not the exception. If the white man had based his environmental management practices on this assumption the persistent boom and bust periods that have dogged rural industries since earliest days could have been smoothed out, and the Australian environment also would have been in a much healthier condition.

To a large extent drought is a relative term, for example, in the drought stricken country we saw in 1965, Peter Giles of "Wintinna" in the north of South Australia, commented that there had been no good rain for ten years! Another comment at the time by one who had no interest in grazing, was "Well the seasons may have been a little drier than normal!"

The first of numerous trips around and through Australia was in 1965. When we left Port Augusta for Alice Springs there was plenty of evidence of drought and the further north we went the worse it became. In the sheep country for the first few hundred miles there was no grass, not even dry grass. The shrubs which form the basis of the grazing industry in the arid zone were extremely emaciated and provided little feed. The Mulga trees were green but were being cut down in enormous numbers to sustain the stock. Trees which would have been up to 100 years old were being cut down ruthlessly. The Mulga tree is a legume so will sustain stock, but at an enormous cost to the environment. Mulga wood is very hard which means it is slow growing. It will take 50 to 100 years to replace those being cut down - that is if there are no more droughts!

As we neared the Northern Territory border we turned off the Highway, west, and went through the Everard Ranges, Kenmore Park and Mulga Park station properties. The soil type in this country is of a more sandy nature and the emaciated shrubbery which had been evident further south had disappeared altogether. There were only trees and red dirt, even the trees had the appearance of dying! We drove through three or four miles of normal country on the boundary of Kenmore Park and Mulga Park. A bit of old dry grass, shrubs still there, trees in good condition ... Why? The only reason we could conclude was that it was too far from water ... the cattle couldn't reach it!

In the arid zone it is generally accepted that cattle will feed out as far as six miles from water. It should be noted that all cattle in the arid zone must be good walkers for that reason. The short legged animals with the heavy bodies which we have down south would be useless here.

The arid zone cattle, by having to walk such long distances for feed and water, would consume a lot more feed per pound of beef produced, and in addition to this they have to be fed for four or five years to get enough meat on their frame to be salable.

On through Mulga Park, to Mt Connor [Atila], over to the Rock [Uluru] and out to the Olgas [Kata Tjuta] - the same story. Ayres Rock and the Olgas from the air show a few trees

and red dirt. Back to Curtin Springs and up through Angus Downs to Wallera Ranch house. Not quite as bad through Angus Downs. Wallera Ranch house to Kings Canyon. The carnage and desolation of this 70 mile trip through Tempee Downs station is best described from notes in the diary of the time:

We followed the George Gill range west. This took us through the most drought devastated country of the whole trip. All grass and shrubs had long since died and disappeared. Many of the trees were either dead or dying. Most groves of the lovely Desert Oaks were either dead or dying. One old Monarch, the biggest we saw was close to the point of no return. Many of the old creek gums were either dead or dying, and in the creek beds dead cattle and brumbies. Reedy rock hole, a magnificent pool of clear fresh water, had been fenced in and a windmill was pumping water to a tank and from there to a water trough about 100 yards away. It was the only water in many miles.

Many cattle were dead around the trough, other heaps of dead cattle had been dragged away from the trough by station hands. The dead cattle we saw at Reedy Rock hole were the ones which had walked in to water and were too weak to walk back to the feed (?). We did not see the ones which had walked out to the feed and were too weak to walk back to water.

Back to Wallera Ranch house and on to Alice. Back on the Highway we came to a sign on a station boundary:

RESEARCH RESERVES.

ANY PERSON FOUND CARRYING OR USING FIREARMS ON THIS PROPERTY WILL BE PROSECUTED AND WEAPONS WILL BE CONFISCATED.

ALL FAUNA PROTECTED.

BY ORDER. (Signature undecipherable.)

Looking past the sign at the landscape - nothing but red dirt and dead trees!

In to Alice, then as far west as Haasts Bluff, back to Alice and as far east as Harts Range Police Station, where the surface soil was badly drifting, back to Alice and up the Track towards Darwin. Around Wauchope the country is just as bad as - at Kings Canyon and is also drifting. Past the Devil's Marbles and in about 20 miles drove out of the drought!

We have driven through drought stricken country from Port Augusta to the Devil's Marbles over 1200 miles and we drove from Haasts Bluff to Harts Range police station and we knew drought conditions extended into Queensland. An awful lot of country to be stricken with a man-made affliction. One wonders how many Emus Kangaroos and other fauna died in that man made holocaust!

A drought 20 years ago ... old hat! No! The 1982-83 drought was more widespread and more severe! The new owners of the continent have still not come to terms with its environment!

We turned west at Katherine and went out to Kununurra and Wyndham. From Wyndham down to Halls Creek and on to Derby. The country from Wyndham to Derby was just as drought stricken as the Centre, but the soil had a firmer base and was not so prone to drift. There were not many dead cattle around, but those we saw were just walking skeletons. From Fitzroy Crossing we went the back way to Derby to take in Geikie Gorge, Tunnel Creek and Winjana Gorge.

These three attractions are of Geological interest and have been given the status of National Park by the West Australian Government. They all cut through an old limestone barrier which starts up near the coast and follows for some distance but parallel to the King Leopold Range. The barrier runs for several hundred miles in a big U shape. Traces can be seen along the old Ord River road between Nicholson and Kununurra but running North this time. Originally it was a coral formation in an ancient sea. The limestone is packed with fossils.

At Geikie Gorge, just out of Fitzroy Crossing, the W.A. Government is making the feature into a major tourist attraction. There was nothing there in 1965 but we were back in 1973 and again in 1980, and by that time extensive camping and other facilities have been put in for the convenience of visitors.

At tunnel Creek we walked through the tunnel and the pools of water were clear and fresh. There was a stockyard at the other end. We were back at Tunnel Creek in 1973 and the country was again drought stricken, or maybe there had been no rain in the meantime. There were several dead cattle leading up to the entrance to the cave and the pools of water were filthy. Back again in 1980, there were no further dead cattle to be seen, but it was obvious that the Tunnel was being used as a stockyard! The clean sand had been all churned up, cow pads everywhere and the pools of water were putrid!

From a reserve point of view both Tunnel Creek and Winjana Gorge are out of sight and very much out of mind! The origin of Tunnel Creek is a small creek which starts out on the plain, winds its way in to the Barrier, follows it along some distance and then has cut a tunnel straight through. The length of the tunnel would be no more than a couple of hundred yards.

The Tunnel was the get away for the aboriginal Pigeon [Jandamara] and his band of followers who defied the early cattlemen for a long time. They would carry out their raids on white camps, cattle or whatever and head for the Tunnel, follow the creek bed hiding their tracks by stepping only on rocks to the Tunnel entrance then out the outer side. What saved Pigeon and his followers for so long was that the entrance to the Tunnel could not be seen until only a few yards away!

Winjana Gorge, further north, is where the Leonard River has cut through the barrier. It would be around 300 feet high at this point, the river or Gorge itself would be about 100 yards wide. As we approached the Gorge the track came close to the Barrier, which rose vertically. In two or three places spring water flowed from the base out onto the plain. At these places there were dead cattle around and the ground where the water emerged from the Barrier had been trampled into a putrid morass! There were a number of sizable pools in the Gorge and water in these was in reasonable condition, although both ends of the Gorge had been fenced off and was used as a cattle yard. Michael quietly watched one pool for about ten minutes and 14 Johnson crocodiles surfaced. We were back here in 1973 and again in 1980. On both these occasions the water was not so extensive as in 1965, but what water there was was almost putrid! One wonders what happened to the crocodiles -

they are a protected species! The Gorge was still being used as a stock yard. [No longer in 2014.]

In 1965 we continued on past Derby, Port Hedland, Roebourne and Onslow and drove out of the drought into a lush season.

Our next contact with drought was in western Queensland in 1969. We went up the east coast as far as Daintree, came back to Innisfail, crossed the Divide, and went out to Normanton, Karumba and then south. As we approached Cloncurry there was evidence of severe drought, and it was possibly at its worst around Winton and Longreach.

The country is different to the Centre, the soil is of a heavier grey type and less prone to drifting. Even so the country was just as devoid of vegetation as the Centre was in 1965. The main difference was that the trees were still in reasonable condition and the stumps of the old grass were still there.

From Winton we wanted to have a look at a Geological feature about 50 miles out on "Colson" a station property. We contacted the owner, Eric Bryce, to make sure it was all right to go out. The drive to Colson was through-drought stricken country, and when we arrived at the boundary the change was dramatic! Inside the fence old grass was still there and up to eighteen inches high. This was the pattern all over the property. The sheep we saw on the drive to the homestead were in good condition with plenty of lambs. We saw numerous Kangaroos and Emus.

We had a long talk with Eric at the homestead. He said they had not had any more rain than the neighbours – perhaps he didn't carry so many stock. The area of the property was 48,000 acres and the stocking rate varied from 6-8000 sheep. There were only 6000 at this time because of the dry conditions. Current lambing was over 90%, and this in the face of the worst drought known!

The approach Eric Bryce made to the management of his property can best be illustrated by a story which Bill Peach quoted on his program "This Day Tonight" shortly after we came home. In highlighting drought conditions in Western Queensland he quoted a property, not far from Colson, where the owner had 60,000 acres and the normal stocking rate was 20,000 sheep. At that time about one third had been sent away on agistment, one third were dead and the remainder were in an extremely emaciated condition!

In the Centre in 1965 the drought broke in December, and good rains followed. We made a quick trip back in the following September. The country was like a garden of Eden, but more of that later. We wanted to go out to Ruby Gorge on the Hale River which was on "Atnarpa" station. It was past the old gold mine at Arltunga. We called at the homestead to ask the way and talked to Mrs Bloomfield. She said the men were all away, in fact they were expected back that day with the first of the cattle. We inquired how they fared during the drought and she said reasonably well. Three years ago when the drought was getting really bad the men folk bought another property down near Oodnadatta where a good season was being experienced. All the cattle were taken down there for the duration of the drought. With the ending of the drought almost twelve months ago, it was desirable to give the property a reasonable chance to recover.

Driving through the property it was obvious it had not been flogged as other properties had been. Stock had been removed before any real damage had been done to the vegetation upon which their cattle project was based. There were no dead trees and all the perennial plants and shrubs, which are the basis of this industry in the arid zone, were in excellent condition.

In all our travels in the arid zone the above are the only two examples of management, which we have seen, that have followed the recommendations of the late Francis Ratcliffe over 30 years before!

In the late 1920s and early 30s pastoralists in the north east of South Australia and into N.S.W. and Queensland, had had a run of dry seasons and the country was in a bad way. Much of it was drifting, in fact some homesteads and buildings were being covered with drifting sand.

The late Francis Ratcliffe was a Biologist with the C.S. & I.R.O. and he was sent up into the country as leader of a team to investigate the problem. From his description of what he saw the country resembled the Centre in 1965.

His findings were:

The country had been grossly overstocked, there were no annual plants and all perennial plants and shrubs were dead!

His recommendations were:

Perennial plants and shrubs were the basis of any grazing industry in the arid zone.

The stocking rate must be such that these plants can replace comfortably what is eaten by the stock.

Ratcliffe had this to say:

Pastoral settlement in the arid belt (or anywhere for that matter) was merely self destructive if the system of stocking and management practice led to the progressive depletion of certain of the most important components of the pasture. If settlement was to be on a permanent basis, stocking must be in equilibrium with the vegetation; that is to say, it must permit complete recovery of those plants that are periodically overgrazed. Deterioration, erosion and drift will increase with every recurring drought unless the stocking policy is adjusted to suit the conditions imposed by climate and vegetation.

And:

In the semi-desert country the intensity of grazing is the only factor that man can control; and as it happens to be the chief destructive factor operating, no program for dealing with the deterioration of this region is worth serious consideration unless it has a scientific stocking policy as its first plank. And by this I mean a stocking policy based on accurate knowledge of the behavior and natural regeneration of the main fodder plants.

Further:

The rate of regeneration from seed of long lived woody plants is slow, often very slow indeed. Although some species of shrubs can make good growth in a couple of seasons, it is absurd to expect that a few good years are sufficient for the recovery of trees, bushes and shrubs that have died, been killed off or seriously damaged in a drought, even if stock and rabbits could be persuaded to leave the young plants alone and erosion and drift did not enter the picture. The arid country vegetation is a complex living whole, the end result of centuries of slow development and adaption. If this age-old balance is shattered it cannot be mended, historically speaking, overnight.

Half a century has passed since those words were written - they have never been heeded, and the deterioration of the vegetation in the arid zone proceeds at an ever increasing rate ...

8. Grazing in the Arid Zone

The arid zone could be roughly defined as all that part of Australia West of the great Dividing Range and north of the Tropic of Capricorn. There are small pockets in the extreme north of the zone where rainfall exceeds 60 inches annually, but it is monsoonal rain and falls within a few weeks of the year while the rest of the year is mostly cloudless and dry.

The early graziers seemed to be enraptured with the country, and went in and took possession of large areas blindly, especially in the Kimberleys. They had no idea of the problems that would surface nor of its potential, because there was no one who had had previous experience with the country.

The cattle industry was established in the first place with major aborigine problems, then drought, marketing and nutritional problems have dogged the industry to the present day. It would be flattering to call the cattle which are killed for human consumption *Boners*. They cannot be graded higher for the reasons to follow. There are meatworks in Darwin, Kathrine, Wyndham and Broome. Most of the meat is exported as Boneless manufacturing Beef and as such is the lowest quality beef produced.

The Northern Territory and the Kimberleys produce only about 2% of total beef produced in the country. Yet the industry takes in up to 15 or 20% of the Australian Land mass. If ever an industry was out of balance on Asset/Production ratio it is this one.

Another disturbing feature of the industry is the small number of cattle turned off in relation to the number carried. In our own beef herd all our vealers have gone to market fat before they are eighteen months old. By contrast, in the North, no cattle are turned off fat! They have to be held for four of five years, not to fatten because they won't, but to get enough meat on their frames to be worth sending to the meat works. This means that for every 100 breeding cows with a calving percentage of 50, 250 head of stock have to be fed each year to market 50 boners! The question arises immediately, How can the industry remain solvent? Two reasons: the leaseholders get the land for a peppercorn rental, and the people who work in the industry, mostly aborigines, get little more than Tucker!

That is not all. In 1973 I talked to one of Vesty's ex-managers and his information on the management of stock numbers at the station was illuminating! If the bosses in London send out word to market so many head of cattle and that number is just not there to be sold, perhaps because of drought or there could be losses through other causes, heads rolled, and not cattle heads! So, to counter this contingency, the head stockman deducted 10% of calves marked each season (in other words they were not recorded). The overseer deducted 10% and the manager deducted 10%. This meant that for every 50 calves marked only 36 appeared in the books.

Good business the reader may think! Maybe – but what about the asset – the environment? Already it is carrying 350 head of breeders to produce 50 boners per year, so on top of this it has to carry an extra 7% which are not recorded! [Make that 40% – 50 instead of 36.] Taking this theme further, we have to fill in a statistical form each year on our beef herd, we assume the cattlemen in the north have to do the same. Add to this the

number of stock which are missed in the annual round up, then just how accurate can the books be?

In the early 70s I had correspondence with our local Federal Member, Malcolm Fraser. I pointed out that the arid zone was grossly overstocked. He assured me that from the information he had from the Minister concerned, who in turn obtained it from the relevant Department, that stock numbers on the leaseholds concerned were controlled! Officialdom don't give a damn, Politicians care less, and the leaseholders laugh all the way to the bank!

Add to these numbers all the thousands of head of domestic stock that have gone wild – Buffalos, Cattle, Brumbies, Camels, Donkeys, Goats and Pigs ... does anyone know just how much stock the arid zone is carrying? Does anyone care ...?

In 1965 our contact with cattle in the Centre was negligible, most were dead. In the Northern Territory and the Kimberleys there seemed to be a lot of cattle. All were in poor condition at best. It took some time to unravel the real story. In the wet season the vegetation makes rapid growth for the three or four months of the monsoon. In this time the cattle have to put on enough condition to last for the rest of the year. To this has to be added nutritional deficiencies. This means that cattle cannot fatten to anywhere near our standards.

Nature did not evolve vegetation in this part of the country for cattle! By cattle-grazing standards it was plentiful enough, but of very poor quality. In 1965 the Chief of the Ord River scheme told us that around 25% of breeding cattle die in the Kimberleys each year from malnutrition, in other words starvation! In such a situation the breeding is always the first casualty, the younger stock are better able to survive under stress. This loss of stock was also confirmed by my ex-Vesty's Manager acquaintance.

In the 60s and early 70s Governments constructed hundreds of miles of what were termed beef roads, and were mostly in the Kimberleys. They were to provide better access to meat works in this country. They were formed gravel roads, although where such a road was part of a Highway it was sealed.

Some of the roads in the Kimberleys had sign posts every 30 or 40 miles which indicated "Cattle Dump". These were just off the road in the form of a long cleared strip, a chain or so wide, with a stout post in the ground in the centre of the strip. These places were where the transport drivers pulled in to winch out the dead cattle from the transport. Such cattle were unable to stand the trip to the meat works because of either their weak condition or the inhalation of dust, or both.

On one occasion along the Gibb River Road about half way between Derby and Wyndham we saw the carcasses of eight bullocks right on the side of the road. They had, obviously, been there for a couple of days. Inquiries in Derby revealed that the driver of this particular transport started with a load of 80. He lost 13 on the way to the meat works. The ones we saw on the road were part of the thirteen. What we didn't see was the bruises caused by the rough trip to the other carcasses after they had been slaughtered!

In 1980 we called at the Wyndham meat works to see what type of cattle were being slaughtered. There were about 30 head in the yard, two or three bulls, some cows and some younger stock. All were in an extremely emaciated condition!

In 1976 we were at Oobagooma, a station property about 100 miles north of Derby. When we arrived the station hands had a yard full of wild donkeys and were drafting off two semi-trailer loads to send south to Adelaide and Melbourne. Two nights later we were camped south of the station and the two loads of donkeys went through about midnight.

This load of donkeys had quite a bit of attention from the media. The R.S.P.C.A. was also well to the fore to see that the consignment received V.I.P. treatment for the whole of their long trip. The donkeys had to be unloaded at certain points and watered and fed. A Vet. was on hand to check their wellbeing before final delivery was made at the destinations!

We had no idea Donkeys had been elevated so far above cattle ...

We always thought cattle had feelings too ...!

In 1965 we arrived at Tunnel Creek late afternoon, in time to see stockmen finish yarding about 400 head of cows and calves. It was the annual muster. We talked to the head stockman for a short time and he said we could come over in the morning and see how they did their branding and marking.

The crew consisted of two young chaps, about 18 or 19, one chap about 30, and three aborigines. They were just finishing breakfast when I arrived at their camp in the morning. The camp was a revelation! They had a small tractor and two wheel trailer, to carry their gear from the station, which was about 20 miles away, this was besides their stock horses. To say the camp was primitive would be describing a palace! Everyone just dossed on the ground, the white chaps seemed to have a couple of blankets, one under and one over, no shelter or tent, and the morning was almost frosty. There was a good sized billy, which indicated that tea had a high priority at meal time, a pan, a pot and not much else. I noticed some chunks of meat lying on the ground nearby uncovered. I guessed that was the dogs' rations ... There were no dogs! No one volunteered any information and I didn't ask. It was obvious it was the mens ration of bully beef! A good guess at their menu would be bully beef, bread and tea!

We walked over to the yard a bit later to watch proceedings.

Everything was done the hard way, except catching the young stock. Two men were on horseback in the yard and each horse had a collar and hames on. One end of the lasso rope was tied to the hame hook, then the rider lassoed the calf, manoeuvred the rope between two posts close together in the middle of the yard and the calf was dragged up to the posts and then manhandled onto its back quick as a flash, and in almost as short a time it had been castrated and branded! There was a good fire near the posts to heat the brands, there was about three inches of dust all over the yard, and the men were all bare footed!

We watched proceedings for a while then noticed a young aborigine in a corner of the yard whittling a rather crooked stick. After a while it dawned on us what he was doing. He was the official Tally Clerk, one notch for each calf marked and branded and one big notch for each tenth one!

All this for the big boss in his plush office in London or wherever ...

There is only one muster each year which means that young bulls can be twelve months old before they are castrated. As young bulls can reproduce before they are twelve months old the repercussions on the quality of the herd can well be imagined, Besides this, young bulls can be missed in the muster, odd ones for years. This means that there can be no uniformity in the breeding of animals best suited for the trade. Hence ... Boners! A more slovenly way of producing beef for human consumption could not be possible!

A bit later on the same trip, we were at Joffre Falls in the Hammersleys (Now a part of the Hammersley Range National Park). We talked to a lady who owned near by Juna Downs Station. She had lost her husband about twelve months previously and was managing the property herself. We related what we had seen so far in the cattle industry, and she pointed out it was much the same here. She spoke of plans to fence her property, to introduce better bulls to upgrade the herd and find a better way of marking and branding stock than the Bronco method, which was the method just described. She said the reaction of the men around the place was quick and to the point - She was a bloody lunatic! She swore like a trooper. We took off our hat to the lady from Juna Downs.

In the late 60s the idea of fattening beef cattle in feed lots took off. It entailed the outlay of enormous amounts of capital to provide concreted yards, feed troughs, water, etc. to say nothing of the enormous amounts of feed that had to be brought in. The whole idea was a gamble from the beginning because there was no stable market for the stores [un-fattened cattle] which had to be brought in, or when they were sold as fats in three months time.

Some bigger companies up north tried to counter feed costs by growing their own. But after a decade or so most projects ended in disaster.

Before the start of our 1973 trip we heard that an American company had purchased Liveringa and one or two other properties near by. Liveringa was some distance south of Fitzroy Crossing in the Kimberleys. Naturally a look at an extensive feed lot was high on our priorities.

The first thing we saw before even sighting the headquarters was three flags billowing in the wind. One American, one Australian and one of unknown vintage, no doubt the private flag of the company. We were not impressed ...! Inquiries at the office revealed that the feedlot was about six miles away. I had made it known that I was producing beef down south in a small way and was interested to see how feed-lotting worked. We were given directions and told to ask for Chris, the chap in charge.

The feedlot was an enormous affair – built to turn off 28,000 head of cattle a year in four lots of 7000 head. We had no trouble in locating the Chief, and when he discovered I could talk the same language we had a most interesting discussion. Very early he made no secret of the fact that he was disillusioned with the set up. Apparently, Bosses in California, like Bosses in London had a habit of requesting specific numbers of finished cattle on a specific date and if they were not forthcoming heads rolled!

Instead of a quota of 28,000 the chief could only manage 16,000. Everything had gone wrong. It could be noted here that the West Australian Government had tried to grow rice on this property for years but had finally given it away. A barrage had been placed across the Fitzroy River to back up water for the rice. In the face of the W.A. Government's failure

to grow rice the Americans came in and were going to grow sorghum to feed their cattle. In the season prior to when we arrived the company put in 7000 acres of sorghum. Between a late monsoon, shortage of water, insect pests and birds no header was put into the crop. It was a complete failure!

The chief said to cope with the water shortage for the current season the Company intended to put down 30 or 40 bores. They had been prospecting around and found an underground aquifer, one bore yielding two million gallons a day! I wondered if such an attack on the aquifer would run it dry. He said the company were not particularly concerned with that aspect.

To get through the season hundreds of tons of cotton seed had to be purchased in Kununurra and transported over 400 moles to get them through the season. One aspect of this feed was that the Ord River project was just about to collapse like their sorghum crop, and by this time the cotton was being sprayed on a closer rotation than the original ten days. One wonders just what the DDT content of the beef was and how they got it past the U.S. customs!

One interesting point to come out of out talk was that the Company was exporting its own product. It was paying to have the meat processed before it left the country. The return was 86 cents a pound at the feedlot. At the time the price of our beef was 42-43 cents a pound. Beef producers down south take note!

About twelve months after this the Company was almost broke, but they got a new lease of life in more loans from U.S.A. Even this has gone down the drain because results anticipated have not been realised. I think the company will find that it cannot establish an industry where nature never intended that industry to be established.

Across the Northern Territory border to the east conditions for the production of beef are marginally better. Further east on the Barkly Tableland the industry has achieved some success. The area certainly had the best cattle we saw anywhere in the North.

Still further east into Queensland, although the feed looks plentiful to the eye it lacks nutritive value. The cattle are rangy and gaunt looking and in no way can they approach the quality of beef produced down south. We talked to a chap near The Lynd and he was experimenting with trace elements to upgrade his beef. He was having some success, but then the economics of this practice on large holdings is doubtful.

In the Centre cattle will do well and occasionally they will fatten. Then they have to be transported the one thousand miles to market in Adelaide and much of the condition they start with is lost by the time they reach their destination. Perhaps the major problem in the centre is that the environment is much more delicate than further north. Droughts are more common and more severe. The tendency is to hold cattle through a dry season in the hope that the next one will be better and they can be sent to market. This is what happened in the 1956 - 1965 drought with such devastating results. There is evidence in more recent times that the lesson of this catastrophe has not been heeded!

9. The Ord River Fiasco

A lot has been written about the North - Ion Idriess' books in the early days, J.H. Kelly's "The Struggle for the North", and every so often the media would add its voice and print. All painted a glowing picture for the future of this country – none recognised the fact that it was semi-desert! Bruce Davidson's book "The Northern Myth" was the first real attempt to look objectively at the future potential. Needless to say comment on his findings came close to ridicule.

With so much promotional publicity it was inevitable that some spectacular project would eventuate, somewhere, sometime in the North.

The trouble is that Northern Australia cannot be categorised in any particular way, except that it is one of Nature's unique and un-tameable areas – that is so far as rural production is concerned. Millions of pounds and dollars have been spent in research, but unfortunately nothing works, as yet, according to the Laws formulated by European man.

The country worked exceedingly well for the first Australians, because they lived off the country and with it. From their point of view it didn't have to be conquered. It was there for their use and they used it wisely. They understood the environment so well they could live and thrive where European man would die in a matter of hours.

After World War II ended, C.S.& I.R.O. and the West Australian Government set up a research station on the Ord River just south of Wyndham, to find out if a viable agricultural industry could be established and so utilise a large area of land which some Politicians considered could and should be used.

Many agricultural crops were tried, rice, cotton, sorghum, sugar cane. All found the soil and climate suitable, but none could be considered viable because of insect pests and birds, both endemic to the area. The trouble was these crops could be produced more efficiently and more profitably down south. New markets would have to be found in a world situation where such were hard to come by.

It would seem that the choice of an irrigated cotton project was a last desperate throw of the dice. It was doomed to failure from the start because 16 of the 18 major pests of the cotton plant were endemic to the area. A break through would have to be made in control methods. To date, 20 years of research had failed to do this. However, it was to be cotton, and so it was.

A diversion dam was put across the Ord River to hold enough water to get the project under way until a major dam could be constructed upstream. The township of Kununurra was laid out in close proximity to the diversion dam.

Plans for the main dam were drawn up and a site selected. The headwater catchments of the Ord River and its tributaries were badly eroded through years of overstocking, so all stock had to be taken out of the area and a lot of time and money spent in restoring vegetation and land profiles where erosion had taken its toll. When we were there in 1980 the catchment was still being patrolled, 16 years after the first blocks were allocated, and it looked like being an ongoing process for the life of the Dam.

The C.S.&I.R.O. and the Department of Agriculture had worked out precise husbandry techniques for growing cotton, and because of endemic pests no deviation was possible or even allowed to the prospective farmers. The most important requirement was: when the cotton plants had finished their life they had to be slashed as close to the ground as possible and all residue raked and burnt and the ground left completely bare for at least six weeks.

In time this requirement alone would have ended the cotton project because it would have destroyed the structure of the soil. This happened in the early days of the wheat industry because of the practice of burning stubble to facilitate ease of working the ground for the next crop. The soil eventually ran out of humus and was setting like concrete. There was no option but to burn the residue of cotton because if left it would permit pests to carry over from one crop to the next.

There was a lot of interest down south in the project. This was helped by considerable Government input (subsidy) which was to go to each farm to make sure it was a goer. An added bonus to the project was that the cotton seed was to be used as feed to bolster the cattle industry.

The first blocks were allocated in 1964 and our first contact with the scheme was in 1965. We arrived in Kununurra early in the morning and went around to Ord River Headquarters to see if there was any possibility of having a look at the scheme. We had seen tours advertised. There were six in our party, and to our surprise we were told if we came back at 2PM there would be a bus and a guide to show us around and it would cost 10/- each.

We were back at 2PM sharp and there was a bus, a driver and a guide waiting for us! We were certainly shown everything – a couple of farms, mechanical cotton pickers working with trailer bins to convey the harvested cotton to the ginnery where the lint is separated from the seed, with a running commentary all the time. Around to the research station. It was here we were told of the pest problems, on the quiet, by one of the staff, not by our guide! We were also told the Government was well aware of these problems long before the project was given the go ahead! Round to Kelly's knob for an elevated view of the whole project and finished up at the diversion dam!

The first disturbing factor was the tough looking nature of the soil. It was easily summed up as cement-like when dry and checkered cracks all over it, and gooey when wet, the sort of soil which puts one up on stilts when wet. It would be extremely difficult to plow and work down to a reasonable seed bed for planting the crop. This kind of soil in a region where rainfall was better distributed would be excellent, but where there is no rain for eight months of the year and with tropical temperatures ... most discouraging.

The second disturbing factor was that it was basically dependent on husbandry heavily oriented towards chemical farming! We were told the crop had to be sprayed every ten days during its growth and when ready to harvest had to be defoliated with another spray to facilitate mechanical harvesting. It was here we were told about the need to slash and burn after harvest. Spraying was all done by contract Helicopter, and the cost of the program per farm for the season was \$20,000. The blocks were around 600 acres and the cropping area allowed was 240 - 250 acres per year.

Another disquieting factor was that costs were just double those down south. Housing, living expenses, machinery, spare parts were all double or very close to it. Perth was the main supply base for most commodities. There was an air freight and passenger service, but there were three rates for freight: normal rates on freight may take three or four days, emergency rate by return flight, double, and at discount rates freight may take two or three weeks! This was considered a most iniquitous situation and could hit the farmers hard. No matter how well machinery is looked after there are always breakdowns, and the machinery being used was expensive!

The assessment of the project at the time was that it wouldn't work! It was far too heavily subsidised and costs were too high. Everything had to be worked to a tight program, there didn't seem to be any room for contingencies. At the time cotton could be imported cheaper, which meant that any external market would be hard to find and equally hard to hold.

It is not certain how many blocks were allocated over the next year or two, but people from the south seemed anxious to give it a go just as I did when I came to Portland. Every conceivable aspect was looked at and assessed, but in the end some were missed, so it is understandable that the chaps who went to Kununurra could also short change their assessment.

We were next in Kununurra in 1973. The cotton project was in the doldrums. Some had pulled out and were trying to grow sorghum for feed lot cattle, The spray cycle for those still on cotton had been reduced to four days to cope with insect pests. The ones growing sorghum were also fighting a loosing battle with the birds, they were eating it as fast as it ripened! At least one feed lot had been established but it was too early to say how it would work.

On this occasion we camped in the caravan park alongside the Diversion dam. Apparently the birds camped on an island within the dam. Around sundown they started coming in to camp. Flocks of several hundred came in almost continuously for about three quarters of an hour. The numbers were incredible, mostly Magpie Geese and Corellas. There had always been some scepticism about the claim that birds could destroy such vast areas of grain, but not after seeing the numbers involved!

We called at the Ord River headquarters to see if we could find out what was happening to the scheme but all the men were away. The lass in the Office suggested the Department of Agriculture as an alternative. She rang through and made an appointment for us with the Chief. We had a most interesting talk. He said that cotton was on the way out and that farmers were groping for a substitute. Sorghum, a little wheat and green feed for lot feeding were being tried. The cost of growing cotton had soared to \$180 an acre with the spray program costing \$75 of that. He said it was not economical to feed high cost feed to the "poor type of cattle that were in the region". There was also a backlash from DDT and it was difficult to sell cattle.

Losses of Range cattle were heavy and the feedlot people would have to get a better type of range stock. This meant that station owners would have to upgrade their stock. From conditions previously outlined this would be difficult. The chief also pointed out that as well as heavy losses of stock the damage to the land resource by hungry cattle was enormous!

We went to nearby Hookers feed lot to have a look and see how it was progressing. On the way we passed a paddock of sorghum and it seemed to be covered with Brolgas! The chap at the feedlot said the brolgas were no problem, but that Magpie Geese and Corellas were!

The cattle in the feed lot were in reasonable condition, but of course were still the rangy type of the area. Hookers have their own stations and do not have to buy in cattle. Asked if the fats went to Wyndham and the answer was yes, in an evasive sort of way!

Further out in the irrigation country there didn't seem to be much activity. There were a lot of cattle in one paddock and there was someone at a shed not far in from the gate so we went in and talked to the chap. The cattle were poor types, he said he had paid \$35 for them and expected to get \$80 or \$90 when they were fat. He said he was sending his fats to Darwin for the local market as DDT levels were too high for export! DDT levels of 127 PPM had been detected in slaughtered cattle. The local tolerance was 7 PPM. One wonders if the high level DDT meat is being consumed locally or if it is being sent south!

The chap had a ruddy complexion which prompted the question: how are people here standing up to the continuous hot weather? He said one gets used to it, although the incidence of skin cancer is high.

In 1965 the main Ord Dam had not been started and now, 1973, it was completed. The dam was about half full, not having been finished long enough to fill. A caravan park with tourist amenities, a store, hotel-motel and numerous houses had been built.

The area was being landscaped, and someone had a licence to run boat tours on the Dam. We did the boat tour which took a couple of hours. Even though the Dam was only half full there was an enormous expanse of water.

The Dam statictics were fascinating. First, it was inconceivable that the Dam could be built without diverting the river. The answer was: All preliminary work, excavations, concrete work and so on were done in the dry season. Most northern rivers are only a series of waterholes in the dry season anyway. Next season when water was low enough work was started on the Dam wall, and it was completed to a height of 320 feet in one season! At full capacity the Dam holds 4½ million acre feel of water, but with the river in full flood 28 million acre feet of water are held back. This surplus water is drained off down to capacity level.

We were back again in 1980; everything had been completed and the Dam was full to capacity. We did the boat trip again and when about a mile out on a large stretch of water, and trees could be seen on the horizon, someone asked "is that the shoreline out there?" "There is more water behind those Islands than can be seen here"!

In 1976 we went away in towards the centre of the Kimberleys to have a look at a proposed Dam site near the headwaters of the Fitzroy River. The site that had been selected was similar to the Ord Dam site and it looked as though a Dam could be constructed just as easily. The site is a long way in, in never never country and would require extensive road works to get materials in. With the experience of the Ord project I

guess Politicians would be wary of building another white elephant, at least one would hope so!

There have been other attempts to grow grain in the North, especially sorghum, but all have failed. Lakeland Downs at the bottom of Cape York had sown 20,000 of sorghum in 1973. Most failed because of late rains, insect pests and weeds. Talking to the Manager for a few minutes and asked if any pilot work had been done before the crop was sown, and the answer was No! There was an enormous amount of machinery in a compound, storage sheds for grain, and several housing units for staff, a marine jetty had been constructed at Archer Point just out of Cooktown. Three big grain silos had also been constructed to hold grain which was to be exported. About twelve months later it was learned that the project had failed!

Willeroo station, west of Katherine, were growing about 20,000 acres of sorghum for a few years, but found it was not a viable proposition. Too many birds! Denham station between Wyndham and Halls Creek bulldozed a large area of country, put down extensive areas of concrete for a feed lot and erected some of the framework for the buildings. That is as far as the project went. It was abandoned.

C.S.& I.R.O. spent a number of years at Humpty Doo, a few miles south east of Darwin, trying to grow rice. The project was based on Fog Dam. An earth embankment had been put across several thousand acres of swampland to hold enough water to grow the rice It was no trouble to grow the crop, it was equal in yield and quality to that grown down south. Again insect pests but mostly birds attacked the ripening crop with their usual ferocity, and eventually the project was abandoned.

We camped at Fog Dam on one occasion and the mosquitoes almost carried us into the water. Such a plague had never been seen or experienced before! The number of birds on the Dam was incredible and kept up an incessant babble all night long.

It is remarkable indeed how the Australian Aborigines occupied such a large Continent for so long without major contact with peoples from other lands and just as remarkable how the Tasmanian Aborigines existed for so long without contact with the mainland people!

It has always been assumed that the first Australians came across a land bridge from the Islands to the North during a period of maximum ice when the sea level would have been much lower. This could still be, but recent Archeological work on both the mainland and Tasmania has taken the period of human occupation back 30,000 or 40,000 years. This would imply that we still know very little about the early colonisation of the Continent, and just where the people came from, although archeological work indicates that life styles in both Tasmania and the mainland were primitive.

Apparently, over the last few hundred years the Aborigines in Northern Australia have had contact with peoples from the Islands to the north. This contact seems to have had little effect on what we may call the indigenous people. Contact seems to have been only one way, Islanders coming to the mainland, and little if any contact the other way. So, for a very long period of time the Australian Aborigines have remained a simple nomadic food gathering people, quite primitive by our standards. [This is no longer a viable view. They were very attached to place, though they moved seasonally within their Country. Their cultures were complex and their land management extremely sophisticated, including cropping. Materially they lived rather simpler lives than ours, cluttered with stuff, but there were, for example, villages in widely separated places. – GD]

Our travels always involved contact with the Aborigines. One cannot help wondering to what extent the Christian missionaries were responsible for the demise of these people from simple nomadic food gatherers with an affinity with their environment that puts European man to shame. Their tribal laws maintained an equitable social life and the basic principle of their life style was one of sharing – socialism in our terms. Their Spiritual values were derived from the environment, rather than some mythical Being in outer space to which we subscribe.

Early Governments allowed missionaries of various denominations to establish mission outposts throughout the continent, supposedly to spread the Gospel, but it is suggested that the ulterior motive was to induce a state of passivity in the people to facilitate the take over of their land by the European settlers.

The missionaries had little trouble in attracting the native people to their mission headquarters throughout the continent. They simply bribed them with the white mans' goodies - food, clothes, tobacco, sweet things and so on. This suited the Aborigines because they could live at the mission station without having to worry too much about gathering their own food. All they had to do in return was to go along to Church services and observe a few different social rules, neither of which meant much to them anyway. [Also not a viable view. A lot of compulsion was involved and they were deeply unhappy.]

The tragedy of this new lifestyle was that they abandoned their natural foods from the environment for the unbalanced European diet. This in turn left the aborigines wide open to the ailments of the Europeans. This trend was strikingly illustrated in the return of deaths at the Condah mission station near Portland between 1876 and 1912. Total number of deaths recorded in that tine was 117. Of these 67 died from European mans' debilitating diseases!

Perhaps the most disturbing feature of this change was that the children very quickly acquired a sweet tooth to the detriment of the healthy life they had previously led. On one occasion when traveling in the north of South Australia we got lost because of a confusing number of tracks and had to call at Ernabella mission station for directions. We had hardly stopped when youngsters, each with a blanket wrapped around their shoulders for warmth, converged on the Land Rover from all directions. Their only words were "You got lolly, you got Lolly?" No we didn't have any lollies. By this time heads were almost inside the windows and one spotted the corner of a lolly bag on the shelf behind the seat. "YOU GOT LOLLY", all excitement. As the graziers moved in the Aborigines drifted in [!] to the stations and most of these became excellent stockmen, a vocation which seemed to suit their life style admirably. This suited the graziers too, it provided a plentiful supply of cheap labor.

As the graziers moved into new country they selected areas which had permanent water. There was very little permanent water in the arid zone and what may have appeared to be permanent water in a good season disappeared in a dry season. The cattle polluted the water holes which the natives had nurtured for years and naturally there was trouble. The Aborigines killed the cattle and sometimes raided the white camps. This was especially so in the Kimberleys. Many Aborigines were shot and more than one European was speared. The west Kimberley was the last to be brought into the European fold.

Police patrols would be sent out from Derby to round up the culprits. As offenders were caught they had to be chained together otherwise they would slip through police hands like slippery eels. This was a pretty dark period in Aboriginal-European relations. The last of the rebels were Pigeon [Jandamara] and his gang, mentioned earlier.

With hind sight, it would have been better to have left the Kimberley country with the Aborigines, at least it would have been preserved in its original state, instead of the eroded, burnt out, poverty stricken landscape we have today, capable of producing a comparatively few miserable "Boners"!

The early contact of the Aborigines and the Europeans set the seal on the progressive decline of a proud and clever people. Proud because their tribal laws, their social life, moral and Spiritual values maintained a stable and virile people for thousands of years. Clever in the sense that they knew how to live off the environment, to live with it, and nurture it and in the thousands of years they used it to leave it just as productive as when it first came into their possession.

The single item which has degraded the Aborigines more than anything else has been the "grog" of the European people. They were, and still are, unable to cope with its toxicity or its appeal, and because of this a large percentage of these people have lost their dignity and the will to either integrate with the European culture or re-establish their old tribal life. They are content to live on the fringe of our society where the Grog, for which a large percentage of them live, is easily come by. They draw social service payments and most of this goes in Grog. They were provided, in many cases, with housing but nearly always in a very short time these are reduced to little more than a Wurli.

The European concept of work and a static place of residence has no place in the minds of these nomadic people. The Aboriginal loss of dignity and the European refusal to accept the inborn instincts of Aboriginal nomadic life leaves a very wide gap between these two cultures.

It is tragic to see the degraded state to which these people have been reduced. This is most evident in the Centre and the North, but less evident in the Kimberleys. Our first contact with this situation was at Curtin springs on our first trip to Ayres Rock. We called at the station, which had been converted to a Tourist Centre to re-fuel and top up provisions. Sitting in the dirt about 100 yards from the store was a young Aboriginal mother with three young children. We walked over to see of she would mind if we took her picture. There was no objection and we gave her some silver. All the children, of an estimated age of one, two and three had colds and naturally dirty noses. No attempt had been made by the mother to wipe the offending noses, and flies were quite prevalent. She didn't seem to have anything to perform such a chore with anyway! By this time other people had wandered over to repeat the process. About twenty minutes later when we were about to move off an Aboriginal in front of the shop Hoi'd out to the young mother. She came in and dutifully handed over the "Takings".

In Alice Springs the Aborigines mostly camped on the banks of the Todd River. In the day time the men spent most of their time in and around the Pubs, and always took a goodly supply of Grog back to the camp in late evening. The women folk spent most of the day squatting in small groups either in the dusty streets or along the river bank. They did not squat in the main street, I guess the law saw to it that that thoroughfare was kept clear.

On this trip, 1965, we saw quite a number of Namitjira's paintings in the shops, these had been acquired for a pittance, mostly by Europeans with an eye to trade. Namitjira's work has now been elevated to a high status in the Art world with a corresponding movement in their value. Unfortunately neither Namitjira nor his descendants saw that kind of money.

Numerous other Aborigines have also shown excellent talent in recording the magnificent colouring in Central Australia on Canvas. On the same trip we saw a very good collection at Palm Valley.

While out that way we called in to the Hermansberg mission. Here a large room had been given over to displaying other examples of Aboriginal Art – traditional tools and weapons, needlework, further paintings, and even a recording of a campfire sing song!

About a week after leaving Alice we read in the local press a report of the annual race meeting at Harts Range about 120 miles North East of Alice. Had we known we would have stayed for the event. However we were back in 1967 and made a point of going out. It was quite an event, spread over three days. The days were taken up with horse racing

and two nights with dancing. A new dance hall had just been erected, a corrugated iron building with a cement floor! A dance band was flown in from Adelaide!

People came from hundreds of miles away, and of course it was an even bigger event for the Aborigines. In the day time most people spent the time between races drinking at the bar. At night time the blacks took their grog to their camp and the whites took their grog to the dance!

Naturally we went to the dance which proved to be quite an experience. The hall was about eighty feet long and about twenty five wide. The orchestra had a small elevated platform at one end and during dances one could hardly move for dancers. It was incredible where all the people came from. A piece of 4 by 2 timber on its flat was part of the wall framing. It was a little above head height when one sat down on the board seats and ran the length of the hall on both sides and proved to be an excellent shelf to hold Stubbies! About midnight shelf space ran out and stubbies, both full and empty, had to be stored under the seats!

We broke camp on the third morning and stopped at the dance hall on our way out. The race Committee were just cleaning up the litter, mostly stubbies from the night before. The number being shovelled into a tip truck was unbelievable!

In 1973 we stayed at a Caravan park at Katherine. After settling in I went over to the store to get a few things and found it had a licence to sell liquor so I bought a bottle of Muscat. In the course of conversation with the owner I remarked on the amount of liquor that is consumed in this part of the country. He volunteered the information that he sells 1600 dozen cartons of beer each fortnight, to say nothing of wine and spirits. This was only one of the numerous places in Katherine where Grog could be bought, and it would certainly not be the biggest outlet!

The above two examples show the amount of beer that is consumed up North, and that means from the Centre to Darwin and from just west of the Divide to the Indian ocean. No matter where the Aboriginal people may be in this area they are surrounded by oceans of Grog. The European population take it in their stride and rarely does one see any of these people more than a bit "Merry"

It is a different story with the aborigines. They can't handle their Grog and become paralytic drunk. When Europeans and aborigines drink at the same bar the Aborigines quickly become drunk, unruly and abusive, while their counter mates are still sober. This situation has caused no end of conflict in drinking houses throughout the North. The hotel people countered by providing separate bars for black and white. This was considered racial discrimination so Governments passed Legislation prohibiting the practice.

In 1980 we called at Top Springs, in the Northern Territory, to re-fuel. There was a car load of aborigines on the premises, some in the bar re-fueling with Grog, some outside. We went into the bar and indicated to the chap what we wanted. He said he was by himself and would attend to us as soon as he could get away. While we were waiting two more car loads of Aborigines pulled up and the men stormed into the bar. Everyone was drunk and the people in the three cars seemed to know each other. The newcomers spread themselves across the front of the bar. While the barman was serving a group at one end a loud

mouthed fellow in the centre was thumping the bar with his fist and demanding service and a fellow at the other end was making noises about not being served. It was obvious the barman was worried and we told him not to worry about us. We kept a pretty close eye on events. After about ten minutes or so the pressure eased off. The fellow at the other end was finally served with three bottles of Whisky! After a lot of loud talk and mugging with the women they loaded themselves and their newly acquired Grog into the cars and cleared off. While they were loading up one kid must have been pestering his dad for money. Finally the chap gave the kid a handful of silver. The kid looked at it and threw it away in disgust. Apparently it was not the right kind of money he must have wanted paper money! After they had all gone my mate fished around in the dirt and recovered almost a dollar in silver.

On another occasion we walked unwittingly into a bar in Katherine and into a group of Aborigines and police sorting themselves out. The barman pointed next door, so we beat a hasty retreat!

In 1976 we spent three days exploring along the Finck River a short way down stream from Palm Valley. Here we met Billie, an aborigine and his family of three generations. Billie had cleared out from Hermansberg and reverted to the traditional life. He didn't like mission life because he was losing control of his family. In their original state the tribal elders always kept firm control of the younger members of the tribe. No doubt this was the reason why the homogenous structure of the aboriginal tribes had remained stable for such a long period of time.

Billie's family did quite a bit of craft work, mostly wood carving from the wood of Sturt's bean tree. the wood is light in colour and very light in weight and is excellent for the purpose. When the article is finally shaped and sanded various patterns are burnt into the surface with a piece of hot wire.

Our camp was a couple of hundred yards from Billie's and the morning we were leaving he, his daughter and grandson set up a table near our camp to display an array of woodcraft. According to aboriginal standards all three were immaculately groomed for the occasion and stood at attention while we made our purchases.

Billie and his family will long be remembered as an aboriginal group for whom we had the greatest respect.

We were in Halls Creek in 1976. One day the rest of the party wanted to go out to the south east to check on some plant life. I wanted to have a look at the country in the opposite direction so we agreed to meet at the Cafe in the evening. I was back a good two hours before the rest of the party and, although it was early for tea, I went into the cafe and sat down. It was the most interesting two hours I have ever spent, just sitting there, having a casual meal, and watching the passing show.

I hadn't been there long when the aboriginal kids started coming in. Most wanted a can of drink and a meat pie or pastie, and most just stood around or sat down outside and ate what they had just purchased. Half or three quarters of a hour later the aboriginal women folk started coming in. Their purchases were much the same as the kids. There were some teenagers and an occasional adult. Again nearly all ate what they had just

purchased just outside in the street. I don't know what the aboriginal population of Halls Creek is, but I am sure most must have bought their evening meal at the Cafe. The proprietor's wife said later this was an average evening's trading! I guess the men folk would have a counter snack and many beers at the pub!

I hadn't been there long when a young chap came in and sat down at my table. We had no trouble making conversation we seemed to have a mutual interest in each others vocations. He worked on a cattle property not far out of town. He was very keen on the open air life and his wages were \$80 per week and keep. While we were talking another young chap came in and sat down at our table and joined in the conversation. He was driving a truck with a road construction gang about 20 miles up the Highway towards Wyndham. He was getting \$240 a week and thought work in the outback was the best and quickest way to knock up a cheque.

While we were eating and talking I noticed a table nearby was being carefully set, Apparently it had been booked. After a while an Aborigine, his wife and three children came in and sat down at this table. I couldn't help watching the progress of their meal! The couple were not full blood aborigine, I would think about half. The whole family were well dressed and their table manners, especially the children, were perfect!

By the time the rest of the party came in and we had finished our meal we were about the last in the shop. I talked to the proprietor's wife and wondered if the Aboriginal women ever did any cooking for their families. The answer was no, it was much easier to give them money to come and buy it here. She said she was concerned about the monotonous and poor diet to which the kids, especially, were subjected to, but there wasn't much she could do about it.

However, she said occasionally she gets 40 or 50 dozen eggs up from Perth (everything comes from Perth) and gives the kids a boiled egg between two slices of buttered bread. She said when the eggs and bread and butter are on they disappear like one thing.

Walking along a couple of streets in Halls Creek at the right time of day one sees some very attractive Aboriginal girls. They are well dressed and obviously work in some of the Offices. Halls Creek is an important Administration centre. In fact, anywhere in the Kimberleys one rarely sees Aboriginal women sitting in the dusty streets whiling away time as they do in the Centre.

One morning in the caravan park at Broome we needed some directions so I walked over to the nearest tent. An Aboriginal lady came out and helped out. While we were talking there seemed to be excessive noise coming from the youngsters inside. The lady went to the tent door and gave some commands in a firm, precise, but kindly voice; there were no further problems inside!

In 1976 we called at Wave Hill for fuel - the store and aboriginal centre, not the station. (This is an uncertain source of fuel so travellers would be wise to carry enough to by pass the place if need be.) A Government Department had built a number of small houses, boxes would be more appropriate, in concrete for the Aborigines. Each would be about 10 by12 feet with a window and a door. Experience has shown that if they were built of any other material they would be quickly be reduced to a skeleton or even demolished! There

was a small yard in front of each one and these appeared to be used more than the shelter or house. In the one nearest the petrol pump there seemed to be about an inch of dust all over and an Aboriginal woman was squatting there suckling a baby about six months old. Six other youngsters were playing around and there were items of clothing scattered all over the yard, one youngster was naked. Apparently as they played and got hot another item of clothing was discarded!

Once we called to have lunch at Howard Springs, an idyllic spot just south of Darwin. A weir had been placed across a small stream downstream of the Springs. The result was an extensive area of crystal clear water up to several feet deep. The area had been landscaped and picnic facilities provided.

We had only been there a short time when a series of yells and screams shattered the tranquility! A bus load of Aboriginal youngsters had arrived from a nearby mission! Over the next hour or two those kids had a wonderful time. They could all swim like fish. After a while I noticed two older girls standing in the middle of the catwalk over the weir. They were obviously at the shy stage. I went out with the camera and asked if they would mind if I took their picture. They had no objection and the resulting picture is one of the treasured ones!

Some years ago a neighbour at Portland, Roy, sold his farm and he and his wife Gwen went to Western Australia to manage an Aboriginal youth centre some distance south of Perth. In 1971 we called in to see them. Their work was most interesting They were looking after problem youngsters (Aboriginal) mostly from Perth. Roy pointed out that they were having a good deal of success in sorting out their problems, but they could not hold them beyond 16 years of age, and when released many of them finished up on the streets again.

In 1965 we camped two nights at Victoria Crossing in the Northern Territory. When exploring under the escarpment high above the road we discovered a fairly extensive gallery of Aboriginal paintings, all in very good condition. In one cleft about nine inches wide was a roll of paper bark which obviously had something inside. Remembering I had read somewhere that Aborigines often wrapped sacred objects and placed them in such positions we didn't touch it. In another place a wider cleft in the wall seemed to have been blocked off with stones, so we didn't disturb this either. Also, there were many artifacts scattered on the floor. The place had obviously been used for a long period of time.

We passed this way again in 1973 and walked up to have another look at the gallery but the whole place had been vandalised!

Away out in Harts Range back country we talked to six or seven young Aboriginal boys and girls, ages about 9 to 14. They were wandering around the bush as free as the air. One boy had the indelible stamp of a Leader. One can only hope he doesn't fall by the wayside!

11. The Red Centre

In spite of the depredations of European man on this continent Nature has been able to preserve many colourful Geological attractions which, in spite of the insatiable urge of Tourist Developers to "Improve" on nature, are almost indestructible.

Twenty years ago "The Red Centre" were magic words. They brought visions of a strange land. To borrow Banjo Patterson's words "Visions of the sunlit plains extended, and at night the wondrous glory of the everlasting stars". Visions of Strange mountains, of rivers and creeks which have defied one of Nature's basic laws, of naked rocks, where the story of life can be traced back for a thousand million years, visions of stately ghost gums and desert oaks, and of Nature's tantalising experiments with colour.

Yes, all these things and many more can be seen in the Red Centre! There are those who would go to the Centre and see only a barren and desolate land. On the other hand there are those who would see Rivers and Creeks, instead of following Nature's basic law and steering their course down the valleys have cut square across both mountain and valley, or have seen the three "Tors", Mt Connor, Ayres Rock, and the Olgas rising straight out of the flat plain, or have read about the meteorite, about three feet in diameter just lying on the surface of the ground when it should have been buried deep beneath the earth's crust, or have watched the sun go down below the western horizon and admired the beautiful pastel colouring which gradually deepens to almost a blood red as the great dome overhead closes down for the night leaving the myriads of stars shining like jewels in the clear atmosphere. They may have gone further north and seen the Devil's Marbles where granite boulders balance precariously on top of one another, or out to Palm Valley to see the Livistona Mariae Palms which are literally a fossil from a bygone age. Over a long period of time they have adapted from a lush tropical habitat to the harsh dry conditions which exist today.

In almost twenty years of travel the Arid Zone, and especially the Red Centre, have never lost their appeal.

The country and its geology

What is the country like? Is it all desert and Gibber? The variation is exciting! There are dry salt-crusted lake beds, some even below sea level, endless miles of Gibber, Sand Hills, level Plains with rich red soils, in places almost lush vegetation, and strangely in places Red Gums in almost forest proportions, and always, either close at hand or in the distance, the old mountain ranges with their red-brown colouring, changing to mauves and blues in the distance.

The south west [east?] corner of the Centre and extending across the north of South Australia is one of the most desolate areas on the continent. This country takes in part of the Lake Eyre basin. The lake is almost permanently dry, having held water only two or three times in the last two hundred years. The bed of the lake is crusted with salt and it

extends to the horizon. The yearly average rainfall is below five inches which makes it true desert country.

On more than one occasion the sea has extended from Spencer Gulf to the Gulf of Carpentaria, and on another occasion it extended from Spencer Gulf north west to the Timor sea. In the past, not many thousands of years ago, great rivers flowed into Lake Eyre. They still do, but only on rare occasion when exceptionally heavy rain fall has fallen in their catchments, but generally these river systems have been partially filled with silt and drifting sand.

After a wet season water can be seen in the creeks and rivers and wildflowers appear in a very short time. Strangely, Nature's most colourful species are to be found in desert and semi-desert country. Along roadsides we have seen Swainson Pea up to two feet high, with flower spikes 7 or 8 inches long. There are numerous species of Grevilleas, Cassias, Sturt's Desert Rose, the beautiful Paakeelias, the Green Bird flower and many others. The most widespread are the yellow everlastings, in places they extend for miles. The most spectacular is Sturt's Desert Pea. In a good season a single plant can send out runners to cover an area two or three yards in diameter, and in full bloom the whole plant can be a mass of blood red flowers.

Most of the vegetation is to be found in the creeks, some rather stunted Eucalypts, Acacias, Grevilleas, and on the plain and gibber country salt bushes and many annual and perennial plants, enough to feed some sheep and cattle. Almost the whole of the area is held under grazing lease. It is always a source of wonder to us in the south why people should want to try and make their livelihood in such desolate country – that is from a grazing point of view.

Gibber is the aboriginal word for small stones and it covers thousands of square miles in Central Australia. They are the residue of old mountains and hills that have eroded by the action of Sun, wind, rain, and frost through countless ages to the undulating country we see today. In places this process of erosion is still evident from the flat topped hills which can be seen. Mt Connor, one of the three Tors, is an excellent example of this process. North of the main gibber country, the rainfall improves to about ten inches at Alice Springs. The vegetation progressively improves and much of the Centre could be likened to the Mallee areas in Victoria, except that the predominant trees are Mulga instead of Eucalypts.

The mountain ranges in the area comprise the Everards and Musgraves in the south, Peterman and Rawlinson to the west and the MacDonnell and minor outlying ranges in the Alice Springs area. The three Tors are situated between the MacDonnells and the Musgraves.

The oldest rocks in the old mountains are Quartzite and gniess which weather to brown and rich red colouring. This is the source of the rich red soils and with the dry atmosphere would be the source of the rich red colouring in these old hills. No doubt it is also the origin of the term "The Red Centre".

Vegetation on the hills is sparse and stunted, valleys and plains between the hills are generally well covered with vegetation and in a few places Red Gums reach forest density.

In the sand dune country between the widely separated ranges are many groves of the lovely Desert Oaks. Rivers and creeks abound with "gum" trees, while the Ghost Gums are found in the poorer ground and on the slopes of the ranges.

North of Alice Springs the rainfall gradually improves to about fourteen inches at Tennant Creek 300 miles to the north with a corresponding improvement in vegetation.

The strangest feature in the Centre is that the rivers and Creeks instead of following the valleys between the ranges have cut square across mountain and valley! What caused this strange phenomenon? While there is still some discussion on the sequence of geological events in the Centre, it seems to be generally accepted that the following sequence of events would not be very wide of the mark:

The Musgrave Ranges could possibly be the oldest mountain range on the planet! They were formed back in the Proterozoic Era possibly 1500 million years ago. The rock is Gniess (Metamorphosed granite), and the highest point is Mt Woodruffe almost 5000 feet above sea level. They formed the eastern boundary of the ancient Land of Yilgarnia and the shore line for an old sea which extended from Spencers Gulf to the north west of Western Australia. The Geologist Charles Lasseron suggests that the conglomerate which forms the Olgas could be water worn stones and boulders from this old sea. The same sea could have hosted the land-locked coral reef in the Kimberleys, mentioned earlier.

The MacDonnell ranges were possibly formed back in Cambrian times about 600 million years ago, long before life appeared on earth [land]. They were majestic by any standards, perhaps 12,000 feet in height. Then for countless ages the area remained stable the only change was the erosive forces of nature – wind, rain, frost and sunlight which eventually levelled the old mountains to a plain. During this stage the sluggish rivers may have changed their courses. Then, the whole area was lifted as a plateau to a height of about 5000 feet! the rise had been so slow that the rivers and creeks have been able to maintain their courses by cutting through the hardcore of the old mountains.

The final phase has been the erosion of this plateau to the picture we see today with about 2000 to 3000 feet of the plateau still remaining. This erosion would be the reason the meteorite mentioned earlier was sitting on top of the ground.

The Devil's Marbles are the remains of an old mountain. In the course of time pieces of rock have broken off cliff faces and fallen to lower levels and finally settled on a rock base. In time the boulder weathers to the rounded shape that is peculiar to granite. At the same time the ground surface is eroded and finally the big roundish boulder finds itself sitting precariously on another boulder. So, the process of sitting one huge boulder on top of another is quite simple – all that is needed is aeons of time!

Attractions

The outstanding attraction in the Centre is the colouring. Aboriginal artists, especially Namatjira, have put an excellent record of this on canvas, but there doesn't seem to be the same degree of pursuit with the camera (up till 1965). The colouring at Ayres Rock and Standley Chasm seem to be the only places where colour has been recorded extensively on film. There is colour wherever there is naked rock and soil! In the daytime the reds and

browns of the rocks can be recorded on film but do not have the sparkle of the same pictures taken at sunrise or sunset.

One of Nature's most unusual tricks with colour was discovered at Kings Canyon on an early trip. I had been taking sunset pictures of the sheer walls of the Canyon and was on the way back to camp. I was watching the colouring on a large outcrop of rock when almost imperceptibly it changed from a reddish brown to a reddish purple – a most dramatic change. The camera was on the tripod so I set it down and took the picture, but only just in time as the colour began to fade. On numerous occasions afterwards I set up the camera and waited for the colour change. It came about 30-35 minutes after sundown and covered the whole landscape, not just parts of it! When the change comes after waiting some time it creates an erie feeling. It only lasts half a minute or so and just as mysteriously ... is gone!

Perhaps the most revealing picture of all is of the Stars. In the clear atmosphere, even with a short tele lens the stars are revealed in many colours which are not apparent to the naked eye, not only this but many more can be seen! On film each star is represented by a slightly curved line, this is because of the movement of the earth during exposure which needs to be about half an hour at full aperture.

For anyone who wants to experiment further, set the camera up on a tripod and aim at a point half way between the highest and lowest points the Southern Cross reaches during the night. Leave the shutter open all night, but don't open before all traces of daylight have gone and close in the morning before there is any sign of daylight. The resulting picture will show many circles of colour, small at the centre and much larger on the outer rim! Another experiment is to photograph the Centre by the light of the full moon. If this is done I like to get a bit of sky which shows the stars and enhances the picture. An interesting one is to get the moon lighting up the white trunks of the old creek gums. Exposure can be varied to suit taste. Start with half an hour at full aperture.

We had seen pictures of Standley Chasm showing excellent colouring on both walls, and had been led to believe that one had to wait until the sun was shining directly into the Chasm. Imagine our disgust when we waited for this to happen and didn't see any colour. We took some pictures when the light was shining directly down the Chasm and a few more after the sun had moved around a bit. When films came back the colour was in the latter. No one told us the best colour comes from reflected light not direct light!

Trees

In driving to the Centre one goes through endless miles of Mulga and Gibber country until one wonders if we are still in Australia. In due course a few stunted old "gum" trees are sighted in an old creek bed and we are reassured! The "Gum Tree" has always been synonymous with the Australian Landscape and this is never more so than in the Centre. For those who like to capture the form of these trees on canvas or film there is no finer place than the Centre. The gums can be old gnarled specimens weighted down by the pitiless rays of the sun, and perhaps putting together a bole no more than a foot in diameter in a century of growth, to specimens up to a hundred feet and more in height

along the banks of the old rivers. Some are full of hollows and, besides leaves, can be crowned white with a mass of sulphur-crested Cockatoos or Corellas or the grey and pink shadings of a mass of Galahs. The most beautiful tree in the Centre is the Ghost Gum with three stems and a good 100 feet in height out Trephina Gorge way. I have two pictures of it. One with background light, and the second one into the light shows it rising from a carpet of yellow everlasting daisies. In both one can trace the white limbs and twigs almost to the leaves!.

The Ghost Gums are found on the poorer country and on the lower slopes of the hills. Their bark is snowy white from the base and the branches all the way to the leaves. Like other gums they come in all shapes and sizes. Out Kings Canyon way they grow like Mallee, a big bulbous base with numerous stems coming from it. The biggest Ghost gum we saw was out Trephina Gorge way, not far from the one described above. It had a girth of 13 feet and would be around 100 feet in height.

Who could ever believe there are Red Gum forests in the Centre? We saw such examples on the Finke River downstream from Palm Valley, and out Ross River way. They cannot match the Red Gum forests along the Murray, but they are a most unusual occurrence in what we always thought was desert country!

It was amazing to learn that there is a native orange tree endemic to the Centre. It is widespread and common. The fruit is about the size of a golf ball and very bitter!

For sheer symmetry and beauty the Desert Oaks are outstanding. Nothing is more attractive than to see a grove of these with their clean straight boles, symmetrical canopy and drooping foliage set in a base of wildflowers!

At Pichi Richi on the outskirts of Alice, amongst other items, William Ricketts has sculptured Aboriginal figures emerging from the red rocks of the area. These have been superbly blended with the old gums of the natural landscape. His work with the most impact shows a burnt out tree stump about seven feet high. An Aboriginal figure is merged into the top of the stump, and in his hands he is holding quite a number of small native animals. At the base of the stump are ashes, charcoal, and the remains of burnt out logs – the result of European Mans' mania for burning.

Kings Canyon

The Canyon is reached by following the road west from Wallera Ranch house along the south side of the George Gill Range for about 60 miles. About four miles before reaching the Canyon a track leads right only a short distance to Reedy Rock Hole, a permanent pool of water at the base of an escarpment where the water tumbles down when it rains and runs out onto the plain. It is only about 20 feet across, the water is crystal clear and one can see down 8 or 10 feet. It is one of the loveliest pools of water in the Centre. Dave Errey was with us on one trip and commented that no-one has really seen the Centre until they have seen this pool.

The approach to the Canyon is by the delta of a small Creek with hills on one side and sandstone Bluffs on the other. These finally narrow until the sheer red sandstone walls are towering 200 or 300 feet above on both sides. The Creek which has cut this Gorge is rather

insignificant, it winds back on top of the plateau only a few miles. Water holes are numerous and bird life is plentiful. At the end of the canyon water from the Creek during rain drops about 150 feet – it would be a spectacular sight in a heavy downpour.

The rock here is Ordovician sandstone, about 450 million years old! A recent rock fall reveals wave ripples on a slab of sandstone just as clearly as when they were made millions of years ago. The plateau above the canyon has weathered to a maze of domes and terraces. Most of the domes are like giant pancakes. Sunset and twilight colouring will amply reward the visitor for any trouble experienced in getting there.

Palm Valley

This is one of the older attractions of the Centre. It is reached by proceeding to Hermansberg, then turning south and following the bed of the Finke River for about twelve miles. The palms are in a small valley coming into the River. The Palms are found in other Creeks in the vicinity but strangely none are in the Finke itself. Some of the specimens must be very old because they reach a height of about 80 feet or more. Their Botanical name is Livistona Mariae, and they are a relic of a bygone age when the Centre was lush with tropical vegetation. They are the only members of this species still surviving. The remarkable thing about them is that they have been able to adapt from their original tropical habitat to the arid habitat where they now survive.

Redbank, Mt Sonder, Glen Helen

From Palm Valley we returned to Hermansberg and went out around Haasts bluff country, which some geologists consider to be a massive meteor crater, and on to the Glen Helen – Alice springs road.

Redbank Gorge is the most colourful in the Centre. It is some distance west of Glen Helen, it was hard to find and when we were there accessible to four wheel drive only. For access to the Gorge itself a raft or rubber dinghy would be needed to negotiate the clear pool of water at the entrance. The Gorge is very narrow and the walls could be 100 feet high. The colouring ranges from almost blood red at the top to red browns and iridescent greys, blues and mauves in the water-worn area.

Towards Glen Helen the twin peaks of Mt Sonder can be seen on the left. The Mount is about 4500 feet above sea level and is the second highest in the Northern Territory. Mt.Ziel is somewhat higher and can be seen to the west of Sonder.

Glen Helen Gorge is where the Finke river cuts through the main MacDonnell Range. A feature of all the main Gorges in the Centre is a pool of clear water at the exit of each one.

Ormiston Gorge

Of all the Gorges in the centre this one is the most spectacular. The west wall would be close to 1000 feet high and is sheer for most of that height. It is only a few miles east of

Glen Helen on the north side of the road. An attractive sandy beach alongside a permanent pool of water make it an excellent place for picnicking.

Serpentine, Ellery Creek Gorges, Standley Chasm, Simpson's Gap and Honeymoon Gap are all on the main road from this point to Alice Springs. At Serpentine Lodge turn off the road rises to an elevation of just over 3000 feet above sea level but never leaves the valley between the ranges. Two or three lookout points, lizard rock and the Ochre Pits [sacred site, treat with respect and please don't remove anything], are also seen on this road.

Eastern MacDonnells

As in the western section, rivers and Creeks have cut across the old Ranges in another series of Gorges, but not as spectacular as in the western section. Undoolya Gap, Trephina Gorge and the Valley of the Eagles are out this way. Corroboree Rock of Aboriginal significance is only a short distance off the road. Ross River Tourist Resort is also out this way. Travelling south to N'Dahla Gorge from Ross River some interesting rock formations can be seen. The rock is of sedimentary origin and with the uplifting of the strata the softer layers of material have weathered away leaving wall-like extrusions of harder material. In the Gorge itself Aboriginal rock pickings can be seen. These are not to be confused with paintings and are very much older.

On past Ross River for another 30 miles or so is the old gold mining site of Arltunga. Gold was mined here early in the [twentieth] century but the field was not extensive and was quickly mined out. As with all old mining sites there is a mass of mining machinery lying around.

Unless there is an interest in Geology visiting all the Gorges can become monotonous, but the main ones are certainly worth looking at. A little knowledge of the Geology of this fascinating part of Australia can make a visit far more interesting and rewarding.

The Three Tors

In the south west corner of the Centre, towards the Musgrave Ranges, are three of the most interesting pieces of rock on the Continent - Mt Connor, Ayres Rock and the Olgas. They are known as the three Tors. All are of sedimentary origin, yet all are of completely different composition!

Mt Connor is sandstone with a trace of conglomerate; Ayres Rock is Arkose, a coarse gravel which over aeons of time has become cemented together as a single massive boulder; the Olgas are Conglomerate, water worn stones of all shapes and sizes and composition and have also been cemented together into a single mass.

Mt Connor [Atila]

Mt Connor is a tabletop rising straight out of the plain to a height of 1100 feet. The erosion pattern has made the top half sheer, while the lower half slopes away to the plain. Periodically, large masses of rock break away from the top and by the tome it reaches the

level of the plain it has been weathered to small pieces the size of Gibber. The Mount can be climbed quite easily from the south east to a magnificent view in all directions.

The Olgas [Kata Tjuta]

The Olgas are about twenty miles to the west of the Rock. The highest of the domes is over 1700 feet above the plain, half as high again as the Rock. Of the three Tors these old hills are the most interesting. The thirty odd domes of different shapes and sizes, the narrow passages between some, the small Creeks and the flora and fauna would keep one busy exploring for days.

There is a road right around the domes, and a branch leads into a spot called the Amphitheatre, almost in the centre of the domes, and to picnic facilities. One of the domes nearby can be climbed easily and gives a view of the Rawlinson Ranges to the south west, the Petermans to the west, Lake Amadeus country to the north and the Rock to the east. These old domes are a photographers paradise, and for those with time many different mood pictures can be taken.

The Rock [Uluru]

At a certain place and at a certain time in Central Australia the sight of abandoned cars and buses is a daily occurrence. Looking in the opposite direction we see people ... standing about ... a low murmur of conversation ... waiting ... expectantly ... and the object of their expectations? To the Europeans ... Ayres Rock; to the Aborigines ... Uluru. This pilgrimage is made to sunset strip a mile or two west of the Rock every evening just before sundown to see the startling display of colour which nature stages on rare occasions.

This huge boulder rises straight out of the plain and it is difficult to convey on film the massive impact it creates. Geologists are agreed that its origin is sedimentary and it has generally been accepted that pressures in the earth's crust turned it to its present position with its bedding planes almost perpendicular [vertical].

Some features of the Rock are understandable, others just as mysterious as they have always been. No wonder the Aborigines looked upon it with such awe and respect. One wonders about the origin of the Brain on the north side, and the old women's Cave which is a quarter of a mile long! Inside this Cave the ceiling has eroded to the most fantastic shapes imaginable. [I believe this is no longer open to the uninvited.] There is even a Wave Rock at Maggie Spring. There has always been an unwritten law in the outback that pools of water are never deliberately contaminated. The many visitors who washed their feet and went swimming in Maggie Spring prompted Bill Harney (The first Ranger) to erect this notice:

"THIS IS NEITHER BATH NOR SINK, SOME WHO COME MAY WANT TO DRINK".

Those who have seen the Rock glow have witnessed one of Natures strangest phenomena. This is usually associated with certain atmospheric conditions and is seen only for a minute or two at sunrise or sunset. Different cloud effects will give different colouring.

We saw the Rock glow on our first visit. The first morning and evening were cloudy and the sun did not break through. The second morning was also cloudy, but there was a strip of clear sky between the horizon and the cloud. Camera was set up and fingers crossed. Almost imperceptibly the first rays of the sun strike the top of the Rock and the shadow slowly moves to the base. From that moment the Rock began to glow, and the glow became more and still more intense until surely, the whole thing must melt and spread across the plain! At the crucial moment the glow began to fade and in less than a minute it was back to the realm of things on earth. At the peak of the glow the impulse was to run but legs would not move and one stood as if transfixed to the spot ... barely remembering to work the camera.

Gradually familiar sounds penetrate the ears, the drone of an aeroplane, the clopping of diesel motors, the rattle and clatter of cars and trucks as they bounce along the badly corrugated roads. The Uluru which was so much a part of mythology ... even the Ayres Rock of Bill Harney's day ... no longer exists ... the atmosphere has been destroyed ...

(It is pleasing to note that all European junk around the Rock is to be removed and new accommodation and other facilities provided some miles to the north right away from this strange and remarkable Monolith, so that it may revert to the undisturbed displays of mystery and grandeur with which it has been endowed by Nature.)

PART 3. A Layman's Economics and Politics

12. If a Boy is Too Dull ... Put Him on the Land

If a boy is too dull for a career in industry or commerce put him on the land.

The above few words point the bone at the very heart of the problems associated with land settlement in this country. For some strange reason Australian farmers are fiercely individualistic and this, coupled with a general lack of business acumen, has resulted in the deplorable standard of farm economics. This has been so since the country was first settled.

Collectively, the farmers have more economic muscle than any other section of the community, but each of the many thousands of farmers throughout the country, instead of pulling together, pull in different directions! The result is chaos, and that is not too strong a word to describe economic state of our farming industries.

Politically, farmers are mostly right (in political jargon) in many cases extreme right. Perhaps their egoism has led them to believe that they are on a higher social scale than their working man status would imply. This means they are more concerned with aligning themselves with the Commission agents and Speculators, whose only concern is to cream off the top fruits of their labours instead of aligning themselves with the consumers who provide the markets for their produce.

From earliest times farmers have been gullible and never seemed to have the capacity to analyse the claptrap which high speed salesmen put over. They have numerous organisations that never see beyond today and are never prepared to make the hard decisions that would lift them out of chaos into a smoother and more stable plane of existence.

Apart from the production of those products for our own use, the primary industries in this country were never destined to provide the farming community with a stable industry, with the possible exception of wool, or give them a fruitful reward for their labors. We are farming on the opposite side of the Planet to where our overseas markets are and no amount of planning or ingenuity can get us over this hurdle. Some would say there are more populous areas to the north. For these people agriculture is the basis of their existence and it would be like trying to sell our surplus products to the overloaded E.E.C. Besides, being poor countries, they do not have the means to pay for our produce.

The trend of the developed countries in the last decade has been to upset this age old balance by moving their manufacturing industries to the third world to take advantage of cheap labor. Fine, but when such industries are moved those who were employed in those industries are dumped on the scrap heap of unemployment,

There would be enough talent within the farming community to do this organising, but because of the indifference of the great majority to such a move its realisation is impossible.

On two occasions within a twenty year interval I was a member of the same farmer organisation, but with a different name. Each time financial membership was around 120. With this membership no more than ten or a dozen members would attend a meeting, quite often less. With such apathy it is impossible to put together an organisation with some clout.

The Victorian wheat growers have always been critical of freight charges by VicRail in transporting their wheat from country sidings to the shipping terminals. This cost is only chicken feed to what the proliferation of makes and models of farm machinery is costing the wheat grower. All branches of the farming community are caught up in the splurge of farm machinery, but the wheat grower most of all because he uses the most and costliest machinery.

Some years ago in Western Australia the farmers formed an organisation to evaluate farm machinery, especially headers and tractors. Neither the manufacturers or those who sold and serviced them were doing the job properly. Because of intense competition and rising costs short cuts were being taken in both the manufacturing and the selling and servicing of the machines. This applies to all farm machinery but this group of wheat growers had a particular interest in headers and tractors because they were growing wheat on a large scale.

At first the trade did not take too kindly to the idea but when evaluation pointed to the ones with the best and worst features and some sections of the trade began to lose business, all soon fell into line.

As a result of this exercise the wheat growers concerned are getting a much better deal from their machinery merchants. The problem extends throughout the full range of farm machinery, trucks and cars, and there is an urgent need for all farmers to follow the lead of their counterparts in the W.A. wheat belt.

The only credit that can be given to the wheat growers, apart from the small group mentioned above, is that they have established a single orderly marketing system. This only came after many years of open market selling to numerous merchants who dealt in the product. The commission which went to these merchants in now going to its rightful place – the wheat farmers.

The wool industry also established a marketing system based on a minimum fixed price for the season. This worked well for many years until the managers misjudged the market and were landed with about a 5 million bale surplus. This situation is still in flux.

The marketing of meat, horticultural products and to some extent dairy products is a shambles.

The Victorian Government's decision to remove the Newmarket sale yards gave meat producers an excellent opportunity to take control of their own industry. An example of the extra returns available to producers was given earlier where Liveringa producers doubled their return by processing and exporting their own product.

The trucking of fat stock long distances to market and then often longer distances to the abattoir is not only hard on stock but it downgrades the final product.

The sensible solution would be to establish about four major abattoirs in Victoria, centrally sited so stock would travel minimum distances. They should be Co-Operatives owned and controlled by the producers. For the local market the grower would fix the price based on the cost of production plus profit and all stock would be sold over the hook.

In the event of industrial trouble the Co-Operative management (Producers) would deal directly with the meat workers instead of standing on the sidelines, as at present, helpless to intervene between merchants and workers in their numerous industrial differences. The final product would be scrutinised by management so there would be no opportunity for substitution rackets as has recently happened.

Another major factor in keeping our primary industries on or near poverty level is the almost perpetual lack of capital. This creates the strong suspicion that, along with the consuming public, financiers make a point of keeping most farmers in perpetual debt. However where finance is controlled markets can be controlled, and there are times and cases where lack of capital becomes a massive burden on producers. As mentioned before, producers have it in their own hands to rectify the unbalance.

Where capital is available the inability of many farmers to select the most suitable machines and stock for their purpose from the myriads available is quite evident. A first hand example can be given: In 1974 when Michael was about to take over management the tractor was due to be replaced. He spent quite a bit of time over about three months combing the specifications of nearly all the tractor makes on the market within the power range required before selecting one. It is ten years old now and still doing efficiently the work it was expected to do.

Twenty years ago when a beef herd was established two breeds of cows were selected. They have been crossed backwards and forwards producing top vealers which top the market more often than not. Fees for veterinary services are minimal. By contrast, a neighbour a few years age bought a dozen joined heifers, but a different breed to ours. All had calving trouble, he lost a number of calves and three of the heifers. Our beef herd is a commercial one and they get no special treatment except that they are well fed.

Our pastures are plowed out every four years and a cash crop of potatoes taken off. Paddocks are resown with grasses and clovers. This rotation keeps pastures fresh and vigorous, and weeds don't get a chance to establish.

For some unknown reason primary producers when they find it expedient to change properties will, after making allowance for any difference in productive capacity, pay a higher price for the new one! After farming for three or four years on the new Pine Hills settlement one of our neighbours decided to move. He paid 6 pounds an acre for the replacement property, almost double the value of the one he sold! This has been the pattern in farm changing in the last 70 years!

Our present property which cost \$26 equivalent in 1951 is now valued at about \$1000 an acre. Certainly the property is much more productive now, but on present valuation there is no way a farmer paying that sort of money would get it back from farming!

There is still a limited market for what we produce but there is no stability whatever in the prices we get for our produce. The whole situation is quite ridiculous. Yet it is quite within the capacity of the farming community to rectify the problem simply by organising themselves and applying a bit of sound business acumen to their industry.

The temptation is to pressure Governments to help stabilise these industries, and this is happening all the time bringing a third influence into the scene and further whittling away the producer's control over his own produce. Government intervention means that taxpayers' money is involved - in other words subsidies.

As mentioned earlier a producer–consumer economy has everything going for it. By eliminating commission agents and merchants who deal in primary produce, the producer deals directly with the Unions and the Consumer instead of standing on the sidelines and watching helplessly as other factions fight over his products, in many cases before it has even been sold, and wondering if he is going to get anything at all for it!

About the time of the first settlement in Australia Meyer Anselm Rothschild, a budding financier of Frankfurt, sent his five sons, one to each of the main capitals of Europe. Collectively and very quickly they gained control of the finances of the Western World. This is precisely what the old man had in mind. He reasoned that he who controls finance controlled Industry, Commerce and Nations! It has been that way ever since.

To make sure his empire didn't slip through his fingers the marriages of his descendent children was rigidly controlled, and this principle has been adhered to in succeeding generations. It would seem that the Rothschild family are still firmly in control of world finances. If too much money is in circulation and things look like getting out of hand some sort of a recession is organised to bring everything back into the fold.

For this system, Capitalism, to work for the whole community money needs to be circulating all the time, creating jobs, establishing and expanding industries and so on, but always making sure that the lubricant, money, is kept in balance with the economy. Too much and the works go up, inflation, too little and the economy grinds down, unemployment. When there is unemployment neither the Community nor the financiers are reaping the benefits of an economy that should be running smoothly but financiers have always tended to keep the machinery under-lubricated, this acts as a brake on the possibility of losing control. The ultimate result is that the system is tilted to one side and neither the community or the financiers are getting the full benefit from a system which is cumbersome and outdated.

Finance was always somewhat of a mystery until the whole system crashed in 1929. Elsewhere it has been noted that at the time there was plenty of work to be done, there were plenty of people to do the work and to process the needed materials, about 30% of the workforce was unemployed, and there was ample food in the country – all the ingredients to get the economy moving again. The only item missing was money, an artificial commodity! From this catastrophe it was obvious the finances of the Western World were being manipulated by a handful of people.

When someone decides the economy needs to get rolling again money is produced like magic! How else could Europe, Russia and Japan have been re-constructed after the

devastation of the last war, or the first one? In the small Penguin book "Report from Iron Mountain" it was pointed out that if all the industries in the U.S.A. involved in the war game were directed towards helping people instead of killing them, all poverty in that country could be eliminated in just one decade!

What a hollow ring the word Democracy has when one considers the above. Abraham Lincoln's Democracy never got off the ground, because the people controlling finance wouldn't let it!

On this continent we have every natural resource needed for human wellbeing, even in this day of Technological wizardry. Why then are we tied to the boom and bust economies of other Nations? Where is our money? Why can't we get our economy going with our own money – provide employment for the three quarters of a million people who are hopelessly bogged down in the morass of a financial system controlled by a handful of greedy people?

It has always been a source of wonder why the economy of our Nation has to be tied to the Stock Exchange - a gambling Casinol! Why can't people rise up against this financial tyranny? They do, but human nature being what it is, and also being like farmers, they pull in different directions instead of together and the financiers have no trouble retaining control. The most recent examples have been in Central America and prior to that the countries of South America, especially Chile. Our own Whitlam Government was destroyed for daring to borrow money outside the establishment to buy back the farm! In other words retrieve our country from foreign ownership!

As this is being written (Sept 1984) the Labor Government has just cleared the way for foreign Banks to operate in this country, ostensibly to provide competition with our own Banks and to help in the development of our country. This follows permission recently given to 40 foreign exchange dealers to operate here. No doubt the two go hand in hand. The prospective Foreign Banks and Foreign Exchange dealers reacted gleefully to this concession.

The amazing thing is that this pandering to foreign capitalists and allowing them to gamble with our foreign currency is being done by a Labor Government - a Government of the people! This means that thousands more people are going to take more cream from the GNP without contributing one cent towards their keep. However, I guess the primary producer Zombies will be there to see that the cream supply is ample so that these people can have all the good things in life without soiling their hands!.

David Yallop, in his book "In God's Name" sets out in great detail how some International financiers and Currency traders engage in wheeling and dealing in currencies of all nations. Their activities cover a wide spectrum: gambling in currencies without security, illicit dealing in arms, laundering dirty money from gambling, drugs, tax evasion etc., Corruption bribery and murder to protect themselves and their friends from the law.

In the last 50 or 60 years the most lucrative way of earning a living without soiling one's hands has evolved - Time Payment! Credit is provided for people to buy anything they want, clothes, household goods, cars, machinery of all kinds, homes and so on. In the

early days one third of the value of the article was required as a deposit and the balance was paid off in weekly or monthly instalments plus interest. Good care was always taken to see that the amount owing was always less than the item's value. In this way those people providing credit never lost. If an item had to be repossessed because payments were not kept up to date its eventual sale always returned the amount owing.

Then to promote more credit sales the deposit was lowered, even dispensed with altogether in some cases, and the repayment terms extended. This involved an area where risks were greater and meant default would involve the lender in loss. To cover this a higher interest rate was charged with the possibility of making a higher profit at the same time! Then to further increase sales extensive advertising of goods and services was carried out to try and persuade people to buy things they really did not need! And so it has gone on and on - the most lucrative money making scheme ever devised by the financiers. At the present time billions of dollars are involved. Needless to say the Banks and other institutions, some formed especially for the purpose, jumped on the band wagon.

But that is not the end of the story. To promote still more sales someone came up with the bright idea of building obsolescence into the goods, in other words making sure they didn't last as long as they used to!

It would seem that the Capitalist system works well when everything is expanding in the direction of the private sector but when markets diminish and the economy becomes sluggish jobs are lost and everything grinds down to slow motion. The trouble is there is a lot of work that is essential for a robust and progressive society but such work does not return the high dividends which private enterprise insist on getting. Such work would include roads, railways, education, power and so on. To get this work done involves Government spending. When the economy is sluggish less tax revenue is corning in so Government work has to be cut back or money borrowed from the money lenders.

As this borrowing has to be repaid plus interest it follows that borrowing has to be kept within the capacity of export earnings over import expenditure. A disturbing feature of this situation is that when export earnings are down importers are allowed to keep on importing items, including luxury items, which could easily be done without! And the result of this is that our standard of living is down graded instead of expanding. It is most disturbing to primary producers to see their hard earned currency wasted in this way.

The worst feature of such a situation is a run down economy with thousands of unemployed and the lower strata of our society becoming poverty stricken!

For as long as history has been recorded the countries with an agricultural based economy have always been the most stable and their people the most contented - that is until the Trader came along, more especially in the last 100 years, in his pursuit of instant wealth. He raped the natural resources of these countries, destroyed their economies, left the people impoverished, in some cases poverty stricken, divided and fighting amongst themselves.

Our country has gone a long way down this road!

It seems that the descendants of old man Rothschild have the finances of the Western World in a vice like grip. It is not allowing people and Nations to come to grips with the technological revolution. The capitalist system allowed us to negotiate the industrial Revolution, albeit with a certain amount of poverty. Competition, the basis of the Capitalist system, was allowed full rein. The small man with initiative could have a go and he succeeded or failed according to the quality of his goods or services. His goods were quality made, and a far greater percentage of the people were making a real contribution to the GNP than is the case today.

By contrast, in this Technological age, competition has steadily declined allowing goods and services to become shoddy, to be produced with built in obsolescence with an enormous waste of natural resources. This situation has arisen by the amalgamation of business enterprises in both industry and commerce. These amalgamations or take overs, as they are currently known, allow for certain refinements in both management and the staff and coupled with computer technology result in employees from bottom workers to top executives losing their jobs. Fine for the owners in the form of increased dividends, tragedy for those who lose their jobs.

Many of these conglomerates look for, and find loopholes in the taxation laws. The result is that the little people who cannot escape paying their taxes have to shoulder a large part of the extra burden. The balance of the tax revenue which the Government should receive, but does not, means a cut in essential services. Hence a gradual lowering of our standard of living. The business conglomerates now, as well as the financiers, have a dominating influence on world economics.

The American Multi-Nationals have invaded almost every country on the planet, more especially countries of the third world where they have set up shop to take advantage of cheap labor. With this cheaper production from the third world they are now expecting to buy in preference to our own produced in a society with a much higher standard of living. The result is more unemployment!

The massive take overs by the Multi-Nationals of the Western World is fast taking us back to the Feudalism of the dark ages where ordinary people were merely Serfs, obliged to perform the slightest whim of their overlords.

The T.V. program "Sweat of the sun Tears of the Moon" on A.B.C. 23/10/1985, showed how thousands of Indians of Peru, with no future in the country came to Lima, the capital, and set themselves up on vacant land on the outskirts of the city. They built homes and established necessary industries without help from either Banks or Government. In fact the Government ignored them. They established billions of dollars worth of assets at no cost to anyone except their own work and initiative – primitive by our standards, but certainly better than what they left behind in the country! At the same time their Government was hopelessly in debt to the banks and financiers of the Western world with no hope of being able to repay.

The above could be the answer to the problems of the Western world – a producer consumer economy, but one suspects there would be far too many wise guys who would want to feather their own nests at the expense of the community at large.

From events of the last decade or so it would seem that an economic crash greater than 1929 cannot be ruled out. Too much Western money, yours and mine, has been lent by Banks and other financiers to the Third World countries, especially Mexico and those in South America. These countries have neither the needed resources nor stable Government to ensure repayment of this huge debt. The Western Banking structure is under great strain to remain viable, this is especially so of the United States Banks. Some of these have been placed in receivership, others have had to be rescued from this indignity to try and keep the whole system stable. Unscrupulous Bankers and Currency dealers, as outlined by David Yallop, are compounding the situation for the worse.

13. More About Economics

It is almost seven years since the last chapter was written. [So now 1990 or 91.] What has happened since then?

The same Hawke-Keating Labor Government is still in power and by ignoring mans' greatest vices, greed and selfishness, turning its back on the great majority of electors who voted for it and governing the country for the people of big business, financiers, High flying Entrepreneurs, and gamblers on the Stock Exchange, we are now experiencing a worse depression than that of 1929!

The factors which have contributed most to this situation are:

Deregulation of the rules governing finance and industry. Allowing the above mentioned people to do their Banking overseas and by so doing avoid paying their share of taxes.

Allowing businesses with overseas interests to manipulate their books to show little or no profit on their Australian investments.

No provision for Government subsidies for our primary industries to compete with heavily subsidised primary industries in overseas countries.

By drastically reducing tariffs both primary and secondary industries are in desperate straits.

Unemployment has reached, unofficially, almost one million. Overseas debt has soared to unmanageable proportions.

There was a severe downturn in the stock market in 1987. Many high flying Entrepreneurs have crashed, bringing down many small business people with them.

The wealth of our country has fallen into fewer hands.

The media has fallen into fewer hands.

Public assets are being sold off to pay debts.

Some business enterprises were allowed to assume Banking status with disastrous results.

And so the list goes on ad infinitum.

Of the factors noted on the previous page, perhaps deregulation had the greatest impact in downgrading the Australian economy. It initiated a grab for money. When local money became short or ran out investors turned to money markets overseas where our credit was still good. This opened the way for the high flying entrepreneurs whose objective was to build a business empire. The idea soon caught on and the result was that money for normal business establishment or expansion became harder to get. To attract more money higher interest rates were paid.

With the Government policy of allowing the market to find its own level the mad scramble was on. Banks, building societies, various trusts, some formed for the purpose, were all involved in jumping on the band wagon. New overseas Banks were allowed to open up and an extraordinary number of foreign exchange dealers were allowed to operate on the Stock Exchange. Consequently, money even for the maintenance of the basic social structures of our society was not available.

All this led to overloading the economy with froth and bubble because it was based on gambling and not on extra production or the establishment of real new assets commensurate with the amount of money being spent, The situation was compounded by the fact that the multi-nationals, even some of our own manufacturers, were moving their operations to the third world where labor costs were only a fraction of those in our own country. Then we were expected to buy these cheaper goods and helped to do so by a lowering of tariffs.

The result has been catastrophic to our own industries. The entrepreneurs were getting their profit from refining management and technology of the industries they were taking over. Refining management mostly involved using less labor and the surplus, from top management to the lowest workers, were dumped on the scrap heap of unemployed, which is officially around one million and unofficially probably double that. But the unemployed get the dole! Yes, but their contribution to the GNP is a minus, not a plus!

In spite of all this we have returned the same Labor Government three times since 1982. Why? Why? I think the reason is that the Opposition has been in extreme disarray and that they are pledged to a policy even more to the right than Labor. What about the Democrats? The Establishment (our rulers) will not allow the Democrats to be more than a splinter group. More will be said about this later.

The start of the entrepreneurial blitz began in the early 60s when a small Co-Operative Dairy manufacturing Company, Murray Goulburn, operating in Cobram, decided to absorb some of its small competitors. At the time there were many small Co-Op butter factories throughout Victoria and the Cobram manager, J.J.McGuire, could see that if these could be amalgamated and work together instead of competing against each other for the limited supplies of milk and cream there would be better returns for dairy farmers.

The better returns would accrue from a bigger turnover and more efficient manufacturing units, and more bargaining power in the market place because of increased volume of goods. As each smaller unit would have good equity in their holdings, combined these would give good security for borrowing the extra capital to establish the bigger manufacturing units. There was some loss of employment but as the economy of the State was sound these were soon absorbed. Some dairy farmers were dissatisfied, but overall I am sure that the Victorian dairy farmers benefited considerably from the exercise. The bigger manufacturing units were still Co-Operatives, still owned and managed by the Victorian dairy farmers themselves.

In the business world, perhaps the first entrepreneurial adventure was by Gordon Barton, proprieter of I.P.P. transport. In a rather strange move he acquired the Sydney city property and business of the booksellers and publishers Angus & Robertson. But was it such a strange move? Barton saw it as an opportunity to acquire a gilt-edged, undervalued and debt-free property in the heart of Sydney. He could also see that with some pruning and more efficient management there was scope for increased profit. The property

also gave him extra security for borrowing more money for the expansion of his business interests. He was a business man and the fact that certain long-term employees, even in top management, lost their jobs did not concern him.

And so the great entrepreneurial empire building boom took off. The participants moved in on, and acquired, public companies which they thought would provide good profits by re-structuring. The early ones did reasonably well but were not satisfied because it stimulated the urge to get bigger and bigger. The Banks obliged by providing massive credit, even accepting the value of shares on the share market as security! Others joined in, and in time the competition pushed the price of take over objectives higher and higher. When local money ran out or was too dear, and with no restrictions on overseas borrowing, that is where they went.

Then these people discovered that handling so much money gave them advantages in minimising taxes. So by devious means, legal and otherwise they were able to employ the best legal brains in the country to find loopholes in the taxation laws. Some moved their banking operations off shore (outside the jurisdiction of the Australian tax laws and where taxation was minimal). Some Multi-nationals, even some Australian manufacturers, with interests overseas sold their Australian production to overseas counterparts at minimum prices, and then resold on the world markets for a much greater profit, and thus ignored their obligation to pay their fair share of taxes in Australia which provided the base for their operations!!

Writing in the "Age" of April 27 1989, Patricia Howard reported as follows: "News Corporation, Bond Corporation and Pioneer Concrete are masters of tax minimisation", according to a report submitted yesterday to a Federal Government inquiry into international profit shifting. The three head a list of 15 Australian companies which, the report said, were big "tax haven players" and which made more than \$1000 million in tax haven profits in 1987-88.

The tax haven profits of News, Bond and Pioneer ranged from 104 to 118 per cent of the total group profits they declared in Australia, the report said. It said these companies structure their affairs so all their operations in the rest of the world made a loss, thus incurring minimal company tax, and shifted profits into tax havens. The report, which is based on the companies' annual reports, was prepared for the Taxation Office by Mr Greg Crough, an academic and author working with Sydney University's transnational corporations research project. The Chairman of the inquiry, Mr Stephen Martin, (ALP N.S.W.) used the report's findings to hit out at companies that made significant use of tax havens and had refused invitations to make submissions to the Committee. "In particular, News Corporation is one of the companies to refuse to appear, and here it is at the top of the heap of tax minimisers."

That the Hawke government is governing the country for the rich people, and ignoring middle income and poor people, is further exemplified in an article in the "Age" of January 8 1990 written by Tim Colebatch.

Colebatch says: "The Federal Government's tax break for shareholders receiving company dividends appears to have already cost about \$4 billion in revenue - eight times more than the Government predicted when it introduced the scheme. The tax break

known as the dividend-imputation scheme has turned company dividends into almost tax free income for shareholders since it was introduced from July 1 1987. Since most shares are owned by individuals and are held by people in top income brackets, most of the benefit has gone to the rich - above all the super rich, who as a result are paying lower average tax rates than people earning as little as \$30,000 to \$40,000 a year."

In another article the next day, "Age" January 9, Colebatch quotes Prime Minister Hawke as saying: "Any reform system must result in a package which is fairer, so that Australians are only required to pay tax according to their capacity to pay, and the overall system must be progressive". The Prime Minister made this comment at the 1985 tax summit.

The result of all this on the Australian economy has been catastrophic. Overseas debts climbed to unmanageable levels and ordinary people had to pay extra taxes to try and maintain the basic structures of our society - health, education, transport and all the infrastructures needed to maintain these facilities. We are constantly urged to tighten our belts and the business world is continually pressuring governments to cut spending. (So that the glutton can hog more of the available money?) At present the basic structures of our society are crashing about our ears, and while the present government remains in office will continue to do so.

The gambling instinct of Australian speculators in abandoning sound business practices led to the stock market crash in 1987. At one stage, resorting to the absurd, a proposal was made that a multi-polis city of around a quarter of a million people be established basically as a holiday and gambling resort!!

There has been a sorting out since the stock market crash, in fact the mess is still being sorted out. Some of the empire builders crashed, and in doing so brought down many small business people also. Some, when the pressure was really on, resorted to illegal practices, were caught, and are now paying the penalty behind bars.

All this points to the fallibility and incompetence – and tendency to kowtow to big business interests – of those people whom we, in good faith, elect to parliaments, State and Federal, to govern our country.

With the ignorance of the masses as the main power base for our Rulers and Church Hierarchies, one can hardly expect the electorate to be in a position to sort out the grain from the chaff in selecting their political representatives. Then again, a suitable political candidate is not always available, which brings us to the point that the remuneration of such candidates should be in accordance with the duties to be carried out and where the main requirement must be *integrity*. There is usually some disquiet on the salary paid to politicians, but the overall objective must be a higher standard of knowledge of the affairs of State, and a dedication to work for the welfare of electorates generally and for the nation. The upgrading of our educational system to bring it more into line with contemporary life would go a long way towards solving the problem.

Along with decadent politicians, the Media must accept an almost equal share of the blame for the economic mess the country is in. There was a time when the Media acted as a forum for promoting a much higher degree of knowledge than is the case now. Because of tough economic conditions both the printed and electronic Media have to rely on greater circulation for profits and the easiest way to do this is to appeal to the lower instincts of the community by broadcasting or publishing more and more trash, crime, violence, and pornography – a sad reflection on our present technological age. The Australian Broadcasting Commission, funded by the Federal Parliament has always had a certain amount freedom of reporting, although this does vary from time to time according to the whim of politicians. In spite of this, the educational content of its broadcasts is far ahead of the [commercial] broadcast Media.

It is interesting to recall some of the aspects of the great depression, 1929-31. These years were the worst of the depression but very difficult times extended through the 30s, and it was not until war was declared in 1939 that money became available again. The economy of Australia in mid and towards the late 20s was booming and we were spending more money than was prudent, and much of it was borrowed. Apparently the financiers thought there was too much money in circulation and they were loosing their grip so they clamped down.

J.T. Lang was the labor Premier of N.S.W. at the time and he considered the spending power of the people must be maintained otherwise the whole economy would collapse. In those areas where he had jurisdiction the basic wage did not fall, while in all other States it was reduced and in some cases drastically. In addition to maintaining the basic wage he introduced child endowment, widows pensions, and to help out he introduced a small wages tax. He was able to bring in these reforms because the people still had their normal spending power.

In the middle of the depression Lang re-planned and almost completed major traffic reforms in Sydney. The harbour bridge was built, along with the underground railway and the electrification of the whole suburban system. He was able to borrow some money in both London and New York before the overseas financiers declared him a parasite of the worst kind! He introduced a moratorium to prevent creditors from destroying the primary industries of N.S.W.

With the introduction of the moratorium all farm debts were frozen, consolidated and paid out by the Government at a substantial discount. The story of my Dad's involvement is told in an earlier chapter. Where are the signs of a moratorium today, where the plight of primary producers is just as bad as in the early 30s?

The original plan for the the harbour bridge, at the city end, was for a wide street curving away to the south from the city to link up with the arterial roads coming in from the country. All the necessary land, some with buildings, had been acquired and finalised. Lang lost the 1932 election shortly after the bridge had been opened, and all work on the project ceased!

In his books "I Remember" and "The Big Bust", Lang detailed much of the wheeling and dealing that went on in the opposition side of Parliament in those years to get rid of him. At the beginning of the 1932 election campaign the Bavin-Buttenshaw opposition quietly started a rumour that if Lang was returned he would close the State Bank, the Bank with the peoples savings which had stood him so well in the depressed times! That was

the beginning of the end. He lost the election and the Establishment eventually destroyed him just as it destroyed Whitlam 40 years on.

The above clearly shows the depths to which incompetent political stooges of the Opposition in those days would stoop to obey the dictates of our Rulers in London!

With the removal of the floor price for wool and with 5 million bales in storage and with the bleak outlook for other primary products brought about by the heavy subsidising of farmers in both Europe and America creating a world glut in the primary products we export, with a million workers unemployed and the wholesale sacking of thousands of public servants by the newly elected Kennett Government in Victoria, we are in a situation as bad, possibly worse than 1929-32, and the rest of the 90s offer no more hope of getting the economy back on track than did the hungry 30s.

To compound this situation it took 2 billion dollars of hard-earned foreign currency to pay for food imports last year, food which our farmers could easily have produced!!!

And to rub salt into the wound the Australian Government was off the mark like lightning to offer military support to America and members of the EEC, our arch enemies in trade, in their dogfight with Iraq!!!

When one considers the natural environment is the only rock upon which a sound economic structure can be built, and that the environment has been abused and exploited for 200 years, it is in no condition to withstand the paper empires which have been built on it *ad infinitum*. The economic policy the present labor Government has pursued since it came to office in1983 becomes a mockery. It has led to the degradation of our continent to a quarry supplying all sorts of raw materials to feed the maws of international business and finance, and when these supplies are exhausted it will be flung at the feet of the few Zombies who may be left.

A well-managed environment increases production, and as production increases so does the value of the asset!

With the destruction of our environment by the moguls of industry and finance, which includes the dumping of enormous quantities of human waste in our water systems, including the seas, our planet has reached the stage where, if drastic remedial measures are not taken in the very near future, our planet will not be able to support all the human life which wants to exist upon its surface.

From the foregoing one can only assume that in spite of all our technological progress our civilisation is more degenerate than any other that has existed on the planet, and that this has been brought about by the smothering of knowledge by our Rulers!

Democracy?

How come the country is in such a mess when we live in a democracy - Government of the People, FOR THE People, By the People?

Abraham Lincoln's famous formula has never worked because our Political and Religious leaders will not allow it to! Ignorance of the people is their power base and democratic institutions in the real sense would destroy that.

How do our Rulers manipulate the electorate? As we were and still are an English colony, it may be desirable to give a brief resume on the origins of our present political system.

The foundations of our present Parliamentary system were laid on the death of Queen Anne in 1714. As she left no children (they all died in infancy) succession was determined by a Bill of Rights passed by Parliament in 1689. One clause stated "That no person who was a Roman Catholic or married to a Roman Catholic could succeed to the throne. The Act of Settlement in 1701 provided that the successor to the Throne on the death of Anne should be "The most Excellent Princess Sophia and heirs to her body, being Protestant". Thus by 1714 the legal heir to the throne was George, son of Sophia of Hanover.

With the accession of George I who could not speak English, followed by his son George II whom we could say was still more German than English, the Government of Britain fell more and more into the hands of the ruling Party, and the influence of the Crown in politics became less and less.

And who comprised the ruling party? The origin of the two party system of Government goes back to the reign of Charles II in the latter half of the 17th century. As a result of the 1688 revolution Parliament gained control of legislation and taxation, and with the accession of George I and his inability to speak the English language he had to have a substitute in Parliament. Prior to this the King had always assumed leadership in Parliament, except during the Commonwealth. And so was born the Office of Prime Minister as a delegate of the King. Walpole became the first Prime Minister and chairman of Cabinet, which was a long established institution and presided over by the Kings. This, in effect, was the Government of the country.

At this time the practice was for Kings to appoint Cabinet, perhaps consulting with his Ministers, but during the reign of the first two Georges this situation was gradually reversed and the Prime Minister selected his own Cabinet. For a time George III regained the power of Ministerial control lost in the time of the first two Georges. However, the power lost by the Crown was not gained by the English people!

It seemed that Britain in the 18th century was governed by a "Venetian Oligarchy". It was an Oligarchy "as exclusive and almost as Omnipotent as in that famous Republic". The power was based not, as in Venice, on wealth derived from commerce, but on the power derived from the possession of large landed estates.

Educated at one of the large public schools, intermarrying with one another, meeting each other constantly in the small exclusive society of the London of the day, a few family

clans composed the governing classes of the period. (Warner & Marten, in Groundwork of British History).

This then was the basis of the powerful ruling English class. It was further expanded and strengthened from this time as enormous wealth began to flow in from the newly founded and conquered overseas colonies, and further strengthened by the great industrial revolution. So that, by the beginning of the 20th century Britain, as an industrial and trading nation was supreme.

The first world war saw the beginning of the decline of what historians call "The great and glorious period in British history. The second world war saw the demise of Britain as a world leading power and the rise of another "Omnipotent Oligarchy" in a former colony, the United States. Even so the British ruling class remains a powerful influence in world politics. The last decade has seen the faint but sure demise of the United States. Just which nation will succeed it is too early to say. Present indications are that there will be a period of global political turmoil.

And so the progression of the rise and fall of mighty empires since the beginning of our civilisation on the planet continues. Civilisation? Are we, with our great technological advances as civilised as the first people on the planet considering the massive wealth held by a few people and the appalling poverty of the great majority of the people. And the massive destruction of the natural environment which sustains us, is this an indication of a caring and sharing society? And the ease with which Religious Hierarchies slide into bed with our Rulers is this helping to create the caring and sharing society they profess to preach?

The methods by which the early Rulers manipulated Parliament are still strong and healthy. In recent decades the practice of opposing parties hurling abuse at each other in Parliament with little mention of what either party would do to raise living standards plays into the hands of our Rulers. If new legislation is proposed it is vetted by the Rulers to keep opposition to a minimum. In the 19th century cabinet government was more fluid than now, and there was more movement of Members between parties than now, but now party discipline is very strict and members who tend to stray are severely disciplined.

The preceding few notes establishes the origin of a Ruling class in British society. It follows that the Colonies, especially Australia, Canada, and New Zealand, being of basic British stock, should follow the steps of the "Homeland".

A perusal of so called Democracy in this country shows how the principles are manipulated by the Establishment (our Rulers). In the States and in the Federal sphere parliamentary representatives are elected mostly from single electorates, that is where each electorate returns one member to Parliament.

Electoral boundaries are established by an independent Commission whose job is to divide the population into groups of approximately the same number of people: city electorates, small areas, country electorates large areas. A tolerance of 10% in numbers up or down is allowed. This tolerance can amount to a great number of people – the first unbalance. When electoral boundaries are to be revised due to the movement of population, the Government of the day appoints the electoral Commission – an

opportunity for bias towards the Government. When next due for review a different Government may be in office - bias the other way. This situation was very evident during the long administration of the Bjelke-Petersen Government in Queensland.

With the establishment of self government in Australia the two House system of Britain was also incorporated here. In the States a Legislative Assembly and a Legislative Council and in the Federal sphere, the House of Representatives and the Senate.

In N.S.W. as the main governing Colony in the early days the names of prominent citizens were submitted to the Governor and he made the appointments to the Legislative Council. In more recent times however, all upper House members are elected from electorates which are much larger than those of the Lower House, but each electorate having approximately the same number of electors. The glaring anomaly here is that Upper House members are elected for six years instead of the three as for the Lower House. However, provision is made for half the Upper House members to retire for reelection each time there is an election for the Lower House. This means that there is always a residue of Upper House members who do not face the electors at elections for the Lower House. This creates the anomaly that the new Government may face a hostile Upper House or Senate because half the members were not elected with the new Government. This situation has arisen numerous times in different Parliaments in this country. The mostly hotly debated example was when the Governor General sacked the Whitlam Government in 1975 while it still had a majority in the Lower House. This situation still exists and attempts to rectify it are frustrated. The simple solution is to abolish all Upper Houses because they are anachronisms from a decadent age. Doing this would take Democracy a step further to fulfilment. In Queensland the Upper House was abolished years ago and I believe that State is all the better for the move. It simplifies Government.

Voting in Australia is by the preferential system and is compulsory. In other words where two candidates are standing each of the two squares must be numbered, otherwise the vote is informal. Where no candidate gets an absolute majority the candidate with the least votes is eliminated and his/her preferences distributed to the other candidates, and this process continues until one candidate has an absolute majority. This means that the candidate polling the highest number of primary votes may not necessarily win the seat! In a recent amendment to the Electoral Act voters were given the option of just voting for their preferred Party on the Senate ballot paper. This was a forward move and saved a lot of confusion, because there could be twenty or more candidates on the Senate paper.

As noted, the present system of establishing electoral boundaries is not at all satisfactory. The boundaries are established by an electoral Commission, supposedly independent. On paper the idea sounds fine, but it does not always work that way. The historian Geoffrey Sawer, in his book "Australian Government Today", (first published in 1948 and reprinted in 1977 thinks the present system is satisfactory but I am not so sure. As previously noted, the party which is in Government has the prerogative of establishing the Commission. With heated debate on particular legislation and an electoral distribution looming the temptation to manipulate the Commission is very great. With so much corruption surfacing in business and parliamentary circles today I am not prepared to accept Sawer's view.

Almost from the beginning there has been a general acceptance of the principle of a reduction in the quota per electorate in country electorates, partly as compensation for their isolation and partly for the major Contribution the export of their products make to foreign exchange.

However, with a perusal of the discrepancies in the number of voters in many electorates some disturbing variations are found and these are cause for concern! The latest figures available are given by Geoffrey Sawer in 1977. There would be some variation in recent times but I am sure the present overall picture would be much as Sawer has set out.

Remembering that each electorate returns one member irrespective of the number of electors on that roll. In N.S.W the central area, Sydney, had 66 seats averaging 33,000 voters each, the rest of the State had 33 seats averaging 24,000 votes each. In Victoria there were 49 assembly seats in the Melbourne area averaging 28,000 voters and 32 seats for the rest of the State averaging 24,500. In the same State the Legislative Council was elected from 23 districts, averaging 112,000 votes and nine provinces averaging 80,000 voters. In Queensland the State was divided into 4 regions - South east Brisbane, provincial cities, West and far North West, and country. S.E. provinces averages 13,600, provincial cities 13,000, West and N.W. 7,500 and country 9,800 voters. Western Australia had three regions for both Houses, Metropolitan, Agricultural-Pastoral-Mining, and North West.

For the Assembly, Metropolitan averaged 16,700, Agricultural-Pastoral-Mining 8,300 voters, and the N. West 4 seats averaging 4,300 voters. In the Council, Metropolitan 5 divisions averaged 77,000 voters, 8 Agricultural-Pastoral-Mining divisions averaged 8,300 voters, and the N.West 4,300 voters.

Other States have similar varying figures, but enough have been quoted to show wide discrepancies and causes concern for the one vote – one value principle. Sawer comments: "It seems a pity that all States cannot settle down to a basic equality of electorates in the Federal sphere, instead of oscillating between different kinds of gerrymander.

The principle of one vote one value is sound, but in the light of the above comments that vote has many values, so the Democracy which is supposed to be the basis of our Parliamentary system becomes a myth!!

Perhaps the most frustrating anomaly in our electoral system is the Country Party which resulted from dissatisfaction by country people with, to their way of thinking, inadequate representation in Federal Parliament. It became firmly established in the early 20s.

Here again there are strange bedfellows. The small farmers of the wheat growing areas, dairying and fruit growing interests etc. joined with the woolgrowers, who had always leaned to the Establishment. Early in its life this party was able to capture a number of Parliamentary seats and instead of remaining independent and playing the major parties to gain much needed reforms for its people it formed a coalition with the Nationalist Party!! The Nationalist Party of the 20s became the United Australia Party of the 30s and the present Liberal Party in the 40s. At that time the country people lost a golden opportunity to join with the Labor Party and establish a producer - consumer

economy! It has been noted elsewhere that the farmers egoism decreed that they join with the Tories. They are strange creatures indeed!!!

We have now arrived at the stage where neither Labor or Liberal are acceptable as capable of governing our Nation in the best interests of the people. However the third and newest Political Party, the Democrats, do have an acceptable plan of Parliamentary reform but they have no chance of forming a Government because of our manipulated electoral voting system. In the 1990 federal election, in the Lower House, the Country Party polled 832,696 votes and won 14 seats, while the Democrats polled 1,108,416 votes and did not win a seat!

An example of the frustration which a hostile Upper House can cause Governments is being acted out in Victoria at the present time. The Cain Government was elected in 1982 and performed reasonably well until the Federal Labor Government deregulated finance. This initiated a wild scramble for money as noted earlier, and to some extent the States had to join in to get money for Government. There may have been some lack of business acumen in administration in this situation, but with the economy of the nation in serious decline suddenly the States found themselves in serious financial difficulties. However the States did not deliberately run their economies into the ground as is being canvassed by the Liberal opposition.

In Victoria the Treasurer, Rob Jolly, resigned, and some time afterwards, John Cain also resigned! Joan Kirner was then elected leader of the Labor Party and became Premier. Her restructuring of the Victorian economy was proceeding as well as could be expected, yet she and her Government are being hounded at every opportunity by the Liberal Opposition. Most recent development has been that Brown (the then Leader) and his party have declared guerrilla war on the Victorian Government. Asked what that meant the reply was that only Legislation that is of benefit to the Victorian people will be passed by the Upper House! In other words his party will govern Victoria! What authority do they have to do this? A majority of one in the Legislative Council where only half the members faced the electors at the last election! Ironically Brown has given no indication that he and his Party have a magic formula to restore the Victorian economy any faster than the Kirner Government. The fact that he and his party would be disrupting the economy of Victoria in their grab for power is of no concern. Kirner's moves to restore Victoria's economy, considering the constraints imposed by the Federal Government, are sound, and an election at this time would not be in the interests of the State. The Kirner Government still has nearly two years to run. She needs a little bit of help from the Opposition to carry out the job she had the guts to take on!

The fact remains that the blame for the economic mess the States are in, including Victoria, must be laid at the feet of the Hawke-Keating Government, because it controls the purse strings of the Nation.

This Government was elected in good faith to manage the affairs of the Nation but they abrogated that responsibility and handed over Government to the Multi-Nationals, International financiers, high flying Entrepreneurs and the gamblers on the Stock Exchange.

15. The Evolution of Church–Labor Politics

From the following it will be seen that it is hard to separate Religion from Politics in Australia.

In the convict days class distinction was between the convicts, who comprised both Catholics and Protestants, and the Officers in charge plus all ancillary personnel. These latter all belonged to the established church, the Church of England. The Church of England was, at this time, at the peak of its ascendency, and also at the peak of its autocracy. The Irish and English convicts quickly found common cause. However a percentage of the Irish Catholics were political prisoners, and intellectually a little above the others and for this reason became the leaders. It was within the climate of these two groups that the Labor Party was born towards the end of the nineteenth century.

While the Church of England was dominant at the time of the first settlement, over the next half century the Catholic/Convict association rose to much greater esteem in the community. This was largely brought about by the two groups being at one in improving the living conditions of their members. However as time went on the Church wanted reforms within Church ideology. There is nothing in the Bible which decrees that the Church should have dominion over mans' temporal laws. In fact the reverse is the case: render unto Caesar that which is Caesar's and unto God that which is God's.

Around this time, near the end of the century the social philosophy of Karl Marx was gaining popularity. Early in the 20th century Pope Pius X could see the possibility of the Socialism of Marx achieving dominance in the Political field to the detriment of the Church and he was prompted to decree that the Catholic Laity (ordinary Catholics not associated with the management or policy of the Church), should take a more prominent role in the Temporal life of the people to steer reforms away from the Godless socialism and back to the Church. This policy was pursued with increasing vigor by Popes XI and XII. By the thirties the word socialism was being replaced by the word Communism. So that, if we ignore the fact Religion has infiltrated both Politics and Administration we would be fooling ourselves.

H.G. Wells in his book "Crux Ansata" comments that Popes are the most ignorant people in the world. This would also apply to most Catholic Priests because of the nature of their education. This is exemplified by Niall Brennan in his book "Dr Mannix". On the appointment of Dr Mannix as Coadjutor Archbishop of Melbourne, Brennan Comments: "After 35 continuous years in seminaries, from a lad of fourteen to a man of 49, from the lowest junior seminarian to the highest seminary rank in the land, Dr Mannix was to undertake pastoral duties of the Priesthood for the first time ... It would be hard to imagine a greater change of climate, and customs than this move from Maynooth." (Maynooth was a seminary in Ireland).

Brennan comments: "Every seminary is an enclosed and thoroughly insulated establishment. It has to be to do its job properly. It is more than just a tertiary college. Its object is so specialised that the world has to be rigorously excluded. Even the sight of a woman can be greatly disturbing to a young Priest"

"It is a common criticism and a facile one that the academic life has no basis in reality. Severity is normal for a seminary. It is not the same as a University, it is more akin to a military academy. The institution has a direct interest in the success or failure of its candidates. It does not want the wrong sort to pass through, and the tests, therefore, are severe and comprehensive."

Brennan comments further on the career of Dr Mannix: "Daniel Mannix spent almost thirty continuous years at Maynooth, and in his case the world could easily pass him by on a bigger scale than the ordinary student ... He had hardly finished being a student when he became a professor. His progress in the academic world was extraordinary but it did not fit him for an active task in the world. He was one of the most brilliant students they had ever had, and became one of their most distinguished Presidents. He became, indeed, one of the great academics of Ireland; but it was not good practice for Bourke Street".

Dr Mannix arrived in Melbourne in 1912 to take up the position of Coadjutor Archbishop to Archbishop Carr towards the end of the latter's term. He was given a warm welcome by Catholic and Protestant alike. Perhaps a little more fervently by his own flock. Being an Irish Catholic he related more to the Irish Catholics, who had been deported in the early days, than to the Catholics of Rome.

When Dr Mannix arrived in Melbourne the burning question was: more Government help for Catholic schools. (This question, like the Irish question, is still with us!). In his book "Dr Mannix", Niall Brennan records a public debate on the question. "There was a close friendship between the church leaders of the different denominations, notably between the two Archbishops, Dr Carr the catholic and Dr Clarke, the anglican. The issue of the catholic education system could be aired and it was possible for public debate to be held"

"The late T.C. Brennan, then a rising Polemicist of distinction put the catholic cause against the protestant whose spokesman was the Rev. Nicholson, to a packed audience of more than 3000 in the old auditorium. The debate, from an academic point of view, was conducted with perfect decorum and at a high level of thought on both sides. Each recognised that the other had a case, each believed his own was better, but the other could be heard. It was a new type of society, so new indeed, that the members of it hardly realised how new it was". A major event occurred in the catholic calendar in 1928. In that year an international Eucharistic congress was held in Sydney. It was a distinction for both Sydney and Australia because it brought the church in Australia under International scrutiny. There were Bishops, Prelates, and scholars from all over the world and they were led by the Papal Legate Cardinal Ceretti.

1929 was the start of the great depression. It saw the Bruce–Page coalition government sacked, even the Prime Minister lost his seat in Parliament! In the ensuing election Labor was elected to govern. The leader was a catholic, Jim Scullin, who became Prime Minister. Other top members were Frank Brennan, Joe Lyons, Parker Maloney, Jim Fenton and others. Those mentioned were catholics and found a ready mentor in Dr Mannix, because of his experience (?) with poverty stricken Serfs in Ireland, and because, at the time Australia seemed to be headed in the same direction. To be thrust into government at a

time when the country was in deep economic trouble was unfortunate for the fledgling Labor Government.

After trying to govern for a little over two years, four of Scullin's Ministers crossed the floor and voted the government out of office. In the election which followed the Nationalists were returned to government. The party was restructured and re-named "The United Australia Party", with Joe Lyons as Prime Minister. This party governed until 1939 when Joe Lyons died in office and R.G. Menzies became Prime Minister. The party was again re-named "The Liberal Party" [actually, reformed after the War].

During the depression years many leading catholic members of the government, and as members of the opposition, would have a yarn with "The Arch", (Archbishop Mannix), who was always available, and they found him a ready listener to the problems of government. He may have given advice, but he never gave any specific directions as to which course the Parliamentarians should take. These years also saw the very stern Archbishop from Ireland mellow more into the Australian environment.

Apparently, Melbourne was not to be outdone by the Sydney Eucharistic congress of 1928. Dr Mannix decreed that there should be a national Eucharistic Congress to mark Melbourne's centenary in 1934. Perhaps it could not match the earlier one in Sydney but the Pope decided to send a Legate, and this person was to be the Primate of all Ireland, Cardinal McRory. No doubt this was a tribute to the work Dr Mannix had done for the church over many years. Again, many overseas church Dignitaries came to attend the Congress. The Congress was a great success and culminated with a procession through Melbourne streets which was viewed by a crowd of about 200,000 people.

The 1934 Congress in Melbourne seemed to be a watershed between the Irish catholics, who had been predominant since first settlement, and had found common ground with the lower strata of the Protestant population where both groups could live together and respect each others views, and a more aggressive form of catholicism which began to surface at this time. It also coincided with the decree of Pius X, and supported by Pius XI, that the catholic Laity should become more involved in promoting the Ideology of the church. Apparently the Vatican had decided that the catholic church and its teachings should play a more important part, not only in the Spiritual life of the world, but also in the Temporal life.

In other words, to alter the politics and administration of Western society to rectify what seemed to it as a drift to a Godless world. Also, about this time, late 20s and 30s, immigration to Australia from southern Europe was increasing rapidly, which meant that the influence of Rome began to displace the predominantly Irish content of catholics in this country.

In addition to the above and in response to decrees from Popes Pius XI and XII and as a more intelligent electorate was emerging the younger intellectuals of the church began to take a more direct interest in the Ideology of the church. This resulted in the formation of the Campion Society. It was not a political group, nor a secret society. To quote Brennan In "Dr Mannix", it was concerned with philosophy, theology and history, and if the catholics of Melbourne are neither as stupid, as uncritical, or as easily Priest-led as before they can, to a large extent, thank the Campion Society of the 1930s.

In 1864 the international association of workers was founded in London. Its guiding genius was Karl Marx, who at the time was writing his master work on Capitalism. There is no doubt that interference by Rome in the 30s brought about the demise of the working relationship between the Irish catholics and the protestant workers who had so much in common. As events moved to the 40s the gap widened to the extent that the groups became enemies and by the 50s the division split the Labor Party in Victoria into two groups. The catholic rump formed what it called "the Democratic Labor Party". This split kept the Labor Party out of office, in the federal as well as the Victorian Parliaments, for twenty years because the D.L.P. gave their preferences to the Liberals.

B.A. (Bob) Santamaria, of Sicilian decent, and one of the brightest of the younger intellectuals became leader of the Campion movement. One of their first ventures was to publish a broadsheet called "The Catholic Worker". Mannix gave his permission for the new venture, but placed the group under Diocesan censor, and so long as they did not contravene the laws of the church he did not intervene. It was to be entirely a Lay effort to bring about reforms that would lift the living standards of the poorer people by way of political and administrative means. This marked a complete change to the approach of the Irish catholics who preferred to bring about these changes by working within the temporal laws of society. Strangely the first issue of the Catholic Worker declared that Capitalism, not Communism, was the enemy of the church! The Irish and the Italians were the two largest groups in this new movement, but each had some reservations about the validity of the other towards catholicism.

In 1937 following a Plenary Council of the Bishops of Australia it was decided to establish a branch of the National Secretariat of Catholic action with headquarters in Melbourne. (The original Secretariat was English). The Council dealt with a number of social problems, Communism, Education, Family Welfare, Unemployment and so on. It meant that the Priest and the Laity worked together in the affairs of the church. Santamaria was appointed secretary.

By the time Catholic Action was instituted in Australia young catholic students were getting knowledge of temporal affairs, not from Ireland, but from England, France and Italy. In these countries the reaction of the poorer people to economic problems, which meant lower living standards, was to turn to the church. At the same time those who had no interest in the church were turning to communism. Actually there was little difference between the two systems as far as social reform was concerned. The real difference, of course, was that reforms under communism did not countenance religion, while on the other side reforms had to be through the church. The Vatican could see that reforms under communism would end church aspirations for world domination.

Other catholic Lay organisations followed Catholic Action. From France and Belgium came The Young Christian Workers Movement. Then there was the Young Catholic Girls Movement, and the Young Christian Students, which came from Europe and was to work in the schools to encourage intellectual discussion of Religious Truths and values from an early an age as possible. There was the Catholic Rural Movement with the objective of persuading farmers to adopt more helping and sharing attitudes in the farming community.

Santamaria had developed great talent for administration and was virtually head of all these organisations. He did not work well with Committees but worked best as an individual with his own men. This meant that there were divisions in the ranks.

In the long term the Catholic Movement became the dominant group of action. Some believed that the church should work for reforms within the temporal administration of the country. Others believed, and this was Santamaria's view, that Catholic Action, or a new term coming into use for that group "The Lay Apostolate" should infiltrate government, administration, unions and other instrumentalities, and gradually, as they acquired the numbers, substitute catholic Ideology for the Ideologies of our present society. This had happened in the mid 50s when the Victorian Government was destabilised, the result of which was noted earlier.

The Lay Apostolate engineered the sacking of the Whitlam Government in 1975, and when the Hawke-Keating Government was elected in 1983 they had the numbers, and have governed the country ever since. This is the main reason for the country being in such a mess. Their power base as mentioned before is the ignorance and poverty of the people. This seems to contradict the aims of the church mentioned earlier for a lifting of the living standards of the poorer people in our society, but one important aspect was not mentioned by the church earlier. It was given by Pope John Paul II when touring Eastern Europe last year (1991) when he said "Ethics are more important than Economics". This was reported in the "AGE" of 16/8/91. It means that a mans' spiritual component must be in order before his tummy is filled!!! It also means that the church will be the final arbiter, and going back to the Dark Ages we know what that means!

The catholic church is working against allowing ordinary people to have the basic requirements for their welfare commensurate with the intelligence of our society and the availability of all the resources to do this. Neither the present government nor the opposition are likely to alter the status quo, because the power base of the opposition is the same as for the present government: the ignorance and poverty of the people.

There is much in the temporal Ideology of the church that is good, for example, a more caring and sharing society. But this is more than offset by its spiritual Ideology, such as blind obedience to the pronouncements of a supposedly infallible Pope. The Pope is human the same as the rest of us and is subject to the same human failings, especially in the interpretation of the Scriptures. The revelations of David Yallop in his book "In God's Name", where the inmates of the Vatican have turned that small State into a gambling den just as it was 2000 years ago, and the debunking in recent times of numerous Vatican myths, strikes the intelligent people left on earth with cold irony!

The foregoing notes provide background for catholic intrusion into Victorian politics in the mid 50s, the sacking of the Whitlam government in 1975, and the abrogation of labor party policy by the Hawke-Keating government when it was elected in 1983.

PART 4. Some Thoughts on Religion

The two subjects which intrude most into our daily lives are politics and religion, yet both are virtually banned from debate in open forum. Why?

No doubt our Rulers, the establishment and church hierarchies, use this as a subterfuge for maintaining the ignorance of ordinary people. The reason given is that it inflames passions.

In this technological age I think it is time we learned to debate in open forum the two most important factors which influence our daily living in a rational manner, especially as the present Rulers, the establishment and the church, are fast destroying the natural environment of our planet in their insatiable scramble for power.

Have we less zeal for reform than the scholars who faced up to the Roman Catholic church and its inquisitions in the middle ages? Many thousands of learned men lost their lives in those days in the inquisition in their efforts to break the stranglehold of the church over people and nations. Their efforts were not in vain and substantial gains were made in increasing the general knowledge of the people. But like all such movements a certain amount of apathy and fifth column work allows the enemy to dig in and consolidate. And so, at the present time the establishment has established sound bridgeheads, while the church for the last half century have been fighting bloody battles in South America, Central America, South East Asia and at the present time in eastern Europe, to consolidate its position.

In previous pages the effects of politics on the natural environment, economics and democracy were discussed. In this, section, Part 4, the effect of the church on every day life will be discussed.

Since earliest times questions have been clamouring for answers, questions about man himself, where he came from, his destiny, the origin of our planet, the universe itself? The logical source for answers to these questions would be the Bible. After reading it three times over a number of years – questions unanswered! It seemed to be all mumbo Jumbo about mythical things with no relation to fact.

Eventually I read the book "The Hermit" by Lobsang Rampa, a Buddhist Lama. It generated a huge spark. All questions answered clearly and logically. Rampa wrote eighteen books, fifteen are on my bookshelf, and there is only one which I have not read.

Since man has been on the planet he has never known who he is, where he came from or why he is here. This is largely because of his own kind. Records have been kept for millions of years of the numerous civilisations which have been on the planet, yet he has failed to interpret these.

In the year 60 AD they were interpreted for him by his own kind, because of warped minds the record was bent and shaped to assist the lust for power by these people. In other words the Bible upon which our spiritual philosophy was based was written in that year.

But do we need a spiritual philosophy? What I think is wanted more than anything else is a code of Moral behavior towards our own kind and all life on the planet! There is no doubt the mind of early man was primitive but it had the capacity to develop and it did this, but unfortunately it took a wrong tangent and led us to where we are now like a heap of Lorenz's rats.

(Conrad Lorenz was a biologist and in his efforts to probe the reasons for animal behavior he set up an experimental colony of rats. The selected rats were fine specimens of their kind. They were given ideal conditions for living and breeding but there were no checks and balances such as are imposed by a natural environment. In a few generations he had a mangy, scavenging, undisciplined heap of fighting fury.) And that is how I see the human race today!

Way back when traveling the ring of history we took that wrong tangent and it took us to spiritualism instead of moralism and metaphysics. Very early, our spiritualism prevented us from practicing one of the basic laws of nature in the natural environment – the elimination of all the weak members of our species – hence a human race of the same degeneracy as Lorenz's rats.

As in all animate species there is always a few brighter than the rest and these dominate. In all species except man this domination does not prevent compatible living within the group. In the case of man the leaders subjugate the rest and compatible is not possible.

Early in our history there was a certain amount of unexplained phenomena, and there still is, which the bright boys of the group explained as of spiritual origin and by so doing were able to gain and keep control of the remainder of the group or tribe. This pattern of deception has followed our civilisation to the present day. Along the way, the leaders, we will call them priests now, were able to augment their power by devious means. the writing of the bible that we know was one of these developments.

The article in the "AGE" of 18/2/91 which appears on the next page sets the theme for serious questioning of the spiritual philosophy thrust upon us for the last two thousand years by the leaders of the christian religions.

Part of the basis for questioning spiritual values is taken from the books written by Lobsang Rampa, a Buddhist Lama, between 1956 and 1977. In his book "The Hermit" Rampa sets out creation and gives considerable information on the UFO people and their Technology.

The Hermit was a blind Buddhist Lama who lived in a hermitage high in the Himalaya mountains high above Lhasa, the capital of Tibet. When a young man his eyes were plucked out by Chinese officials for refusing to give State secrets, which he did not possess! Apparently he had been watched for some time by the UFO people as another candidate to spread their teachings which were still being blatantly abused by the people on Earth. After blindly groping his way high up the mountain he was picked up by the UFO people and taken to one of their bases deep in the Himalayas. He had a remarkable memory and the idea seemed to be to give him the knowledge and extent of their technology so he could pass it on to a suitable person at some time in the future.

Radical views on church draw 18/2/91 cries of paganism

By MARK BROLLY, Religious affairs reporter, Canberra

A 34-year-old Korean woman has thrown a theological time bomb into the seventh assembly of the World Council of Churches, which is meeting in Canberra.

Professor Chung Hyun-kyung, a South Korean Presbyterian; has managed to divert the assembly from the Gulf conflict with a series of controversial views that challenge the traditional theological and cultural roots of Christianity.

Her views have won applause from many delegates, particularly from women and Third World representatives at the assembly, but have caused deep concern among many other delegates, especially orthodox Christians.

She has been accused of syncretism (combining rival doctrines and practices), paganism and apostasy. But she has dismissed these labels, describing the real problem as one of power, and calling for the traditional theology promoted by the early church fathers and male church authorities to be replaced by the voice of post-colonial people in the Third World and by women.

"Maybe this is the time we have to listen to the voice of these people because Third World people and women... have been listening to you for 2000 years," she told a special session of the assembly on Saturday that had been called to discuss her views.

"I think we are the new paradigm and we are new wine. You can't put us in the old wineskins. Yes, we are dangerous but in that danger there is the work of the Holy Spirit opening to new grounds so (that the) church can be renewed."

Professor Chung's views have provided an undercurrent of dissension since the second day of the assembly, 8 February, when she made a dramatic presentation on the assembly theme, 'Come Holy Spirit, Renew the Whole Creation'.

Her presentation set the controversy rolling with an acclaimed piece of stagecraft, combining 16 Korean performers with two Aboriginal dancers. She read out the names of people who had died tragically in history — including an Egyptian slave woman, Hagar, "exploited and abandoned" by Abraham and Sarah in the Biblical account, "our brother Jesus" and Korean women who were in Japan's "prostitution army" during the Second World War — before symbolically burning the list of their names.

She said she no longer believed in a "macho, warrior God who rescues all good guys and punishes all bad guys", but relied instead on a compassionate God who wept in the midst of a cruel destruction of life.

But some of Professor Chung's most controversial statements were her linking of the Holy Spirit, the third person of what Christians call the Blessed Trinity, with the spirits of Korea.

She said Korean spirits were full of han, which was anger, resentment, bitterness, grief and the "raw energy for struggle for liberation".

"In my tradition, people who were killed or died unjustly became wandering spirits, the han-ridden spirits," she said.

The living people's responsibility was to listen to the voices of the han-ridden spirits and to participate in the spirits' work of making the wrong right.

"These han-ridden spirits in our people's history have been agents through whom the Holy Spirit has spoken her compassion and wisdom for life. Without hearing the cries of these spirits, we cannot hear the voice of the Holy Spirit.

The importance of the Chung controversy is that it reflects the struggles between the traditional bases of Christian theology in Europe and the Middle East and that of new theological thought coming from the Third World, between the prevalence of men in authority in the church and the demands of women to be heard.

For the World Council, it demonstrates the tensions between the Western and Middle Eastern Christians who were among its founders and the newer, vigorous churches of the Third World. The knowledge given to the Hermit briefly traced the history of our planet from its beginnings to the present time and included a glimpse of the advanced technology which the gardeners of the Earth (this identified the UFO people as given to the Hermit) had developed over many millions of years in Earth time. Apparently these people have a certain amount of management within the Universe of their influence. This management mainly consists of seeding new planets and tending them as a gardener tends his garden.

The gardeners are not mythical, they have been observed in the sky in their aircraft for as long as history has been recorded. The Bible records their appearance in numerous places.

The Hermit was taken from their base in the Himalayas to their headquarters in the universe. Here he was given sight and taken, with a guide, on what we could call a tour of inspection. He was taken to management headquarters where he was seated in front of a series of picture screens. It should be noted that when a picture appeared on the screen the viewer had the sensation of being part of the picture. At all times a voice described the scene.

From this point I will quote what the Hermit was told. There were nine men at headquarters.

"Here" continued the voice "are the wise ones who have called for your presence, they are our wisest men who for centuries have devoted themselves to the good of others. They work under the direction of the Master Himself who has lived even longer.

Our purpose is to save your world, to save it from what threatens to be suicide. To save it from utter pollution which follows a nu– but no matter, these are terms which have no meaning to you, terms which as yet have not been invented in your world. (This would have been recorded in the Hermit's mind within the decade 1860 - 1870). Your world is about to have a fairly intense change. New things will be discovered, new weapons will be invented. Man will enter space within the next 100 years. Thus it is that we are interested".

The Hermit still watching the screen: "From the outer edge of the picture there came speeding a vast comet with its flaming tail pointing towards that unseen dark centre (this could be a Black Hole. FD). Across the picture the comet flew drawing together behind it other worlds, drawn out of their predestined orbits by the increased gravity, raced on collision course. The instant when the comet and the dead world collided the whole universe seemed to burst into flame. Whirling vortices of incandescent matter were flung across space. Flaming gasses engulfed nearby worlds. The whole universe seen on the screen before me, became a mass of brilliant, violent flaming gas. Slowly the intense brightness pervading the whole of space subsided. Globlets of incandescent material were flung out as the great central mass vibrated and convulsed in the agony of a new conflagration. The voice broke into my chaotic thought "You are seeing in minutes what took millions of years to evolve".

Then on the screen the Hermit saw the universe which contains our solar system. For millions of years the Gardeners watched the new creation in case there should be radiation hazards. (In time, a year in space could be a thousand years on earth. I don't think anyone knows just what the time difference is, but it is great. FD).

Several expeditions were sent out to select a planet for seeding with plant and animal life, and to determine when it would be ready for this purpose. Apparently the base ships are massive affairs, perhaps a mile long, cigar shaped and proportionally high. When leaving base they rise a few hundred feet and just disappear, leaving no trail of any kind. The voice said "It travels at speeds unthinkably faster than light".

One expedition showed that most of the land mass on planet earth was in one piece. The planet had a destabilising wobble and a spreading land mass would let it spin more smoothly. A special craft was sent which directed a ray towards the land mass and split it into several pieces and allowed them to drift.

When a new world is created and needs to be stocked with animate and inanimate species, the first stock have to be ponderous animals and heavy vegetation. These begin the initial taming of a hostile ecology.

The story of the rocks have allowed us to trace the various stages of the evolution of the ecology of planet earth from when the first minute life appeared to the remarkably diverse and integrated ecology to the present day. Ecologists have been able to trace this evolution with reasonable accuracy.

The first humans brought to the planet were strange purple creatures with short legs and long arms. They lived in caves and in large trees. These creatures were mindless and couldn't fend properly for themselves and showed no sign of evolving into more intelligent beings so they were exterminated.

After long ages different animals and very different humans were released. The humans flourished and became a mighty civilisation but like our present civilisation it foundered on the rock of greed. Finally a mighty explosion buried the civilisation under the sea.

Again long ages passed with no activity. The massive explosion which destroyed Atlantis left the planet radio active and this had be allowed to disperse. In time another expedition released more advanced animals and humans. This was possible because of the changing atmosphere of the planet.

Prior to this there had been a mighty war in space. The civilisation to which the Gardeners belonged, apparently extended over several universes (Galaxies?) which the Hermit called for want of a better word, the Empire. The Gardeners were only a small section of the administration.

Quoting the voice on the screen which the Hermit was watching "The Empire was great but there came from another universe violent people who tried to wrest our possessions from us. These people were humans and upon their heads they had horney growths projecting from the area of their temples. They also had a tail. War was their sport as well as their work. In black ships they poured into the universe and laid waste worlds which we had so recently seeded. In space cataclysmic battles took place. Worlds were laid desolate. Worlds erupted into gouts of smoke and flame and their debris clutters the spaceways as the asteroid belt even to this day. A world struck another world a glancing blow and threw it against the earth. The earth juddered and shook and was pushed into another orbit which made the earth day longer".

"During the near collision giant electrical discharges leaped from the two worlds. The skies flamed anew. many of the earth humans perished. Great floods swept the surface of the world and the compassionate Gardeners hurried around in their arks trying to load aboard humans and animals that they should be conveyed to higher ground for safety". "In later years" said the voice, "this would give rise to incorrect legends throughout all earth lands. But in space the battle was won. The forces of the Empire defeated the invaders and made many of them captive".

"The Prince of the invaders, Prince Satan, pled for his life saying that he had much to teach the peoples of the Empire. Saying that he would at all times work for the good of others. His life and that of some of his leading men were spared. After a period of captivity he expressed himself anxious to co-operate in the rebuilding of the solar system which he had desecrated. Being men of good will, the Empire Admirals and Generals could not imagine treachery and evil intent in others. They accepted the offer and set the prisoners tasks under the supervision of the Empire men.

"On earth the natives were crazed by the experiences they had undergone. Fresh stock was brought in from outlying planets where some humans had survived. The lands were now different, the seas were different. Through the complete change in orbit the climate had altered. Now there was a hot equatorial belt and ice formed very heavily on the polar regions. Huge animals died in the sudden cold. Forests collapsed when their living conditions changed so drastically". (Von Daniken spoke of a war in space in one of his books. FD)

"Very slowly conditions became stabilised. Once again man started to build a form of civilisation. But man was now exceedingly warlike and persecuted all those who were weaker. Routinely the Gardeners introduced fresh specimens that the basic stock should be improved. The evolution of man progressed and a better type of creature slowly emerged. But the Gardeners were not satisfied. It was decided that more Gardeners should live on earth, Gardeners and their families. For convenience mountain tops or high places were used as bases. Over an eastern land a man and a woman descended in their space ship and made their base on a pleasant mountain top. Izanagi and Izanami became the founders and protectors of the Japanese race "and" the voice sounded both rueful and cross at the same time - "Once again false legends were woven; because these two, Izanagi and Izanami, appeared from the direction of the sun, the natives believed they were the sun God and Godess come to live among them".

The picture changed and the Hermit saw spaceships coming in and slowly descending until they too occupied a mountain top. "The Gods of Olympus" said the voice in a sarcastic tone. "The so called Gods who brought so much trial and tribulation to this young world. These people with former Prince Satan among them came to settle on earth, but the centre of the Empire was far away. Ennui and the promptings of Satin led astray these young men and women who had been given earth assignment so they could gain experience".

"Zeus, Apollo, Thesius, Aphrodite, daughters of Cadmus and many others formed the crews. The messenger Mercury sped from ship to ship throughout the world carrying messages – and scandals. Men became overwhelmed with the desire for the wives of

others. Women set themselves up to trap the men they desired. Across the skies of the world there were mad chases in speeding craft as woman chased man, or husbands chased eloping wives, and the ignorant natives of the world, watching the sex antics of whom they deemed to be Gods, thought this was the way they should live. So there began an era of debauchery in which all the laws of decency were flouted".

"Various wily natives, more alert than the average, set themselves up as priests and pretended to be the voice of the Gods. The Gods were too busy with their orgies to even know".

"But these orgies led to other extremes led to murders so numerous that at long last news of them filtered back to the Empire. But the native priests, those who pretended to be representatives of the Gods, wrote down all that happened and altered sayings that their own powers might be increased. It has ever been thus in the history of the world, that some of the natives wrote down not what happened, but that which would enhance their own power and prestige. Most of the legends are not even an approximation of what took place."

"And so the orgies continued".

The voice on the screen went on "Certain of the Gardeners under the control of Prince Satan, established a capital of sin in the cities if Sodom and Gomorrah. Cities in which any form of vice, or perversion or depravity was considered as Virtue. The master of the Empire solemnly warned Satan to desist and leave but he scoffed. Certain of the better inhabitants of Sodom and Gomorrah were advised to leave, then at an appointed time a solitary aircraft sped through the air and dropped a small package. The cities were erased in flame and smoke. Great mushroom shaped clouds ascended into the quaking sky, and upon the ground there was naught but devastation, rubble of stones, melted rocks and the incredible debris of human habitation in decay. By night the area shone with a sickly radiance. Very few escaped the holocaust".

"Following this salutary warning it was decided to withdraw all the Gardeners from the face of the earth and to have no more contact with the natives but to treat them as specimens from afar. Patrols would still enter the atmosphere. The world and its natives would still be supervised but no official contact. Instead it was decided to have on earth natives who had been specially trained and could be planted where suitable people could find them. The man who later became Moses is an example. A suitable native woman was removed from earth and impregnated with the seed having the necessary characteristics. The unborn child telepathically conditioned to give great, for a native, knowledge until an appointed time".

"In due course the baby was born and further conditioning and training was given. Later the baby was placed in a suitable container and under cover of darkness was deposited securely in a bed of reeds where he would be speedily be found. As he grew to manhood he was in frequent touch with us. When necessary a small ship would come to a mountain and be concealed by natural clouds or by those we made ourselves. The man Moses would then ascend and come aboard, leaving after with a wand of power or specially compiled tablets of Commandments which we made for him".

"But this was not enough. We had to go through similar procedures in other countries. In that land which is now known as India we especially controlled and trained a male child of the most powerful prince. We considered that his power and prestige would induce the natives to follow him and adhere to a special form of discipline which we had formulated that there should be improvement in the spiritual state of the natives. Gautama had his own ideas, however, and rather than discard him we allowed him to produce his own form of Spiritual discipline.

Once again we found that the disciples, or priests usually for their own gain, distorted the teachings in their writings. Thus it was ever upon earth, a coterie of men, self styled priests, would edit or rewrite scriptures that their own power and wealth should be enhanced"

"There were others who founded new branches of religion, such as Mahomet, Confucious – the names are too many to mention. But each of these men was under our control or trained by us with the basic intention that a new world belief should be established, the leaders of that religion would then lead their followers into good ways of life. We intended that each human should behave to others as he would wish others to behave towards him. We tried to establish a state of universal harmony such as existed in our own Empire, but this new humanity was not yet sufficiently advanced to put self aside and work for others"

"The wise ones were very dissatisfied with progress. As a result of their cerebation a new scheme was propounded. One of the wise ones had remarked that all those sent to earth so far had been introduced to the wealthier type of family. As he correctly stated, many of the lower classes would reject automatically the words of such a higher class person. Thus it was that a search was made, first using the Akashic record, for a suitable woman to bear a son. A suitable woman from a lower class family and in a country wherein it was considered that a new religion or doctrine might be expected to flourish. Researchers assiduously devoted themselves to the task. A fair number of possibilities were presented. Three men and three women were secretly landed upon earth in order that they would pursue their investigations so that the most suitable family should be selected"

"The consensus of opinion favoured a young woman who was childless and married to a practitioner of the oldest trade on earth, the trade of carpenter. The wise ones reasoned that the majority of the people were of this class and they might be more willing to follow the words of one of their own. So the woman was visited by one of us whom she took to be an angel and told that she was to have a great honor, That she was to bear a male child who was to found a new religion. In the fullness of time the woman became pregnant, but then occurred one of those events so common in that part of the world; the woman and her husband had to flee their home because of persecution by a local king".

They made their way slowly to a middle eastern city and there the woman found her time was full upon her. There was no place to go except in the stable of a hostelery. There the baby was born. We had followed the flight prepared to take all necessary action. Three members of the vigilant crew descended to the surface of the earth and made their way to

the stable. To their dismay they learned that their ship had been seen and described a star in the east".

"The baby grew to boyhood, and through the special indoctrination he constantly received by telepathy he showed great promise As a youth he would dispute with his elders and regrettably antagonised the local priesthood. In early manhood he withdrew from those he knew and travelled to many other lands in the middle and far east. We directed him to travel to Tibet, and he crossed the mountain ranges and he sojourned for a while in the cathedral of Lhasa, where, even now, the prints of his hands are preserved. Here he received advice and assistance in the formulation of a religion suitable for western peoples.

During his stay in Lhasa he underwent special treatment in which the astral body of the earth man was freed and taken away to another existence. In its place was inserted the astral body of one of our own choosing. This was a person with very great experience in spiritual matters – far greater experience than would be obtained under any earth conditions. This system of transmigration is one we frequently employ when dealing with backward races. At last everything was ready and he made the long journey back to his home land. Arrived there he was successful in recruiting certain disciples who would assist in the dissemination of the new religion".

"Unfortunately the first occupant of the body had antagonised the priests. Now they remembered the fact and carefully arranged an incident under which the man could be arrested. Having control of the judge who tried the matter the result was a foregone conclusion. We considered effecting a rescue, but came to the conclusion that the overall result would be bad for the population and for the new religion."

The new form of Spiritual discipline spread. But once again there were those who subverted it to their own ends. About 60 years after its inception a large convention was held in the city of Constantinople. Here many priests forgathered. Many of them perverted men who had depraved sexual desires and who looked upon heterosexuality as unclean. Under their majority vote the real teachings were altered and made women appear unclean. They now taught quite erroneously that all children were born in sin. They decided to publish a book about the events of sixty years before".

"Writers were hired to complete the books on the same lines using as far as possible the tales and legends which had been passed down (with all their inaccuracies) from person to person. For year after year various Committees sat to edit, delete and alter passages which did not please them. Eventually a book was written which did not teach the real belief, but which was, in effect advertising material to enhance the powers of the priesthood".

"Throughout the centuries which followed, the priests – who should have been assisting the development of mankind, actively hindered it. False legends have been propagated, facts have been distorted. Unless the people of the earth and particularly the evil priests change their ways, we, the people of the Empire will have to take over the earth world. Meantime we have orders not to converse with mankind, to make no overtures to any government on earth".

The voice ceased to speak.

The foregoing record of the creation of our planet has been set down as it was dictated to the Hermit by the Gardeners of the earth who then relayed it to Lobsang Rampa. To me it records a much more acceptable version of creation and of subsequent evolution than is recorded in the Bible. Rampa speaks the language of our time and everyone can understand it, from the highest academics to the most humble persons. He wrote eighteen books altogether, all paperbacks - cheap books so they would be available to everyone, indeed, circulation ran into millions. The feedback from his readers in the form of inquiries and questions was enormous. I have quoted from the one book "The Hermit" because it records creation and establishes the seed bed from which all religions have germinated.

The simple basis for good living is, as it has always been,"Do unto others as you would have them do unto you". In accepting this as a foundation upon which to build our lives we don't need the magnificent temples, to worship what? Man made religious dogmas!!! The seed of good living is in our own minds and there is no need to go further than that.

It would seem that Lobsang Rampa was one more try by the Gardeners of the earth to establish a smooth code of living on this planet. He was given all the clairvoyant powers which were given to Christ, but the method of approach was different, by the printed word instead of the spoken word which has a habit of being misconstrued.

Has he proved successful? Generally, I am afraid the answer must be in the negative, although as one moves around the community it is surprising the number of people who are familiar with his work, and the feedback from thousands of readers and recorded in his books, I would say he has been the most successful Extra-Terrestrial missionary yet, in spite of the fact that the media crucified him and he had to work more or less underground both to do his writings and then to get them published.

What now?

The answer is given in Rampa's writings, so those who want it will have to look there, but it is not pleasant!

17. What We Have Found

A lot of reaearch has been done on the geology of our planet, and a lot of Archaeological work has also been done to try and trace the origin and evolution of our planet and to try and trace the origin and evolution of human life from earliest times.

Background for this chapter has been taken mostly from Brad Steiger's book "Worlds Before Our Own". The Archaeological work he traces compliments Lobsang Rampa's story of creation in the previous chapter.

Steiger comments "It is rather amazing that such a sophisticated people as we judge ourselves to be, do not know who we are, and it becomes rather dismaying to discover that there is a great deal of suppressed, ignored and misplaced prehistorical cultural evidence that would alter the established interpretation of human origins and provide us with a much clearer definition of what it means to be Man".

People engaged in pre-history work in recent times have pushed the advent of man back 10, 20, 30, and 40 thousand years. The Leakey's working in Africa have pushed it back over two million years! But does it stop even there? In 1975 human like footprints were discovered in rock strata and dated at about 40 million years old, and in Texas a hominid footprint 16 inches long was found in rock dated at 80 million years, back in Dinosaur days!

The Egyptian and Central American Pyramids still contain unsolved mysteries! Is it logical to expect primitive people to build such structures? Methods of construction depicting hundreds of slaves manhandling blocks of stone weighing many tons and elevating them three or four hundred feet stretches the imagination to the absurd. Engraved stones have been found which indicate that man lived at the same time as the giant reptiles. No record of fabric having been found had been made until Egyptian cloth was found 5000 years ago. Then what about the spinning tools and pattern fabric designs found in Russia and dated at about 80,000 years ago!!

Recently interpreted Aramiac texts have suggested that the Israelites were given a machine for making manna which supposedly came from heaven during their wanderings in the desert after leaving Egypt! There is evidence of a major metal working factory in Russian Armenia, and pre-Incan people in Peru were working platinum which requires temperatures of over 1700 degrees!

Single items known as erratics, carved bones, stones and what appear to be ancient coins have been brought up in oil drilling operations. An imprinted slab was found in a coal mine with diamond shaped squares and the imprint of a face on each square. A gold necklace was found imbedded in a lump of coal, and a metal bell shaped vessel was found in solid rock in Massachusetts. Erratics have been found in different places around the planet.

There is evidence to suggest that there were nuclear explosions in pre-history times, Fused green glass which is a product of nuclear explosions has been found in similar strata

in Africa, Euphrates Valley, Sahara Desert, Gobi Desert, Iraq, the Mojave Desert, Scotland, Egypt and Turkey. (The destruction of Sodom and Gomorrah for example. FD).

The older records of pre-history, which have become so deeply entrenched in our minds, because of more recent discoveries, will have to be discarded and pre-history records rewritten. It has been, discovered that the Megalithic Chambers, tombs of western Europe, are of earlier origin than the Pyramids. Copper metallurgy in the Balkans is dated earlier than that of Greece, which has always been considered to be the earliest record. It seems that Stonehenge and the early bronze age in Britain was well under way before the Mycenaean civilisation of Greece began. Stonehenge is now claimed to be the oldest Astronomical Observatory yet found.

Traditional views of Bible history seem to be under siege everywhere. Traces of man have been discovered in southern California dating back to 70,000 years B.C. The Chinese have found evidence of human occupation in Yunnan Province and dated it at 1.7 million years ago. The Mollo people in Bolivia established their kingdom 13 to 15 centuries before the Incas. In 1972 one of Richard Leakey's associates discovered a human skull of modern proportions and dated it at 2.8 million years, and this has gone a long way towards shattering the evolutionary theory of man's progress from the primitive apes.

And so the veil on man's antiquity is pushed further and further back. Now, fossilised footprints have been discovered in the rocks of the Carboniferous, and Cambrian periods, 250 to 500 million years ago. The fossil tracks of decidedly human impression both bare and shod have been fund in sites in Virginia Pennsylvania, Kentucky, Illinois, Missouri, Utah, Oklahoma and Texas. Obviously the prints would have been made before the rocks consolidated, when they were mud or sand.

Steiger quotes A.C. Ingals writing in the Scientific American January 1940 "If man or even his ape ancestor or even that ancestor's early Mammalian ancestor, existed as far back as the Carboniferous period in any shape then the whole structure of geology is so completely wrong that all geologists will resign their jobs and take up truck driving. Hence for the present, at least, science rejects the attractive explanation that man made these mysterious prints in the mud of the Carboniferous period with his feet"

On this point Steiger replies: "if the scientists can dismiss the footprints as tracks made by some as yet undiscovered Carboniferous amphibian that walked upright, left no tail or belly marks it would seem that human teeth, bones and artifacts in Carboniferous deposits must present much larger lumps to sweep under the academic carpet".

In 1912 two employees of an electrical generating plant in Oklahoma broke a large piece of coal with a sledge hammer which was too big to go into the furnace and an iron pot fell out of the centre of the lump leaving its impression in the coal. A coal deposit in the Fortunian Formation in Montana has yielded many fossils including ganoids, a kind of fish scale, and sharks teeth. In Switzerland the jawbone of a child was found and dated at Miocene times, about ten million years ago. In 1928 two coalminers in an Oklahoma coal mine uncovered a concrete wall deep down the mine and were warned by management not to tell anyone about the find. Previously in 1926 a block of silver shaped like a barrel was found, also a large bone. In 1971 remains of human bones were found in a 100 million year old rock formation in Utah. further excavation revealed most of a human skeleton

still in situ. The find was referred to a scientist at the University and there the matter died. As Utah is the home of the Mormons this is understandable. In the White Sands National Monument in New Mexico perfect impressions of giant human footsteps have been found, but the study of these have never been taken to the logical conclusion. Why?

Steiger discusses the pros and cons of the existence of a race of giant humans in the time of the dinosaurs. He presents very strong evidence but it seems to me that the strength of the Creationists in the U.S.A. with their closed minds it is not possible to establish a common approach. However Lyman in his book "Forbidden Land" written late last century describes an amazing discovery by an expedition uncovering an Indian Mound in Pennyslvania. They found the bones of 68 men which were believed to have been buried about the year 1200. The average height of these men was seven feet while many were much taller! On some of the skulls two inches above the perfectly formed forehead were protuberances of bone. Evidently horns which had been there since birth. (Satan? FD) some of the specimens were sent to the American Investigating Museum and nothing more was heard!

Steiger records a Dr Javier Cabrera of Inca Peru as being a doctor by day and an archaeologist by night. The Doctor has collected about 15,000 engraved stones that appear to depict a very special race of man living side by side with the great pre-historic reptiles, The Doctor will not disclose the site. Biologist Ryan Drum, writing in the May Journal of the International Fortean organisation, 1976 told of his visit to Dr Cabrera and of his own examination of the strange petroglyphs. The rocks vary in size from fist to giant boulders, but they were all covered with weird petroglyphs. Many of the largest showed strange five fingered people fighting or interacting with what looked like dinosaurs. Their fingers are similar to the skinny digits like those on Easter Island statues. Drum describes the most astonishing stones which show operating tables, surgical knives, Anesthesia, sutures and so on. The larger stones portray these peoples' society, their mythology and astronomy, including a system of 13 calendar months of 28 days. The rocks definitely show man alongside the dinosaurs!

As well as the large smelting furnaces in Armenia, mentioned earlier, glass smelters have also been found in the Middle East. In 1966 a piece of glass 11 feet long 7 feet wide and 18 inches thick was found in a cave near Haifa it weighed almost nine tons. The only larger pieces of glass on the planet are in the Mt Palomar telescopes. Dry cell batteries have also been unearthed in this region. Other glass objects have been discovered but their use has not been determined. In the "Cave of the Ancients" Rampa speaks of light in a round glass globe without any connection to a power source. It is a cold light which lasts for millions of years. There could be a connection.

Many artifacts have been found on the North American continent dating back about 50,000 years and scientists and academics have under some difficulty, been able to open their minds a little and accept some discoveries as fact. In 1930 a Dr Burroughs was taken to a sight in Kentucky hills where he was able to locate ten complete man like tracks and parts of several more in Carboniferous limestone. Evidence suggests they were made on a sandy beach in the Pennsylvanian period of the Palaeozoic era 250 million years ago.

There are many Amerindian tribes who believed the stars were homes of higher beings. Often magic circles were found which the star people had burned into the grass. Many legends tell of people re-establishing themselves after some devastating catastrophe which suggests the Biblical story of the flood or the destruction of Atlantis. There seems to be much evidence in literature especially religious writings, that many times the earth has been devastated and recovered to host further civilisations,

On to the skeletal remains of giants. Death Valley in California gave up the skeleton of a giant female in 1896, estimated to be 100,000 years old. Other fossil remains in the same area show that at the time of burial the landscape was lush forest, possibly a sea shore. In the same strata fossil remains were found of pre-historic camels, an elephant like creature with four tusks, Huge ferns and pre-historic fish life.

In 1895 a group of miners found the mummified form of a giant female at Bridlevale falls (Montana?) in a stone vault. The woman would have stood 6 feet 8 inches tall. In 1874 a catacomb of giant skeletons were found in a railway cutting in Carolina. Standing these people would have been eight feet or more tall. In 1912 a number of giant skeletons of both sexes were found in Wisconsin. It would seem that the North American continent had worlds upon worlds before Adam was even thought of.

Very little work has been done to trace out the origin of these giants. Are there people around who do not want this to happen because it would upset their smug assumption that the world was created in the year 4004 B.C.?

The builders of the great monuments in pre-historic times have also left their trade marks around the planet. Pyramids, the most prominent come to mind first. The great Pyramid of Cheops seems to embody the amazing skill and technology of a civilisation somewhere in the dim past. In his book, "Secrets of the Great Pyramid", Peter Tomkins says "The pyramid is a carefully located geodetic marker or fixed landmark upon which the geography of the ancient world was brilliantly constructed, that it served as a celestial observatory from which maps and tables of the Stellar hemisphere could be accurately drawn and that it incorporated in its sides and angles the means of creating a highly sophisticated map projection of the northern hemisphere, correctly incorporating the degree of latitude and longitude". Tomkins further hypothesizes that the "Great Pyramid may be the repository of an ancient and possibly universal system of weights and measures, the model for the most sensible system of linear and temporal measurements available on earth, based on the polar axis of rotation whose accuracy is now confirmed by the measurements of orbiting satellites".

According to Lobsang Rampa, Peter Tompkins is fairly close to the mark, Rampa goes a bit further and says that "Somewhere in the base of the Great Pyramid, and still awaiting discovery, is a set of the complete laws of physics as related to our part of the universe. It is one of several in repositories around the world. When discovered the new laws will render our present laws of physics completely obsolete".

The early Greeks enjoyed a good deal of intellectual freedom and they did a lot of basic research on astronomy, yet in the year 1600 A.D. Giordano Bruno a Dominican monk, was burned at the stake for suggesting the heretical thesis that there were an infinite number of suns with planets revolving around them which might be capable of

supporting life! In the middle ages when science was almost non-existent in Europe, the states of Central and South America had a knowledge of astronomical science almost equal to that of the present day!

Two or three items of more recent origin are recorded to show how our Rulers withhold knowledge from general circulation, knowledge which would help us to understand better who we are and where we came from. It seems that the knowledge blanket which the priests imposed in the 1400 or 1500 years following the publication of the Bible still exists.

In his book "The Roswell Incident" Charles Berlitz records the crash of a flying saucer in New Mexico in 1947 in a violent thunderstorm. In the first two or three hours the incident was reported locally and several people had first hand information. Amongst other things, that two or three people were on board, and that the fabric covering the craft was tissue thin and hitting with a sledge hammer made no impression! As soon as the American military heard of the incident they pounced like a tiger. All bits and pieces were gathered up, even minute fragments and taken away, and those who had first hand information were sworn to secrecy!

Early this century the French Geodetic Survey Department wanted to check the centre point of gravity in earth to arrive at a more accurate measurement of the planet. In the course of this work Geodetic scientists suspended two weighted cords, each about a mile long down a coal mine shaft of the same depth. They wanted to check the difference in measurement between the bottom of the shaft and the surface. The bottom measurement should be shorter than that on the surface, but by how much? To their consternation the surface measurement was the shorter! Everything was checked and re-checked, same result!

They took the problem to colleagues in America, and the experiment was repeated. This time two coal mines were selected each was about a mile deep and were connected by a transverse tunnel at the bottom, an ideal medium for the experiment. Cords of a suitable length each with a 60 pound weight were suspended down the shafts, and the weights were suspended in a bowl of oil and left for 24 hours to make sure there was absolutely no movement. Measurements were taken with the same results as the Frenchmen. The distance at the surface was the shorter, and calculations showed that the centre of gravity was 4000 miles out in space! No explanation was forthcoming as to why this should be and the matter was conveniently forgotten. (One wonders about the new laws of physics hidden under the great Pyramid, or the hollow earth theory, of which more will be said shortly).

Of all the disasters which seem to have occurred in the life of our planet, that of Atlantis has captured the imagination most. It is mentioned in early Biblical history and has persisted down to the present time. No one knows just where on the planet Atlantis was situated but the generally accepted position seems to be in the Atlantic ocean, beginning at the African Iberian peninsular coast line and extending westward possibly as far as the American continent. Evidence of this civilisation certainly exists on both sides of the Atlantic.

In the process of collecting material for this paper it seems logical to me that the site of Atlantis was Gondwanaland, that large mass of land which existed in the southern hemisphere for much of our planet's life. This would explain logically the evidence of this civilisation on both sides of the Atlantic. There is evidence of structures in the mid-Atlantic ridge and in the Gulf of Mexico. During the war a pilot ferrying planes between Natal in Brazil to Dakar in Africa saw the remains of a city on the western slopes of the mid-Atlantic ridge. This was mentioned to a friend in a Club in Cairo shortly after, but apparently the pilot lost his life before the matter could be further investigated. Then more recently off the Bahamas a French under water explorer found a series of huge stone blocks fifteen to twenty feet square resting on stone pillars which penetrated the seabed for an unknown depth. It was suggested they could have been the remains of a harbour before the land subsided. Evidence of another submerged city was found by a Danish diver near the Cape Verde Islands in 1929.

The structures of a lost civilisation are not the only evidence which suggest that the ancient site of these people may have been Gondwana Land. There is evidence of similarities in the flora and fauna all along the American, African and European coasts. It is accepted now that these continents plus India and Australia were part of this southern land, and that at some time Gondwana divided and these continents divided and drifted to their present positions.

In the early 70s a team of academics led by a Dr Asher made a survey along the Iberian Peninsular to see what further evidence could be found on the existence of the mythical city or land of Atlantis. Author Steiger interviewed Dr Asher and one of her comments was "It is unfortunate that the scientific and educational interests of the entire world in the matter of Atlantis are thwarted by International intrigue". It seems that the Middle Ages concept of knowledge for the Spiritual and Temporal rulers only, still exists.

The sequence of events concerning the birth and evolution of our planet given in this paper is much more logical than the abbreviated version given in the Bible with its many gaps and wrongly chronicled events, and many questions unanswered. Worst of all the birth of the planet with all its life, animate and inanimate as given in Genesis is completely unacceptable.

Some thought has been given as to whether the Hollow Earth theory should be mentioned in this paper, but as it would be part of creation and because of its suspected existence taken from the diaries of early polar explorers, the apparent confirmation of its existence in the mid 50s and the absence of open discussion on the subject something will be said about it.

The Scandinavians have a legend about a strange land called Ultima Thule somewhere towards the North Pole, but details are sketchy. Perhaps they are more familiar to the Norwegians.

It was discovered by early Polar explorers that for some distance out from where the Pole should be navigational instruments just go haywire! This is understandable, because for an unknown distance out from the Pole there is no North!

In 1895 the Norwegian explorer Hansen, in trying to reach the Pole, became lost for two or three months! He recorded in his diary that the further north he went the warmer, even hotter, it became. He saw tracks of foxes, warm blooded animals, which should not have been in what was supposed to – a frozen landscape. There were clouds of blackish dust. Where does this come from? There are no Volcanoes in the Arctic region! There is snow of different colours, and the different colours fall at different times of the year. Some of the dust has been analysed and found to contain a pollen that has not been found on the surface of the planet. The explorer Hall records that frigid conditions exist to a certain northern point, but before the Pole and then the climate becomes warmer and game animals which should not exist in more frigid country are plentiful!

Satellite pictures of both Poles, North and south, show that the regions around the Poles are perpetually shrouded in cloud or fog. Of the thousands of pictures taken only one shows the surface of the land clearly and it shows clearly "The Hole at the Pole". It is about 140 kilometres across. The Auroras, both north and south have never been satisfactorily explained. Could the reason be the warmer air from the interior interacting with the colder air from outside?

There could be people living in the Centre also. Where would they come from? Rampa says they are surviving members of ancient civilisations, Lamutia, Mu, Atlantis and others. They have survived devastating catastrophes which have rocked the planet from time to time. We must remember the Poles were not always frozen. It is only in recent geological times that this has happened. One could theorise that the few survivors from each catastrophe after having been through the trauma would have a more caring and sharing life style. From Chilean reports their technology has reached the OFO stage.

The Chileans have a great interest in the south Polar regions and have been observing just what goes on there for a long time. They have photographed UFOs rising from the vicinity of the Pole. Their Geophysical Scientists have taken many pictures of UFO activity, but under pressure from the United States Military have handed over most of them for "Safe Keeping".

Rampa comments on the land area inside: "If an 800 mile shell is allowed for, the hollow is 6000 miles in diameter. With no water this would make for a greater land mass than outside" He further comments "If there is more land inside, there would be more people, or if they regularly used the "PILL" they would have bred for quality rather than quantity"!!

In the early 50s the United States took a sudden and great interest in Antarctica and established a permanent base at the Pole. One of their military leaders Admiral Byrd did a lot of air reconnaisance over the continent. Apparently they knew of the hollow earth and had flown some distance in. In 1956 they organised a major flight into the Centre with Admiral Byrd in charge. He must have been a bit of a flamboyant type, because I read in the press where Byrd said they were going to have a look at "That Enchanted Land beyond the Pole". It was reported that they flew 1700 miles in towards the Centre. After that, Nothing! Some twelve months later it was reported that Admiral Byrd had died.

18. Absence of Knowledge Leads to Serfdom

In the last two chapters the creation and evolution of the planet has been traced, and then as a result of Geological and Archaeological research a glimpse of the recorded traces of many civilisations going back 250 million years. Enough to say that man has been on the planet long before Biblical times.

This chapter will look at the help or hindrance which the Christian Religious Hierarchies have rendered to the human race in the last two thousand years or so.

The "Establishment" has already been defined as one of the dual Rulers of the people on this planet. In the following pages the Church will be defined as the second partner in ruling the people of earth. Each ruler has the same power base, namely – the ignorance and poverty of the people. The maintenance of this base requires that only a very minimum of knowledge should be available to the people. This approach can be traced throughout this story so far. This being so the combination has worked closely together for almost 200 years.

The establishment of the Christian Religion was outlined earlier so the story can be taken from there.

After about sixty years the new religion had gained enough support to show the more alert priests, that it could be used to strengthen their power base, so in that year they held a convention in Constantinople and the result was the Bible, but not exactly as it is now. By that time the books of the new Testament had been written and these were combined with writings and legends of the old Testament in one book. None of these writings were recorded exactly as they had been recorded. Rules, laws were bent to suit the power objectives of the priests rather than the smoother code of living which was the objective of the Gardeners. It took many years to write the Bible and not many years afterwards the church became the supreme ruler over Christendom, in other words all the states and kingdoms in Europe. The new church became known as the Church of Rome.

About 300 A.D. Emperor Constantine became the first Christian to rule Rome. Missionaries came to Britain, but it was several hundred years before all of Britain became a Christian Nation.

In the year 635 Jerusalem was taken by the Arabs on the disintegration of the Roman Empire, but the Arabs allowed Christians from all countries to make pilgrimages to the birthplace of their Church. In the eleventh century the Seljuk Turks took Jerusalem and began a period of Christian persecution. This inflamed Christendom and led to a series of Crusades by the Crowned heads of these countries, including Britain to try and restore the rights of pilgrims. In the history of Britain the third Crusade led by Richard II was the most important. In the Crusades there was little cohesion between the armies of the Crowned heads. But the right of Pilgrims to visit Jerusalem was restored.

In the fifteenth century the Church lapsed into a deep trench of licentiousness and this sowed the seed of discontent throughout Christendom. Popes Sixtus IV, Innocent VIII, Alexander VI and Caesar Borgia were all unscrupulous rogues. Their period was marked

by intrigue and violence. However the Church did consolidate its hold on real estate in Rome.

Then in 1527 Rome was sacked by a French entrepreneur, the Duke of Bourbon. He had a following of disgruntled Spanish Catholics and German Lutheran! In the process the Pope was taken prisoner. Then for a time the Popes lived in France and on one occasion there were two Popes, one in France and one in Rome!

Christendom was becoming extremely disenchanted with the Roman Church. Spirituality was still very strong and there was no thought of giving up religion. The attitude was – if the church cannot lead us to a better life what is the use of supporting it.

At this time England saw the rise of Wycliffe and his followers known as the Lollards. These people were opposed to the great wealth of the Church which had been accumulating since 60 A.D. in the form of taxes which did not intrude too much into the King's field, extensive land grants by Kings and Barons and the selling of indulgences by which sinners were absolved from penance on payment of a fee to the Church and so on.

In I377 .. Wycliffe translated the Bible from Latin to English. This put the Bible onto the hands of ordinary people instead of being available only to scholars. However Christendom was not yet ready to break with Rome.

In I516 Erasmus, a Fleming published a complete edition of the Greek Testament and then a new Latin translation in which he corrected, what seemed to him to be mistakes! (Catholics tell us that that the word of Christ as taken from the Bible is infallible if Erasmus altered the script what about other translators; and changing from one language to another how can a precise meaning be defined?)

The real Reformation began with Martin Luther in Germany about 1510. Luther visited Rome in that year and was disgusted with the reign of slothfulness which was revealed within the Church. The arrival in Saxony of a Papal delegate soon afterwards to sell indulgences to raise money to build St Pauls did not improve matters and he was more determined than ever to get some reforms in the Church.

In Britain, the real break with Rome did not come until the time of Henry VIII towards the middle of the sixteenth century. In 1537 Coverdale an Englishman, translated the Bible again and for a while it was placed in the Churches then withdrawn, because although the King wanted to break with Rome he was not prepared to discard their doctrines. This ambiguous situation was partly resolved in Elizabeth's reign when the exploits of seafarers Drake, Raleigh, the Spanish Armarda, and the beginnings of an overseas Empire gave the people of Britain other things to think about and the question of Religion was allowed to mellow.

History has not been precise on when the final break with Rome came and the Church of England became firmly established, but the passing of the Bill of Rights in 1689 contained a clause which amongst other things clearly stated that "No Catholic or anyone married to a Catholic can occupy the Throne of England".

The Bible was once again rewritten in the reign of James II and as far as is known that version is still being used today.

Before closing off this section of Church history, which records the efforts of the Church to establish, maintain and expand its power from the year 60 A.D. mention must be made of the Inquisition, which was the main instrument of the church in maintaining its power, especially towards the end of the period when the population became more literate and was able to question the objectives of the Church. The inquisition could simply be called a Spiritual persuader. Apparently the Popes of the day became impatient with their God, sacked him, assumed the role of God themselves, dreamed up their own versions of hell fire and brimstone and applied them to those people whom *they* deemed to be sinners.

In the days of the great scholars when free thought was a virtue the learned men made considerable inroads, amongst other things, into Astronomy and an understanding of the laws of the Universe. But of course, after the publication of the Bible in the year 60 A.D, all inquiring minds, except those of the Church, were effectively closed off by the establishment of the Inquisition.

The inquisition was an institutional means of silencing Heretics, those people who would not accept the Pope's interpretation of the scriptures as recorded in the Bible. Punishment varied with the degree of divergence from the true line of interpretation by the Church. Torture was introduced to persuade the sinner to change his mind. If the sinner recanted he was freed, if not he died a horrible death. Punishment fell heaviest on the scholars who had the intelligence to question the Church interpretation of the scriptures. Punishment usually meant burning at the stake or having their limbs torn from their bodies by special racks. Instruments of torture were set up in Inquisition branches throughout Christendom. One could safely say that many thousands of heretics (?) were tortured to death in this way.

This immediately poses the question "Are the Bible scriptures ambiguous"?. The answer to that question is the many different forms of worship which have come into practice in the last two or three centuries and it is the height of impertinence that learned men should bend the Truth for their own power and profit.

If learned men cannot arrive at a uniform interpretation of the Scriptures WHAT IS THE USE OF THEM?

19. The Modern Day Church

As we approach the middle of the twentieth century there have been no great upheavals between the Catholic Church, other denominations, Governments or ordinary people, with one exception – the Russian revolution of 1917 – since the Church of England was firmly established. However the Catholic Hierarchy has never relaxed for one moment its pressure and intrigue to get the breakaway Churches back into the fold. This effort has been especially directed at the Church of England because it has the greatest number of followers.

The great bogyman of the 20th century has been Communism. Born in the bloody revolution of Russia in 1917 after the domination of that country by the Church and the ruling Junta for centuries amidst appalling poverty. It was a repetition of the French revolution in the late 18th century when downtrodden masses of people had had enough of extreme riches alongside appalling poverty. Our Rulers immediately saw the Russian revolution as a major threat to their power and affluent way of life. The French revolution was not so much against the church as against their Temporal Rulers, whereas the Russian revolution destroyed the church as well as the Monarchy and its hangers on.

At this time the Church was becoming increasingly alarmed at the spread of Communism (could we say social justice?) However, fortunately for our Rulers both the printed and electronic media were becoming increasingly controlled by fewer and fewer people. (I suggest by design.) This suits both our Temporal and Spiritual Rulers so the old association is still very strong. Media control in this country and armed conflict in other countries is keeping a damper on Communism, but the riches alongside poverty is still very evident and if our Rulers do not make some effort to close the gap there could be another explosion of violence in the not too distant future.

A move by the Church, at least in Victoria, after the war, was to establish an underground movement to infiltrate trade unions and work places by subtle means to undermine the bogy of communism. This move was simply called "The Movement". In 1955 Dr Evatt then leader of the Parliamentary Labor Party, exposed this movement and this split the Labor Party, the Catholic rump formed the Democratic Labor Party and at subsequent elections both State and Federal gave the Liberals their first preference vote and this kept the Labor Party out of office for over twenty years!

In 1959 Tom Truman, Lecturer in Political Science at the Queensland University, wrote a book called "Catholic Action and Politics". He sets out the plans which the Catholic Church have made to take it into the future and to take it back to the position it held in the fourteen or fifteen hundred years from 60 A.D. when it reigned supreme in Christendom. The difference this time is that it includes the nations and countries of the whole world! The information which follows was taken from Truman's book in which he quoted Catholic documents and verbal quotes given by the Catholic Hierarchy.

Truman quotes the society of man by the Catholic Hierarchy as "HAVING TWO ASPECTS, A SPIRITUAL AND A TEMPORAL. AS THE SPIRITUAL SIDE OF MAN IS SUPERIOR TO THE TEMPORAL SIDE, SO THE CHURCH, IN SPIRITUAL SOCIETY, IS

SUPERIOR TO THE STATE, THE TEMPORAL SOCIETY. THE DUTY OF THE CHURCH IS TO GUIDE MAN THROUGH THIS EARTHLY LIFE TO THEIR LAST END, ETERNAL BLISS WITH GOD. THE CHURCH THEREFORE HOLDS SWAY OVER THE SPHERE OF FAITH AND MORALS AND IS THE FINAL ARBITER OF ALL THINGS PERTAINING TO NATURAL LAW. IT IS THE DUTY OF THE CHURCH TO INTERVENE IN THE TEMPORAL ORDER WHEN IT IS A QUESTION OF ANY CONTRAVENTION OF GOD'S LAW OR A DANGER TO MANS SALVATION AND IT IS THE DUTY OF ALL TEMPORAL RULERS TO SUBMIT. IF THE EMPEROR COMMANDS ONE THING AND THE POPE ANOTHER, MAN MUST IGNORE THE EMPEROR AND OBEY THE POPE AS THE VICAR OF CHRIST".

The above was decreed by Popes early this century. One wonders after 2000 years of division, bloody wars, persecution, intrigue, corruption, murder in God's name, licentious living, financial intrigue, torture to death of dissenters whom they judged to be heretics, ignoring Christ's dictum that it is easier for a camel to pass through the eye of a needle than for a rich man to enter the kingdom of heaven, how the Catholic Hierarchy can have the audacity in this enlightened age to interpret the scriptures for us and demand that their ruling be obeyed!! Their authority is taken from the suggested rules for good living in the 60 A.O. version of the Bible which may or may not have been the original instruction!

Archbishop Carboni speaking at the fifteenth Convention of the National Catholic Rural Movement (N.C.R.M.) quoted the late Holy Father, Pius XI, amongst other things "The objective of the Church now, as always, is to preserve and conquer".

Pope Pius X in 1912 said "Whatever a christian may do, even in the affairs of this world, he may not ignore the supernatural, nay, he must direct all to the highest good as to his last end in accordance with the dictates of Christian wisdom, but all his actions so far as they are morally good or evil that is, agree with, or in opposition to, Divine and natural law, are subject to the judgement and authority of the Church".

(It seems that the Church Hierarchy have copied our legal men in the juggling of words, or is it the other way around. These sorts of statements may delight those people who consider themselves to have superior minds, but they are lost on ordinary people).

Archbishop Carboni speaking at the N.C.R.M. mentioned above "in determining to establish the official structure of Catholic Action in Australia the Bishops were carrying out the urgent wish of the late Holy Father Pius X1. In the revolutionary crisis of the twentieth century in which Christendom is faced with terrifying perils, it is his wish that the Catholic Laity should abandon a purely passive or defensive attitude to their religion, and that they should advance on all fronts to extend Christ's kingdom, not only to individuals but to all the institutions of the society in which they live.

Pius XII said "There are four mortal dangers which threaten the Church: The invasion of the Protestants sects; secularisation of the whole system of life; Marxism, which makes itself felt in the universities, and is a most active element, and controls almost all workers' organisations; and a troubled spiritism.

From a small Catholic booklet called "An introduction to social Principles", the following quotes are taken: Married people have the duty of having large families; the importance of large scale immigration is stressed; the children are taught to think that censorship of books and film are right to stop the lies" about the Church being read by gullible people.

(From the foregoing one could hardly be condemned for saying that the Church itself is one huge lie, or about the lie that the Church these days is falling all over Christ when two thousand years ago their ancestors murdered Him. FD).

The Holy Father told the Catholic laity, after the war, to get busy and extend the influence of their Church. "The Movement" was one result, and the National Catholic Rural Movement was another. The Church decided that the best place to extend their influence was in the country, there were too many conflicting influences in the cities to make much progress there.

The N.C.R.M. put together a booklet of guidelines for permeating rural organisations. On pages 68-72 the following organisations are listed:

The Farmers and Settlers Association,

The Australian Primary Producers Union,

The Victorian Dairy Farmers Association,

Chambers of Commerce at local level,

Local Branches of Australian Railways Union,

Postal Workers Union,

Municipal and Shire Councils,

Progress Associations,

The Murray Valley Development League,

The Murray and Murrumbidgee Water Users Association.

The book urges the building of the Blowering Dam near Tumut so the waters of the Snowy river can be fully utilised along the Murrumbidgee. As this infiltration was set to be implemented in the 50s one wonders just how much this has contributed to the degradation of land and riverine environments in the Murray and Murrumbidgee valleys! This smacks of Theologians poking their noses into something they know nothing about!

I did some work in the Murrumbidgee Irrigation Area in the 30s. At that time the population was mostly Italian. I was there last in 1987 and both the irrigation and the Italian population had expanded greatly.

The N.C.R.M. further says "it hopes in time to supplant the principles of Liberal Democracy with Catholic principles as the fundamentals common to all parties and groups in Australian politics". The full story of the N.C.R.M. has to be read to appreciate the significance of its implications.

The Australian Catholic Directory lists a number of Catholic movements. On immigration the N.C.R.M. comments "This movement towards immigration, if the

migrants are properly integrated into the Australian community, could give Catholicism the numbers which at present it lacks to make Australia into a great Christian bulwark in the south east Pacific.

For those wanting more details on official Catholic policy Truman's book is recommended.

As always the Catholic Church is divided. Niall Brennan wrote a book called "The Politics of Catholics" published in 1972. A few of his comments would not be out of place here.

On Communism, Brennan comments: "Governor Wallace is saving Alabama from Communism shouts the little league of rights news sheet, South Africa is supposed to be saving the world from Communism too. One does not mind, too much anyway, this kind of hysterical and ill-informed abuse from people like that. Naturally some people will always call what they do not like by the only cuss word they happen to know". "The harsh truth of this abuse by label, however, is that it has no place in a Christian debate. It has now reached the stage where almost any voice raised in the name of truth justice or humanity will be branded as Communist, and indeed, by some who are themselves opposed to truth, justice and humanity. As if Communism is the only enemy of mankind anyway! As if there is not greed, materialism, bourgeois atheism, bullying, cheating and lying all over normal suburban society. Are Communists the only people to oppose capital punishment and who wish to see the ancient custom of ritual strangulation discontinued in our society?

"Are Communists the only people who oppose apartheid, war, conscription, social inequality, exploitation of aboriginal rights, the filching of our native lands for foreign miners? Are Communists the only people in the world who want to see the riches of the world equitably distributed among the suffering and the poor of the world? Were they Communists who put agricultural land out of production to maintain prices? Was it Communists who burned food in the depression because profit was not big enough? Is it the Communists who run the pornography business of the world and make a packet out of gutter publications"?

"The christian is neither anti-facist nor anti-communist. He has too much he stands for to be against anything. The moment he moves to either side in fear of the other, he betrays his Christianity. The cause of Christ on earth does not need the DLP, capitalism or the Liberal Party to help it along".

Brennan continuing: "Bluntly, I think the moral danger to this country from the U.S.A. is as immediate and serious as any serious political threat from China or Russia".

"News Weekly (a catholic publication) seethes with hate. Frank Dowling seems to bubble every time he thinks of Monash university students. I have hardly met one member of the National Civic Council who does not gloat over his avowed intention of bashing, smashing and annihilating everything named Communism".

Again from Brennan's book quoting James Murray in the Australian 3/1/72; "I am puzzled by the innocents (Killed by abortion) when there is total silence about the innocents of Vietnam again cruelly destroyed by a "Christian" nation ... according to them

both are living. Not so bad a doctrine when you think about it, as soon as someone is conceived he has an entity, he is alive and becomes a matter for our concern. But why the silence about the born ... and the churchmen, the men of compassion – could they perhaps raise their voices too, for the children of Vietnam, Cambodia, Laos, Vientiane ... raise some voices about that, you who are so concerned about the unborn, and the right to take life".

Brennan asks some pertinent questions, "Can we do anything but applaud the zeal of people who protest about the distribution of wealth; who protest about the bombing of innocent people, who protest about injustice and oppression? Must we, because Communists also protest, leap to the defence of these things? What does it matter who protests with us as long as the protest is made? Which is the more Christian, the young man dragged away by police muttering that he will not kill, or the Bishop who hands him a gun and orders him to kill in the name of Christ"?

Commenting on Catholic education Brennan pointed out that their much vaunted school children were never taught theology, scriptures or much Church history, and apart from sex, very little Christian Morality. We were never taught the love of God, the power of prayer, the oneness of the human race, the sweet charity of Christ. But by God we were taught who to fight!"

It is now clear that the N.C.C. was following Hierarchy directions when we were dragged into the Vietnam war. The direction was to block the southern march of the Communists, to conquer these nations and convert them to Catholicism. It is also clear now that the grand plan of the Catholic Hierarchy is to control Australia and use it as a base to spread their tentacles throughout Asia and meet their missionaries coming from the European side. This was not so clear when we were dragged into the war. Apparently the Catholic hierarchy in U.S.A. were able to muster enough support to physically help the Diem regime in Vietnam which was hard pressed by the Communists from the North. Like most wars it was assumed that the objective could be achieved in a very short time. The Vietnamese could easily be over run by the superior American equipment. Also it was an excellent opportunity the the American military machine to "Flex its muscles", and keep their war games strategy up to date. But the American Military machine forgot that the north Vietnamese "communists"? were fighting to regain their homeland which had previously been taken from them. As Niall Brennan commented "The one thing we never did in Vietnam was to ask on which side lay Justice".

It is tragic how easy it is for the media to inflame passions. This certainly happened during this war when passions were volatile. Once upon a time journalism was an honoured profession, it was a medium for keeping people logically informed. Now with high pressure salesmanship it is circulation which brings profits and the key to raise profits is to raise passions, which on some issues it is quite easy to do. The Vietnam war was an example. Mud slinging, delving into personal matters of prominent people are excellent profit makers. Perhaps there may be some journalists who still take a pride in their profession, but it seems that a substantial part of the profession has descended to gutter level, and like the politicians and the Church are viewed with contempt by people who want to see a more just and compassionate world.

In the years of this century to date, it seemed that the Catholic Church had left behind the intrigue, greed, corruption and murder which had tainted its image for most of its years, but particularly in the dark ages. This is not so!

The publication of the book "In God's Name" by David Yallop in 1984 clearly shows that the skeletons in the cupboard have been really thriving on the same old diet, intrigue, corruption and murder. God's Church has never shaken off the shackles in which it was chained in the year of its foundation 60 A.D. The publication of Yallop's book should have been a bone shattering experience for the Church, but apart from an initial outburst and a shrug it has been business as usual!

At this stage it is necessary to define the relationship between the Church and the Italian Nation. On the signing of a treaty with Dictator Mussolini in 1929, the Holy See (the governing body of the Church) obtained recognition of itself as a Sovereign State – The Vatican. It was exempt from paying taxes, both for its properties and its citizens. It was exempt from paying duty on imported goods, it had Diplomatic immunity, and accompanying privileges for its own Diplomats and those accredited to it by foreign Powers. Mussolini guaranteed the introduction of Catholic Religious teachings in all State high schools and the entire institution of marriage was placed under cannon law, which ruled out divorce. In addition to this the Government of Italy undertook to pay the Holy See 500 million dollars (approximately 1984 equivalent).

Vatican Incorporated was in business and it has never looked back. At this point Yallop quotes Lenin "Give a capitalist enough rope and he will hang himself". It has been a close shave.

This meant the Holy See had to have a bank manager. The choice was one of the flock, a business man, Bernadino Nogara. Nogara was reluctant to accept but did so on two conditions:

- 1. Any investment he chose to make should be totally and completely free from any religious or doctrinal considerations.
- 2. He would be free to invest Vacitan funds anywhere in the world.

Within a very few years the investments of Nogara were world wide. No one has been able to find out what the wealth of the Vatican is in shares and real estate. For example the Vatican owns about nine of the leading hotels in Italy, and amongst landed estate, a New York residential area of 227 acres at Oyster Bay. Its wealth must run into Billions of dollars.

Much of the speculation Nogara indulged in on behalf of the Vatican contravened Cannon law and probably civil law. But as the Pope was boss and he was not asking questions Nogara was untroubled. At one high peak in the contraception debate the Vatican owned a plant manufacturing these! In capitalist terms Nogara's services to the Vatican were an incredible success, but in the light of the message of the Gospel it was an unmitigated disaster. The Vicar of Christ was the owner of massive fortunes. At a later stage, not satisfied with enormous business success the Vatican banker used all means, devious and otherwise to avoid paying taxes.

On Nogara's retirement one Paul Marcinkus was appointed manager of the Vatican bank. Marcinkus was born and spent his early years in the Mafia section of Chicago in the U.S.A. He studied for the priesthood, had risen to the position of Bishop and had a permanent position at the Vatican when he was appointed bank manager.

The Vatican involved with the Mafia! I Incredible but true. With some mainland investments in Italy becoming embarrassing the Pope decided to move much of his investment overseas. Apparently he was advised (or was he) that the movement of investment overseas would allow the use of tax havens and so save many millions of dollars for the House of God.

A young fellow, Michele Sindona, a Mafia man from Sicily was appointed assistant manager to Marcinkus. Sindona was good with figures and had the knack of picking the right cards in the investment jungle. He quickly rose within the Mafia, and the Gambino family (Mafia) based in New York, offered him a job. They wanted someone to manage the family's re-investment of huge profits just beginning to accrue from the sales of heroin. In other words they needed a laundryman!

And so the web spread, it would take pages to follow it through, but enough has been said to indicate the extent to which God's House, The Vatican, had been sucked into the morass of international intrigue, greed and corruption. It did not stop here, and the Vatican became more and more involved as time went on. The law would catch up with some of the players. A few, including God's bank, are still playing the game.

Earlier, to help matters along a branch of the Masonic Lodge was formed in the Vatican. It included many members of the Vatican Curia (the governing body of the Vatican) and many powerful people from all fields of Temporal life. It was known internally as P2. Included were members from U.S.A. South America and numerous European countries.

The greatest disaster that could befall this whole organisation would be the Democratic election of a Communist or Socialist Government anywhere. Chile in a free election did elect a socialist Government in the early 70s and we know what happened there.

On the death of Pope Paul VI in 1978 Albino Luciani was elected to the throne as Pope John Paul I. Yallop's profile: "The Spiritual leader of one fifth of the world's population wields immense power, but any uninformed observer of Albino Luciani at the beginning of his reign as Pope John Paul I would have found it difficult to believe that this man truly embodied such power. The diffidence and humility emanating from this small quiet Italian had led many to conclude that this Papacy would not be particularly noteworthy. The well informed however, knew differently. Albino Luciani had embarked on a revolution".

Luciani was born in 1912 in a small town 120 miles north of Venice. Because of his small stature and apparently weak constitution he did not actively engage in outdoor sport, but instead read avidly, including books banned by the Church and he remembered everything he read. He wanted to join the Priesthood and in due course did so. He worked himself up and on the death of Paul VI was Bishop of Venice.

At this time there was great speculation as to who the new Pope would be. Luciani by his quiet unassuming life was almost unknown to the media. He had been well enough known to the 99 Cardinals who elected him and with only twelve dissenting votes his support was massive. There was no doubt about his approach to the Catholic Church – there would be total revolution in the old Hierarchy. He had a remarkable capacity to communicate, whether verbally, through the radio, press or television. In dealing with the day to day problems of the Church he listened to his advisers, pros, and cons, and in most cases gave an immediate decision. Decisions which required more thought would be given in a few days

Those who wanted to see the Church reformed and brought back to its true role in the Spiritual life of its people were delighted, those who had been using God's Temple as a gambling casino were devastated.

On the morning of September 29th 1978 when Luciani was to issue his first decrees for a reformed Church he was found dead in bed!!

Yallop goes into some detail about the factions in the Vatican, about the extent of trivial matters, about inability to make decisions which effect millions of people, in one case 16 years!

The men of the Curia, the governing body of the Church, are old, some pest 80 years. These men will not change. Church dogmas remain almost as they were at the founding of the Church almost 1900 years previously, while the structure and intelligence of human society has changed dramatically, such change has been greatest in the last two hundred years. Yet the Church procrastinates. Catholics around the world are clamouring for reform and Luciani was the man to implement that reform. He was widely informed on both Ecclesiastical and Temporal matters yet the majority of the Curia were against him because many were masons and because they were inextricably mixed up with the financial ramifications of the International currency dealers into whose bed they settled without a qualm. (Shades of Jerusalem).

The Catholic Hierarchy are using the Communist bogey for their lustful progress into the world of riches. The church is still stagnant with no sign of reform on the horizon.

The frivolous and erroneous statements by the media on the death of Luciani drags their standards down to a pretty low level. The fact that Luciani reaffirmed all positions when he was elected was criticised. They forgot that this had been done by the last three Popes and that he had the power to replace anyone in any position at any time. The media described how on the Pope's death Cardinal Villot approached the inert body and proclaimed three times "Albino are you dead?" each question being followed by a symbolic striking of the Pope's forehead with a silver hammer. The media also gave dramatic descriptions of how Villot had taken the fishermans Papal ring from Luciani's hand and subsequently smashed it to pieces. At that time the Vatican hadn't even created the ring!

Why are a handful of people able dominate and dictate the Spiritual needs of millions of people and deny them the reforms which the great majority want and need? No doubt for the same reason that the Establishment dictates the Temporal needs of millions of people, the great majority of whom also want and need reforms.

Do we always have to resort to the final option – bloody revolution? In the last 100 years advances in technology have been miraculous, yet the temporal needs of our people

are almost as stagnant as they were 2000 years ago. Poverty, hopelessness, inertia, misery, everywhere in the poorer classes of our society.

In the small paperback "Report from Iron Mountain" a Committee which had been established to determine just how total peace would effect the economy of the U.S.A. found that if military expenditure could be diverted to eliminating poverty in that country it could be completely eliminated in just one Decade!

Would a reformed Church such as Luciani envisaged have been acceptable to the Gardeners of the Earth? The answer is no, but it would have gone a long way towards that ideal. Even so the reforms Luciani had in mind would have been way ahead of the stagnation we have now.

As pointed out earlier we don't have to be herded into massive temples to be taught about a mythical God and taught that there are certain rules which must be obeyed before we can approach that God. The Spiritual philosophy of the Gardeners is quite simple "Do to others as you would be done by". It seems to me that this is more a Moral philosophy than a Spiritual one and as such a much sounder base upon which to build a compatible civilisation.

The Bible tells us that God made man in his own image. If this is so, and it is, then why has a mythical being called God who lives somewhere in outer space been thrust upon us? Unidentified flying objects have been observes in our skies since this civilisation has been on the planet. The people who drive them are beings much the same as ourselves. They have their civilisations just as we have, but certainly at a much more advanced stage, yet in this advanced technological age (for us) we still allow the Priests to blinker our eyes with visions of a mythical God which has no basis in fact.

The existence of these people and their objectives, as outlined by Rampa is logical both from this source and from our own observations. The observance of that one simple rule, which covers a very wide spectrum, is all that is needed for a whole civilisation to lead a full, contented and compatible life. I believe the word Spiritual has become obsolete. A moral philosophy is much more appropriate for our times and, I believe the only sound rock upon which a contented and compatible society can be built.

Why then are the Gardeners of the earth there? Where did they cone from? What is their interest in dictating, to a point, our lives? For answers to those questions we need to look around us and at our lifestyle. We are abusing our environment which sustains us and our own scientists have warned us that if we continue our abuse of our environment on the present scale much longer we will have destroyed the substance of our existence and our own demise will follow, but like the fool and the Lemmings we blunder blindly on totally oblivious of the precipice which is getting very close.

The above is the negative side, what about the affirmative side. There are many people amongst us who take their leisure in their garden at home or in the "Bush". They are intrigued by the Web of life which exists in both environments, and they derive great satisfaction from creating an attractive environment or just observing an attractive environment and marvelling at the intricate web of life which nature/evolution has created over aeons of time. This activity usually occurs in our spare time and it gives us

the break we need, to rest, and it refreshes our system for the coming week in our struggle with the GNP.

To focus on the Gardeners we only have to liken our home garden to many solar systems and our planet to a whole universe. From our observation and contact with the Gardeners it is obvious their interest is also in the web of life in the universe and in preserving this and re-seeding new planets as they are born and nurturing them as we do our gardens.

As planets are born the Gardeners watch them and at an appropriate time after they have sufficiently cooled They start stocking them with life. In the case of our Planet coarse fast growing plants initially with a progression of improved species, then animals are introduced on the same basis, big lumbering animals first and then gradually refined. Lastly when the atmosphere has been sufficiently tamed humans are introduced, low intelligence types first then gradually evolving up the scale. This process is confirmed in Brad Steiger's book where evidence of human habitation goes back to Carboniferous times, possibly earlier.

On compatibility and spiritual life of a society our Aborigines provide an excellent example. Before we destroyed their culture their life style was one of caring and sharing. By our standards of technology they would be considered very primitive, but then they knew nothing better and lived a happy life. Their Moral standards put us to shame. When a baby was born it was with the mother continuously until puberty. With the mother it shared in food gathering. Early teaching included Temporal and Spiritual values. In the early years the child received the love and care which all female mammals lavish on their young.

When the child passed through initiation stage it was accepted into full manhood or womanhood and a higher education process was still carried on. Following this ceremony the young men and women were allocated mates and the cycle continued. The environment provided the Spiritual values. It was nurtured, and in some cases revered. It was not kicked around like an old rag doll as we do. There is evidence to show that the Elders of the tribe were Clairvoyant. They had their sacred stones, their sacred sites.

Perhaps our key to understanding Aboriginal Spiritual values could be found in the Strehlow collection of artifacts. At present it is involved in a fierce controversy over ownership (Good Weekend, THE AGE, 28/8/87). Professor Strehlow spent a lifetime amongst the Aborigines and was accepted as one of them. Because of the slow destruction of the Aboriginal culture by the dominant White culture he was given their most sacred objects for safe keeping, told of their intimate association with their environment and allowed to photograph their ceremonies and record their songs. The collection is now in the possession of Strehlow's widow, apparently a difficult person to deal with, but then is she more difficult than the people who are trying to acquire the collection for purposes for which Kathy Strehlow cannot fully understand? Could it be another example of the destruction of knowledge by ignorance.

The real evidence of Aboriginal clairvoyancy may be found in their ability to project thought forms. This was an act of pointing the bone at any member who had committed a serious crime within the tribe. It required a special ceremony and if the bone was pointed at a particular person that person sickened and died no matter if he was a thousand miles away.

How dare we dictate to the Aboriginals our perverted values on Spiritual and Temporal living?

The Elders of the Australian Aborigines maintained a stable society for thirty or forty thousand years.

Thought forms, what are they? Lobsang Rampa explains all forms of clairvoyancy in his book "You Forever". Not only that, he explains how ordinary people can perform these acts. Not all people can be clairvoyant, but most can do something. The whole basis of the art is a disciplined mind. Rampa wrote eighteen books, all small paperbacks so they would be available to people in the lower strata of our society. The circulation reached millions and his feedback mail was of massive proportions. In the early part of his mission he answered most letters individually, but later as he became infirm he devoted several books to answering the most asked questions.

He explains thought forms this way: people of the early Egyptian civilisation were clairvoyant, in fact we all were until our rulers put a blanket over our minds way back in the dim past. By the time Moses led the Israelites out of Egypt these people could still perform clairvoyant acts but they were losing the art. When burying their Kings in their sophisticated tombs precautions were taken against banditry by leaving Thought Forms to guard the tomb. This meant that anyone entering the tomb would be afflicted by a strange sickness and die. Such cases have been recorded. The ability to leave Though Forms require extreme discipline of the mind and is one of the hardest acts to perform.

Perhaps the easiest act to perform is that of Astral Travel. Our body consists of three major components, a mechanical system, a chemical system and an electrical system. When we die the two former systems deteriorate and return to the earth. The electrical system is indestructible and floats off into the fourth dimension. In the accepted language of Christianity our soul goes to heaven. We are all in the Astral when we dream but the art of Astral travel is to get the electrical system out of the body while conscious. Rampa repeats the process of doing this many times in his books. According to his feedback many thousands of people have been able to do this travel. Once in the Astral the electrical system only has to think where it wants to go and it is there, fully conscious to observe what we may want to see. Nothing can be taken and nothing can be brought back except the observations recorded in our mind.

The most instructive observations which can be made by those proficient in Astral travel is the ability to inspect the Akashic record. This is a complete record of everything that has ever happened on our planet from the time it was flung out into space as a flaming mass of gas. It is just a matter of going out into space and stopping at the precise time zone and observe what we came to see. All the strange things, unsolved mysteries and the many problems which confront our scientists are there to be seen.

PART 5. Recent Happenings, Late 80s to 1992

Various Topics

Catholic hierarchy and politics

"The prime purpose of the Church (Catholic) is to conquer the world for Catholicism and all the Church's policies are geared to that end". – Tom Truman, summarising Church objectives in his book "Catholic Action & Politics".

"There is no alternative for a Catholic organisation, in an over industralised modern community, but to support policies which will lead to an expansion of agriculture and to a proportionate decline in manufacturing". – Truman quoting, B.A. Santamaria.

"This book by a non-Catholic scholar, is written primarily for the intelligent non-specialist reader. It gives a great deal of information that is new to non-Catholics, about the Lay Apostolate which is a movement to convert men not by the usual proselytising methods but by changing their social environment through political and other temporal action using specially trained and organised bands of laymen". – Truman, Senior Lecturer in Political Science, Queensland University.

"Australia is the big one, the Jewel of south east Asia. Looking down the road, Australia is going to be increasingly important to the United States, and so long as Australians keep on electing the right people then there'll be a stable relationship between the two countries". – Victor Marchetti, C.I.A. Officer, speaking to John Pilger and recorded in his book "A Secret Country".

"Ethics are more important than economics". – Pope John Paul II, The Age, 16/8/91.

The above quotations strike at the very roots of our social and economic problems of today.

The inspiration and groundwork for the present drive by the catholic Hierarchy to restore their status to that of the Dark Ages was laid down by Popes Pius XI 1922 - 1939 and Pius XII 1939 - 1958. This campaign was to organise the Lay Apostolate (ordinary Catholics) into missionary groups with the zeal to infiltrate all Temporal organisations – Trade Unions, Farmer Organisations, Political Organisations etc. and by subtle means slowly change Temporal ideology to Catholic ideology. The success of this campaign has been slowly surfacing since the communist bogy was created in the late 40s and 50s to the present time when our present Federal government seems to be dominated by Hierarchy implants!

Extracts from Truman and Pilger's books above seem to link he CIA with the Catholic hierarchy and there is no doubt that the "Movement" which infiltrated the Victorian Labor Government in the mid 50s was the work of the Lay Apostolate. This leads one to believe that the demise of our social and economic structures at the present time has been brought about by the infiltration of the lay Apostolate. I believe negative thinking and apathy on the part of the community generally allows this to happen. But then of course such clandestine infiltration is never mentioned in the media, and this bears out my assumption that knowledge is being deliberately smothered.

The discussion of the two subjects, Politics and Religion, in open forum has always been considered taboo. These two factors are ones which most profoundly effect our daily lives. If we lived in a real democracy where they could be debated, our country – our civilisation – would not be in the mess it is in now!

This state of affairs puts us back to the Dark Ages when the Church reigned supreme over Christendom from the year 60 A.D., when the Bible was written, for about 1500 years. It was the maintenance of ignorance and poverty in the lower strata of society which allowed the Church to govern for so long. And what was the condition of the people in these times? The Black Death and the great fire of London of those times clearly indicate the appalling poverty of the ordinary people!

The question arises – has the present lifestyle of our poorer people improved on that of the Middle Ages? Comparatively speaking the answer is NO! The above criteria are still the power base of the Church Hierarchy. Poverty everywhere, poor education, no money for scientific research, Libraries and Museums, repositories of knowledge a shambles, the scaling down of manufacturing industries, a million unemployed, officially, certainly double that number in real terms. Indications are that many people, young and old are giving up the struggle. Is this the passive pliant minds which is the first step in the subjugation of people?

And has the Inquisition disappeared? No way! I it is bloodier than ever! The millions of people who have been displaced, tortured, murdered, and thrown into dungeons as filthy as those of the Dark Ages in South and Central America, Vietnam, and now Eastern Europe is proof of that!

And the reason for all this? Simple – they are communists and as such are the mortal enemy of the Church Hierarchy. Doesn't the word communism mean, in effect, social justice? And isn't the basic code for compatible living given to all religions by extra terrestrial missionaries "Do unto others as you would have them do unto you". Surely this means a more caring and sharing life style! It does not mean that everyone should have an equal share of goods and services, but it does mean that the lower strata of our society are entitled to have access to all their basic needs to live a full life, and from this point a proper education system would lift us onto a much higher plane of existence.

Pius XI, quoted by Truman, and speaking on monopoly capitalism "Wherein economic domination has led to political domination by ruthless and greedy men preventing the State from playing its proper role of safeguarding the common good and insisting on social justice", and especially singled out for condemnation was communism because of its "antagonism and open hostility to Holy Church and to God Himself, and because of its violence and cruelty". The pot calling the kettle black?

A news item recently said that a man who has access to President Bush at any time is the evangelist Billy Graham. An egoist who considers himself more Christian than any other professed Christian. Does this mean that Graham condones the atrocities committed by the American military on Bush's orders in third world countries against people who have been labelled communist, but whose only desire is to lift themselves above the poverty line?

The Catholic Hierarchy in their doggedness still persist in opposing contraception and abortion in spite of the fact that parts of the planet are grossly over stocked, which means

poverty reigns. In the dark ages disease and wars kept a brake on population explosions. With a far greater population now, wars and disease cannot cope with the greater increase in the birth rate. Some of the planet's basic resources are becoming dangerously low and we cannot afford such explosions. The great Amazon forests in Brazil which generate one of our most important life giving substances – clean air in the form of oxygen, are being ruthlessly burned to provide agricultural land for an exploding population! A news item only last week told of death squads in Brazil cities to thin out unwanted vermin - Children!

If the Church Hierarchies, and particularly that of the Vatican, had heeded Christ's warning that "It would be easier for a camel to pass through the eye of a needle than for a rich man to enter the Kingdom of Heaven" and controlled their lust for worldly riches and worked for a more even spread of worldly goods between extreme riches and extreme poverty we would never have heard of the word Communism! Considering the human Psyche it is only natural that poor people would turn against the Church which ignored their state of poverty and ignored the basic tenet given to all religions by extra terrestrial Missionaries, "Do unto others as you would have them do unto you".

There is a place for religion in our society. Indeed, spiritualism is part of our make up. It helps to discipline our minds and in so doing helps us approach the ideal of a more caring and sharing society. But where priests or religious hierarchies set themselves up as Gods and try to ram their dogmas down our throats and demand that we forsake our temporal laws and substitute their spurious rules for regulating our lives it is an entirely different matter.

Our Planet and our Universe are living entities, changing all the time, nothing is static. Yet the Hierarchy of the Catholic Church took as a base for its philosophy statements from the scriptures 2000 years ago. There have been many evolutionary changes in that time including Man himself, yet the Church doggedly persists with its antiquated formulas! Catholic Lay people throughout the world have been pressing for a change for near a century now. Nothing has happened! The early and suspicious death of Albino Luciani, Pope John Paul I, should have intensified the demand for reform. On his election Luciani in the final vote received a massive 99 to 12 majority. His pledge "There would be total revolution within the Church". The morning he was to issue his first decrees for a reformed Church he was found dead in bed!

The old men of the Vatican, buried within the walls of their miniature State, have lost touch with the outside world and become bogged down in a mass of dogma irrelevant in the changed world of today. They still aspire to the power and worldly riches which was the objective of their counterparts who wrote the Bible. The Catholic Church is divided, but there is not enough support within the Hierarchy to bring about reform. Niall Brennan, a practicing Catholic, has many criticisms in his book, "The Politics of Catholics". Speaking of his school days he says: "We were never taught the love of God, the power of Prayer, the one-ness of the human race, the sweet charity of Christ, but by God, we were taught who to fight!" and "The mission of the Church in not to alter the political or social structures of a society, but to work within it".

The natural environment

In spite of much talk there has been no real attempt to reverse the downward trend of environmental degradation, especially in relation to land care. Odd cosmic schemes have been suggested and tried, for example, Prime Minister Hawke, a couple of years ago, launched a scheme in south west N.S.W. to plant a billion trees, an odd salt drain has been put in and others suggested but these are only draining salt laden water into prime wetland areas, home for countless birds and destroying these along with the farmland! A few half hearted attempts have been made to arrest soil erosion in the Mallee, and in the undulating country in the higher rainfall areas. Enough to say that it is doubtful if erosion has been halted let alone restore the degraded land.

The Murray Darling basin, draining one seventh of the continent, is the worst effected. Now, due to severe drought in southern Queensland and northern N.S.W. the main catchment of the Murray Darling Basin, and the damming of some of the main feeder rivers for irrigation, the flow of these rivers, including the Darling, has been reduced to a trickle or stopped altogether! This has allowed an excessive growth of toxic Algae, which in places, has rendered the water unfit to drink, even when boiled! In many places alternative water has had to be found for stock and the fish are dying!! The whole problem seems to be negative thinking and inertia by all sections of the community!

Research scientists have never been able to get the message to farmers that big is not always a positive approach to improving soil fertility to extract the most nutritious foodstuffs from that soil. (We must remember that Australian soils generally, are very poor by world standards.) It was noted earlier quoting our own experience that the production of potatoes had doubled by practicing better land management. That production has now trebled and is still rising! A few years ago Michael decided to reduce stock numbers to improve quality. The result – a slight increase in income from the smaller numbers marketed due to improved quality.

An excellent example of land care is given by David Smith in his book "Continent in Crisis". He quotes a project on Middleback station on Eyre Peninsular in S.A. being run by a CSIRO research scientist based in Alice Springs. The property was purchased in 1926 by a blacksmith named Nicholson. Apparently he did not like sheep so to cut down work associated with their management he divided the property into many small paddocks and at great cost put a water supply in each where the stock would have minimum distances to walk to both feed and water. The long term and at the time unseen benefit of this approach to management was that there was minimal disturbance to the vegetation by a large flock of sheep walking to and from water, a process which has a more deleterious effect on vegetation in the arid zone than the actual amount of feed consumed by the stock. (See previous chapter on drought).

Anyway, with all the problems our domesticated hard hoofed animals have caused in the arid zone, why do we persist with them? it seems to be the height of folly to slowly destroy the arid zone to produce poor quality meat and then export it, and a fibre which is becoming harder to sell at a profit!

What is wrong with domesticating our native soft footed species, especially the kangaroo for our meat markets? The Aborigines found kangaroo meat good "Tucker".

None of our domesticated animals can convert grass to protein anywhere near as efficiently as the kangaroo. Most importantly it thrives in our man made environment, mostly because we have put water where there was none previously. In the 1982-83 drought kangaroo population declined to an estimated 8,000,000, about the number that was here in 1788. By the end of the decade the number had risen to an estimated 20,000,000. Surely an endemic species could easily be adapted to supplant our domesticated animals which are causing so much devastation to the arid zone environment.

If sheep and cattle were removed from the arid zone the severe droughts which they are causing would be almost eliminated. In dry periods the native species do not have anywhere the impact on the environment that domesticated stock have. See previous chapter on drought, where country had been reduced to red dirt and half dead trees within the grazing circle out from water. Outside that circle we found an area with normal vegetation, dry looking, yes, but all the normal vegetation was still there and still alive!

To put kangaroo meat on the menu we would have to get past the purists, the animal lobby, the RSPCA or whatever. These people have never done their homework on their pet subject. If they are so concerned about cruelty to animals they should go up North and clean up the cruelty in the cattle industry, mentioned in an earlier chapter. Then what about the grazier who overstocks his property and when the dry times come the feed all consumed, trampled underfoot or blown away, thousands of stock die! That is cruelty to animals in my book, yet no one ever says or does anything about it. It is put down to an act of God. When a grazier overstocks his property he eliminates that excuse, and the responsibility is all his.

Then again, what about the cruelty involved in processing our domestic stock for our own consumption. They are under stress from the time they are yarded at the farm, taken to the saleyards then reloaded and taken to the abattoir. They could have travelled several hundred miles in transports. In the case of arid zone cattle five hundred miles and more! Stress in stock downgrades the final product, the greater the stress the greater the final product is downgraded. Ideally stock should be shot in the paddock before there is any sign of stress, just as the kangaroo shooters do in western Queensland. Kangaroo lobby please note!

Forestry

Early exploiters cut out our cedar and kauri to extinction, possibly other species also. Most of our rainforests on the mainland, both tropical and temperate have been destroyed and there is still extreme pressure to log all old stand forests. This pressure is being resisted by the green movement but they can't match the millions of dollars available to the forest lobby and governments are not over sympathetic.

In his book "Continent in Crisis" David Smith notes the following: Of 19 families of flowering plants regarded as primitive world wide 13 are found in north Queensland – the greatest concentration of these families in the world. More than a quarter of Australian plant genera are found in the region. All these plants and those to follow are to be found

between Townsville and Cooktown in the wet tropical rainforests! More than 1400 plant species have been identified in the area and more than 500 of these are found nowhere else on earth! Over 300 species are threatened with extinction. The area contains the richest concentration of animals in Australia, including 54 species of vertebrates unique to the area, and the greatest concentration of endangered, rare or restricted species in the country.

Smith quotes British Ecologist Norman Meyers (1988) a consultant to the World Wildlife Fund who has a telling comment on the usefulness of rainforests:

"When you walk into a chemist shop, there is a one in four chance that what you buy will have come from a rainforest. It may be an Analgesic, an anti-biotic, Diuretic, laxative, tranquiliser contraceptive pill or cough pastille. All amounting to more than \$20 billion in across the counter sales annually. But to get those products chemists may have looked at only one in a hundred plants for testing, which means that we have only scratched the surface. In the rainforests of Queensland only half a dozen of the 1100 species would have been studied".

If we destroy the rainforests blindly we may be destroying a pearl more valuable than the forest itself.

How wrong predictions can be! In "Continent in Crisis" David Smith quotes Edwin Carton Booth as saying in 1875:

"The Jarrah is certainly one of the handsomest trees of the Australian continent, it grows to great size and when cut at the proper season its timber, so far as experience goes, is absolutely indestructible – wire worms or water worms are powerless in their attacks upon it, and had the "Wooden Walls" of old England not gone out of fashion it would be invaluable for maritime purposes. The Jarrah forests are practicably illimitable and will prove a source of wealth for ages to come".

Yet, in a little more than a hundred years the end of the Jarrah is in sight!

In the early days a lot of Jarrah timber was shipped to England and used for paving London streets. Jarrah forests have had the misfortune to be growing on top of an extensive bauxite deposit. Perhaps this is why it came into existence. About two decades ago a mining company was given a licence to mine the bauxite. A condition was that the area mined had to be revegetated. As far as is known Jarrah is not being used. Is this because it depends on a bauxite base for its establishment and growth?

A forest is a living entity, from the biggest trees to the micro flora and fauna on the forest floor. Because of this, forest managers need to be well versed in forest Ecology in order to establish management practices which do not downgrade the forest. These managers have never properly understood forest ecology, hence management has always been a hit and miss affair and forests have suffered accordingly.

In addition, I believe, managers have mis-interpreted the aboriginal use of fire in the environment. These fires were always small and easily controlled (except on rare occasions when one got away) for food gathering purposes. After years of controlled and uncontrolled burning by managers and farmer/graziers nature was responding with an excessive growth of secondary vegetation. This in turn created greater fire hazards and of

course had to be burned more often to prevent or minimise wildfires! The series of disastrous wildfires in the 60s further intensified management approach to FRB and aircraft were brought in to speed the job. As on the ground, fire pellets were dropped on a grid system to speed up the job of cleaning up the rubbish on the forest floor, ignoring the fact that residue on the forest floor is broken down by the micro flora and fauna into soil nutrients which sustains the ecology of the whole forest system.

While all this work to save the forests was going on another problem reared its head – a fungus disease called Phytophthora. It lives on tree roots, with the result that the trees started to die. In spite of efforts to contain the fungus it gradually spread throughout the Jarrah forests and eventually to the eastern States. Research by B.P. Springett identified the problem as being caused by too much burning. (See quote in "Fire in the Australian Environment".)

Lack of knowledge on forest ecology in the eastern States is just as evident as in the West and the threat to forest survival just as great. There is increasing pressure in the eastern States to log tropical, temperate and dry sclerophyll forests, mostly to feed the maws of foreign industry with chips for both chip board and paper. One wonders sometimes if the time saved by computers returns the value of forests lost!

Our country is not the only one being stripped of its forests. South America, mainly Brazil, and south east Asia until recent times had vast areas of virgin forests. The Amazon forests are being burnt ruthlessly to provide agricultural land for an exploding population. Most of the forests in south east Asia are going to Japan. In Europe, because of its heavy industrialisation, forests which have been nutured for hundreds of years are being destroyed by acid rain. When we consider forests manufacture a large portion of the air we breathe, by absorbing carbon dioxide from the air and releasing oxygen, the long term future looks pretty grim.

Mining

John Pilger in his book "A secret Country" notes that early in the last war when McArthur arrived unannounced with his army to protect us from the Japanese (?), a team of American geologists were given a plane and all facilities to explore the North for minerals. Their main quest was for uranium. At the time it had greater energy potential than all other minerals. Their reward was great because they discovered the world's greatest deposits of uranium! One wonders, on reflection, if without uranium, they would have helped us against the Japanese!

Fortunately for us and for humanity generally the great uranium industry broke down. The English, French, German, Russian, Americans and Japanese built many reactors for generating electricity without doing the necessary research to find out how to deal with radio activity, which is a by product of the uranium generating plants. With a series of major disasters, notably at Windscale in England, the evidence of which was covered up for years, a massive one in the Urals in Russia, which again, no one knew anything about for years, Three Mile Island in U.S.A., Chernobyl in Russia, and more recently one in India. No doubt there have been others of which we know nothing. Because the necessary

research had not been done on how to handle the radiation by product, all were major disasters, with vast amounts of radio activity being released. The magnitude of the problem can be realised because we know it will take thousands of years for the radio activity to neutralise.

Marine environment

While the marine environment around our continent has been exploited to some extent, it is in better shape than the land environment. However, the expansion of the Japanese driftnet fishing industry into our continental waters, especially the Southern Ocean, is causing some concern. The development of driftnet fishing, where the net can be up to 50 kilometres long, has brought strong reaction from the green movement world wide. These nets catch all species and by the time nets are retrieved many of the unwanted species have drowned! Such species include Dolphins, Southern Right, humpback and fin whales, all on or close to the endangered list. The over fishing of Krill, the basic food of whales, is also reducing the whale population. The Blue whale and the Humpback can also be added to the above list for this reason.

Australia so far has been free of major oil spills, although there have been numerous minor ones. Recently, off the W.A. coast a Greek tanker lost a section of its bow and many thousands of litres of oil spilled into the sea. The sea was rough at the time and authorities spent a couple of anxious days effecting a rescue. Eventually the tanker was towed further out to sea where presumably, the balance of the cargo was transferred to another tanker. During the discussion of the incident in the media it was revealed that the ship was badly rusted, and was 25 years old, and that the safe life of a tanker was 15 years!

At the same time it was revealed that oil tankers are still permitted to use the inner passage on the east coast - that is the passage between the Barrier Reef and the coastline. Regulations for using this route require the use of a pilot at all times, and that at times tankers make the trip without a pilot! A major oil spill here would be a world disaster. About two years ago a huge Exxon tanker came to grief in the inner passage of the Alaskan coast, and it was recently revealed that the cleanup cost Exxon in excess of \$1 billion. Even so there was enormous damage to the environment along the Alaskan coast. The question arises - if there was a major spill in the inner passage of the Barrier Reef would our Authorities have that sort of equipment to effect a clean up?

Air and water pollution

It is quite a few years since Thor Hyerdahl crossed the Atlantic from Europe to America. He commented, during the whole of that journey he was never out of sight of flotsam and jetsam from mans' lifestyle activities, and that the Sargasso sea, a giant whirlpool in the middle of the Atlantic, was a cesspool of floating pollution!

In our country, apart from a smog alert day in Melbourne or Sydney, our air pollution is very minor to that in Europe or parts of the United States. My son Geoff, went to Monash University in Melbourne and did some jogging as part of recreation. Then he went to Los Angeles in U.S.A. to do his Doctorate. He resumed his jogging, or rather tried

to, but the act of breathing hurt his lungs because of smog! He has a picture taken from the top of Mt. Wilson, 6000 feet up overlooking the city and all that can be seen is dirty brown smog, not a sign of the city anywhere!

The June 1991 number of the National Geographic has an article on pollution in eastern Europe and the situation is even worse than Los Angeles! There are pictures of people affected by the filth in the air, grown ups as well as children with dirty smudgy faces. It is frightening! In such conditions rain brings down the acid in the air and this has killed off hundreds of acres of forests and contaminated open water!

Following the Chernobyl disaster S.E. winds spread atomic radiation right across Europe. We were never told just what the radiation effects were from the Windscale disaster in England, and we were assured that radiation from Three Mile Island was not sufficient to cause human health problems. In the early 50s Prime Minister Menzies took it upon himself to request the British Atomic Energy Commission to test their dirty bombs on Australian soil! When questions were asked about radiation problems we were told there would be no problems. The testing range was set up at Maralinga in South Australia just north of the transcontinental railway. Years later it was discovered that an extensive area around Maralinga, and another area in the Hammersley Ranges about a thousand miles to the north west, had been badly contaminated by radio activity. It was also revealed that no real effort had been made to protect the aboriginals upon whose land the tests were held.

Towards the end of the war a most effective insecticide was discovered - DDT for short. It was spread around with gay abandon and was most effective against the Malaria carrying mosquito. It was used for controlling agricultural and horticultural pests and only in the last few years has it been declared a human health hazard and its use banned! That is, in the western world. Maybe it is still used in the third world. The result has been that it is doubtful if any animate species on the planet is free from DDT in its tissues. Even the land and marine life in the Antarctic are contaminated!

Almost two years ago it was discovered that the chemical firm of Hoechst on the western outskirts of Melbourne was discharging toxic wastes into the drainage system. The workers at the plant went on strike because of inadequate protection from toxic chemicals in the work place. It took some months to sort the problem out. In that time the Environmental Authority stirred from its slumbers to do an extensive survey of Melbourne and environs for chemical residues. The survey was extensive, one of the most extensive in the world and cost about \$7 million, so the media told us.

The survey taken over thirteen months found that Dioxins, furnans and Chlorophenols were wide spread in the Melbourne environment. Extremely high concentrations were found in the sediments in the Yarra and Maribyrong estuaries. Some fish and all mussels off the Werribee sewerage treatment farm showed levels of Dioxins and Furnans above background levels but below those regarded as a human health risk. Other toxic discharges were recorded from a paper manufacturer, a resins manufacturer and a mixed chemical plant, besides Hoechst's discharges. Professor Ian Rae, Dean of science at Monash University and chairman of the review Committee, said Green Peace's claims were exaggerated but the studies confirmed that Dioxins were being discharged

from Newfarm's (Hoechst's) waste outlet. (It was a Green Peace raid on Nufarm's waste outlet which sparked the survey). HOWEVER, PROFESSOR RAE STRESSED THAT THERE WAS NO KNOWN LEVEL AT WHICH THE TOXIC EFFECT OF DIOXINS ON HUMANS WAS CLEARLY KNOWN. "It is an extremely complex matter, with few hard data available for comparison. But we can say with a considerable degree of confidence that the public is not at any great risk! Ambiguous?

In spite of what Professor Rae has said, the fact remains that there is a risk to human health. Considering the increasing use of chemicals in our lifestyle, and the increasing numbers of cancers in humans we are entitled to better answers than this. Considering Professor Rae's answer, and considering the answers given in previous paragraphs by other scientists that there is little danger to human health from the radio activity that has been spread around, can these latter be given any more credibility than Profesor Rae?

The spread of toxic substances is never ending! Some months ago The N.S.W. Government gave a permit to a paper manufacturer in Albury to dump its liquid waste into the Murray river! Politicians whom we elect to govern and Administrators whom they appoint have no credibility these days.

"Battles over water will split the State" says Crabb, Age 11/10/91. 25 years ago a water shortage in Victoria was predicted. The above headline rekindles the prediction. 25 years have passed and nothing has been done to rationalise water anywhere in Australia, let alone Victoria. We have had plenty of warnings. As with land settlement, the farming community have assumed the prerogative of determining the use of water, yet they are a small minority of the population. Suggestions for rationalisation of water are made in the chapter "An alternative to the Very Fast Train". The longer the day of reckoning is put off, the greater will be the turmoil!

Economic and social

These matters have been looked at previously, but need to be looked at now in the light of the drive by the catholic Hierarchy for world domination.

The various Tory parties in Australia, National, Country Party, United Australia Party, Liberal, and Democratic Labor Party, have never sought to introduce any major Political or Social reforms in a changing society. They have always been content to preserve the Status Quo, but always extending and protecting their vested interests as opportunity presented. They are securely entrenched behind an obsolete Constitution put together a century ago in a changing world.

For example it may be appropriate to quote the powers conferred on the Governor General by that Constitution - a relic of Colonialism. They are listed by Gough Whitlam:

"He can sack the Government, he can sack and appoint individual Ministers. He can dissolve the House of Representatives. He can call or prorogue both Houses. He need not grant a double dissolution although the Government asks for it. He need not assent to a Bill. He need not submit a Bill to alter the Constitution even if it has been approved by the electors. And he need not assent to any Bills passed by both Houses.

And of course, as the Queen's representative, he is commander in chief of all military forces".

Of all the referenda submitted to the people to alter the constitution only one has been passed. [Actually about 9, but still a minority.] This was to give the Federal Government power over the States to deal with Aboriginal matters. It is rather ironic that the Hawke government has virtually handed back this power to the States to deal with the problems of these people in their own conflicting ways.

The results of these referenda were no doubt caused by an illiterate electorate and swayed by the power of the media. Likewise it has been impossible to get reform in a gerrymandered electoral system. Could these problems be caused by the manipulation of Politicians and a deliberate smothering of knowledge?

The first few years of the Hawke Government were taken up with deregulation. In the past the economy of our country was protected from the wolves of International Trade and Commerce with financial and other related regulations so that the general population could have a reasonably sound financial and economic structure which in turn gave reasonably sound social structures.

The process of deregulation has been almost completed. Tariffs are to be phased out in a few years. With the abolition and reduction of tariffs manufacturers are going bankrupt with others moving overseas to take advantage of cheap labor. Unemployment increases, smaller businesses associated with the larger manufacturers are also going bankrupt. Finance deregulated and foreign banks allowed in to serve a limited market and to provide competition. This hasn't worked either because interest is twice what it should be. Thirty or forty foreign currency dealers allowed in to gamble on the stock exchange, and to move our currency anywhere in the world irrespective of how it may effect our economy. An overseas debt of unmanageable proportions bringing us down to the level of third world countries.

Billions of dollars made available to high flying entrepreneurs to gamble in real estate, industrial takeovers, many stripped of their assets to provide more money for more takeovers. Taken over industries restructured in the name of efficiency – more unemployment and not a sign of a solid new asset anywhere.

Droughts and the bottom falls out of the market for primary products. Overseas miners allowed to expand and take their profits out of the country. A massive onslaught on our meagre forests by multi-nationals for chipboard and paper pulp with the cream of the profit going overseas. And all the while money for the maintenance of the basic structures of our society, health, education, transport becoming less and less. Land degradation increasing at alarming rates. Over use of fresh water for irrigation, preventing the flushing of rivers to provide a pure water supply, and because of this the pollution of fresh water by toxic algae and chemicals used in agriculture. Seeing that poverty and ignorance are the power base of the Vatican, it is making excellent progress, and the final takeover is almost complete.

Overseas, progress by the Vatican in its takeovers is proceeding by leaps and bounds. It has finally destroyed the United Socialist Soviet Republics after 70 years and the States

are quickly becoming fragmented, with armed conflict still raging between the various factions, Catholics, Communists and Moslems. In the United States the Creationists (Fundamentalists?) strengthened their position under Reagan and Bush and are now flexing their muscles in politics and administration. A lot of blood has been shed in Central American States. South America has been Catholic since colonial days. Chile tried to break away in late 60s, and installed a popular elected Government, but this was, destroyed in 1973 with much bloodshed, and is back to a poverty stricken economy. South East Asia is being consolidated but Cambodia is still unsettled. The Philippines has also been Catholic since colonial days. In the early days it seemed that Communist China would be a bulwark against Vatican domination, but this is not so. The base for this penetration is Hong Kong. Here the electronic media continuously blares propaganda into China. It is aimed at the students, the most unstable group in China. The Tienanmen Square episode was one result of this propaganda.

The plans laid by Pope Pius XI and ably supported by his successors are progressing well. It has taken a long time, but then Time is nothing to the Vatican. Much of the progress has been clandestine, much of it open and bloody!.

From information given in John Pilger's book "A Secret Country" it would seem that the Central Intelligence Agency, which evolved in the late 40s and 50s, has been the phantom army of the Vatican. With unlimited funds, no doubt available from the enormous industrial and financial investments of the Vatican (David Yallop in his book "In God's Name"). In his book "A Secret Country" Pilger also notes that at the end of the Vietnam war large quantities of drugs which had been stored there were flown out to secret bases in Australia and from there distributed to regional drug banks for "reserve currency" of International criminal activity associated with CIA covert action.

In the ABC's 7.30 Report on 9/11/91 the activities of the drug trade in Australia were extensively explored. It seemed to be centred in the Murrumbidgee Irrigation Area where considerable areas of marijuana are grown. Those in the business seem to carry on with impunity. In numerous cases the police have gathered sufficient evidence for prosecutions and handed this over to the Commonwealth Crimes Authority, which was set up by the federal government some years ago, for action. After much procrastination nothing is done and the trade just carries on. The police are becoming increasingly frustrated!

The Labor Party under Whitlam won government in 1972. His first act was to immediately bring home the conscript soldiers in Vietnam. Then he set about introducing major reforms in Education Housing, Scientific research etc. The determination with which Whitlam went about these reforms after such a long dreary period of inaction began to alarm the American President and his advisors, including the CIA. They were becoming alarmed about the sanctity of their bases in Australia, N.W.Cape, Pine Gap, Nurrungar etc. Their most senior diplomat, one Marshall Green, was sent out to try and stabilise the situation. Australia had been tagging along with U.S.A. under Menzies, Holt, Gorton, and McMahon, and President Johnson had come to regard Australia as the 49th State of USA. Whitlam's actions generated a warm feeling in the electorate to think that at last we were showing a bit of independence in cutting Uncle Sam's apron strings.

Pilger also noted in his book "A Secret Country", that it takes the CIA from two to three years to destabilise a government and that is precisely how long it took to get rid of Whitlam. As the treaty for the renewal of the American bases was due in December 1975 the Americans assumed that the Whitlam government would not renew it, and as that date was getting close action had to be stepped up. Apparently a plan was worked out that the Governor General would sack the Whitlam Government, and this is what he did on November 11th. It is not necessary to detail all the intrigue the sacking involved, except to say that Kerr was involved with the CIA, a fact which he denied. Apparently Kerr did intelligence work during the war and had contact with M15 and M16 in England, maintained these contacts after the war, and also had contact with our secret intelligence services.

With hindsight, it seems that Whitlam was extremely naive in not suspecting the real gravity of the situation as it built up. There was a wave of indignation across the country and Whitlam urged the people to maintain their rage. The Unions began to mobilise for a general strike but the president of the ACTU, Bob Hawke, called a press conference and gave a forthright, almost tearful speech, and said "We must not be provoked, we have to show that we are not going to allow this to snowball" (Quoted from "A Secret Country"). This effectively cancelled Whitlam's call. At the time the American press reported that Australia was strangely quiet! No doubt this gave the Vatican confidence to penetrate further into Australian politics.

In his book "A Secret Country" Pilger traces some of the activities of the CIA in its penetration of Australian trade unions and politics. The cultivation of the Australian Trade Unions by the CIA covert means had been progressing along the same lines as "The Movement" in Victoria, slowly at first but rapidly building up from the early 70s on. When Whitlam's Labor Government was elected to office in 1972, we had had twenty [twenty three] years of Tory government. The leaders of these governments were he "Right People", and being anti-communist the CIA had no great worries. From the end of the war communism had been whipped up into a great Ogre threatening to destroy everything good in its path, when, in effect, it would have established a more sharing society.

When the Labor Government under Whitlam took office there was panic in USA. North West Cape had been installed, and the CIA had recently established Pine Gap. However, the American Chamber of Commerce, representing the most powerful multinationals in the country and with strong links with the CIA, took a much more active interest in grooming suitable Trade Union leaders in case Labor was returned to office again in the future. They set up a branch in Melbourne close to ACTU headquarters. The approach was to fraternise and cultivate friendship with possible future leaders. They had plenty of money to throw parties etc, even make donations to Union funds when there was a shortage or when they wanted to "steer" someone the right way.

When Union leaders went overseas, always to America, they were feted across the country, and in some cases had their fares paid! Bob Hawke of course, had always been ambitious, was good company, and he was well looked after.

The American Chamber of Commerce had also set up the Harvard Foundation in the USA. This was used as a training school to give those taking part an insight into the socio-

economic workings in that country. In effect it was a school of indoctrination on CIA principles. Bob Hawke was one of the many trade union guests from Australia. So it is not surprising that he was able to calm the unions when Whitlam was sacked. It is interesting to note that Neville Wran and Barry Unsworth were also students at the school. In the indoctrination process the "Students" continuously met with the top echelons of the world of industry and finance both in America and at home.

In time, with the help of his American and other "Friends" at home Hawke rose to be President of the ACTU. With the 1983 Federal election coming up Bill Hayden was leader of the Labor Party. The CIA were horrified at the thought of a Hayden Government, so at the last minute Hawke was substituted, and with further help from his cronies Labor won the election and Hawke became Prime Minister! He was now hooked onto CIA policy, the policy which can only thrive on the ignorance and poverty of the lower strata of our society!

During Hawke's reign, and with control of the media, the Vatican is making excellent progress towards its objective, which Truman summarises as "The prime purpose of the Church is to conquer the world for Catholicism and all the church's policies are geared to that end."

In recent years it has become glaringly obvious that there must be some ulterior motive behind press reporting because it is being focused more and more on overseas news and less and less on the socio-economic problems at home. The "news" mostly concerns petty dogfights between people and countries, and if we look a little closer it is always Catholic against anti-Catholic! When we get back home we come to the point where the Priest cultivates the garden – the minds of the people, to be reduced to passivity and then the trader comes along and reaps the fruits of human endeavour! I The Priest and the Trader had no trouble falling into bed with each other centuries ago. The union is even stronger than ever. If we could only destroy one the other would die.

Repeating again the ideal of the Catholic hierarchy, it is to return to life as it was in the middle ages when all people except the High Priests were on the one socio-economic level. Organised groups of people were small for obvious reasons. There were many Skilled craftsmen such as our hand craft hobbies of today and they had their craft guilds. Knowledge except for craft skills was confined to catholic dogmas. H.G. Wells once noted that "Popes were the most ignorant persons in Christendom, they are experts on the dogmas of their church but know nothing of the outside world". It can be added that not having experience civilian life they know nothing whatever about human psychology, and yet they demand the prerogative of directing our lives.

The Catholic ideal is quoted above. What about the other side of the question? It is given in a couple of extracts from H.G. Wells book "Crux Ansata" speaking on the life of the people in mid 14th century:

"Hitherto the subjugation of the common people had been an easy matter. There were plenty of them and if they wouldn't work for the lord of the manor or his subtennants, they could freeze and starve. Then came deliverance out of the east and found a ready soil in the filthy towns and dirty villages of the mediaeval countryside, the great Pestilence. There never was such a pestilence. It came and it returned. It well nigh blotted out mankind. More than half the three or four million people who formed the population were swept away."

And: quoting John Ball of Kent,"The Mad Priest of Kent"

"Good people, things will never go well in England so long as goods be not in common, and so long as there be villeins and gentlemen. By what right are they whom we call lords greater folk than we? On what grounds have they deserved it? Why do they hold us in serfage? If we all came from the same father and mother, of Adam and Eve, how can they say or prove they are better than we, if it be not that they make us gain for them by our toil what they spend in their pride? They are clothed in velvet and warm in their furs and their ermines while we are covered with rags. They have wine and spices and fair bread, and we have oatcake and straw, and water to drink. They have leisure and fine houses; we have pain and labor, the rain and the winds in the fields. And yet it is of us and of our toil that these men hold their state."

The catholic bogy of communism has been with us for a long time and nothing has been done about it. Its time the old men of the hierarchy broke out of their hibernation!

21. Is There a Solution to the Foregoing Problems?

The answer is yes if ... the leaders of the Establishment and the Church could be deactivated for about two decades. They would wake up to a completely new world, one where the gap between the rich and the poor would be greatly reduced. The homeless, the unemployed, and young people would have an important niche in the society in which they lived. They would not be hangers on and dependent on the dole. Everyone would have opportunities to develop their talents to the limit of their ability. This would be brought about by taking money off its pedestal of worship and using it in its rightful capacity - as a lubricant to keep the wheels of industry and commerce turning smoothly, not enough and the machinery squeaks, too much and everything goos up. Emphasis would be on morality and not on mythical spirituality which now dominates world societies, a tenet upon which the establishment and the church have built their powerful empires.

The chances of such a change are extremely slim, because even if there was a will it would take decades to accomplish, and by that time under present management we would have destroyed the life giving support systems of our planet! So, it seems the decision to clean up the mess we have made of our planet, its creatures and its environment will be taken out of our hands by the Gardeners of the Earth. The Gardeners, by the way, are those people who drive the flying saucers often seen in our skies. They have been keeping us under surveillance for thousands of years. They have spent a lot of time nurturing our planet to its present stage of evolution and it is known that they will not stand by and see us destroy it.

If we decided to carry out the reforms ourselves to bring the planet and its people back to a sustainable future a beginning would have to be made at the grass roots level - the people level - the plan/model would be based mainly on the present Communist Chinese system! Yes; the dreaded communist regime which our rulers have told us for years would destroy everything we hold precious. Precious for whom? Precious for those people who have exploited the lower strata of our society since people have been on earth, for their own gain!!

We will have a very quick look at the China situation. It will do two things; it will give us a glimpse of the kind of society Extra-Terrestrial missionaries - Rampa, Christ, Mahomet, Gautama, Confucius, Moses and so on, have been trying to teach us for thousands of years, and it will give us an idea of the enormity of achieving such reforms and of the will and determination needed to achieve such goals.

Pre-Communist China was possibly one of the most exploited, poorest and downtrodden societies ever to have inhabited our planet, certainly during our civilisation. The population of over 500 million was probably the reason for the exploitation.

Around 80% of the population were peasants, and were getting the barest of sustenance from soils that had been cropped for centuries. Most of the natural vegetation had long since disappeared. In the west of the country hills, even steep hills, had been terraced to grow rice, their staple food. The peasants did not own the land, it was owned

by landlords who leased it to the peasants. Rent was a percentage of the crops which the landlord sold for cash. The rent levied varied so that the peasants were perpetually in debt. With the removal of vegetation to get maximum land for crops, floods and famine were a regular part of the climatic cycle.

In the cities poverty was on a similar scale with most of the wealth held by the local merchants. In the nineteenth century the burgeoning European traders gloatingly ogled the huge population as a source of trade riches.

Accordingly some of these countries, England, France, Portugal, United States, established trading bases in the coastal cities, in fact they occupied parts of the cities and surrounding countryside. The Chinese people objected but they could do nothing because they had no organisation or army to repel the invaders. This arrangement suited the indigenous merchants because they were gathering as much wealth as the invaders. About the middle of the century Britain evolved a most lucrative trade in opium. The opium was grown in India, a British colony, and exported to the teeming millions in China. Again, those Chinese who were trying to maintain the stability of their country tried to halt the trade but they could not match the military capacity of the intruders. There were two opium wars but the trade still flourished.

With opium and prostitution large sections of the coastal cities, especially Shanghai, became centres of vice with all the degrading practices which this type of life generates. All this happened when the Christian missionaries were in one of their active phases. Another case, perhaps the most glaring in all history, where the Priest cultivates the minds of the people to passivity and the traders reap the fruits of human endeavour!!

In the early 1930s Japan's military invaded and occupied Manchuria, China's northern and perhaps richest province. The Chinese communist party had been formed some time prior to this but was still only a fledgeling organisation. However they did join with the Chinese Nationalists and put up some resistance to the Japanese but could not drive them out. While the Japanese were in Manchuria there seemed to be an uneasy alliance with Chaing Kai Shek's Nationalist army. At the end of the second world war the Nationalist army turned on the Communists and drove them out of the coastal cities and right back into the hills of western China. They were able to do this because at the end of the war the Americans poured enormous quantities of arms and ammunition into China so Chaing Kai Shek could could dispose of the Communists.

In their rampage across China the Nationalist army laid waste most of the countryside. One example was to cut the dykes of the Yellow river. The ensuing flood killed two million people and made another twelve million homeless, to say nothing of the devastation of the land environment! However, once the Communists reached the mountains they dug in and were almost impregnable. The Nationalists army were mostly conscripts and were poor soldiers, hence in retreat the Communists were able to capture much military equipment.

It was during their stay in the mountains that Mao-Tse-Tung put together his plan for restructuring China. Meanwhile the Communists were foraging deep into the countryside, capturing more equipment and helping the peasants reestablish themselves. The land was taken from the landlords and given to the peasants. This approach built goodwill between

the army and the peasants and when the time came for the army to begin the return march to Peking the work of the army in helping the peasants had spread well in advance and they were white anting the Nationalist army and capturing more equipment all the time. So that, by the time the Communist army reached Peking it was an avalanche!

When the Communists were re-capturing the coastal cities the soldiers did not loot as did the Nationalist army, but respected the people and helped them get their cities back to normal. In most, public utilities had broken down. When the Communists re-captured Shanghai the city was in a deplorable state, and again the army helped to restore the city. One incident clearly illustrates the degree of co-operation between the army and the Citizens: The sewerage system had broken down, so the army spread the word among the peasants and they arrived in hundreds with their wheelbarrows and carts. The soldiers donned their gas masks and went down into the sewers. They did it the hard way because it was the only way, but they cleaned up their city! In the days of Chaing-Kai-Shek and the Nationalist army Shanghai was the home of prostitution, in fact a major industry. In time it was cleaned up, the brothels were closed, and the prostitutes re-educated and almost all returned to a normal life.

It is inevitable that in time we will have to present ourselves at the Pearly Gates to give an account of our work on earth. I believe we are entitled to ask a question: At those gates, who will receive the most marks for their work on earth Chaing-Kai-Shek and his army who raped and prostituted the country and its people, ably supported by the Christain Hierarchy, or Mao-Tse-Tung and his ragtime followers who restored the country and gave the people back their dignity?

I think it is important to have a look, very briefly, at the changes the Red Army brought to China in their struggle to defeat corruption, the poverty of the people, particularly the peasants, and the channeling of wealth and privileges to the few.

The following information is taken mainly from Felix Greenes book "The Wall Has Two Sides". There are others, for example: Stuart and Roma Gelder's book "Long March to Freedom", C.P. Fitzgerald "Flood tide in China", Myra Roper, "China the Surprising Country", Shirley McLaine, "You can Get There From Here". There may be others but these are on my bookshelf. All tell basically the same story, but I think Greene's perception of Red China is the most comprehensive and positive. Where praise is due it is given unstintingly, and where criticism is due it is helpful.

In finally driving Chaing-Kai-Shek and his army out of mainland China the task facing Mao-Tse-Tung and his offsider Chou En-Lai in rebuilding a nation of over 500 million people in an environment which had been ruthlessly plundered, especially in the century prior to the civil war and further devastated by Chaing-Kai-shek and his army, their task was a daunting one.

For the first few years there was a certain amount of fumbling in getting reconstruction under way. The main problem was to keep the supply of materials up to the enormous work force. Although there were priorities in rebuilding the nation, with such an enormous labor force everything seemed to move forward at once. The amazing thing was that those 500 million people worked as one and by the end of the first decade of communist rule the whole nation had been transformed!

In past ages conquering armies almost always destroyed the evidence of the previous occupation. Now, after the conquering army had occupied the whole of mainland China all the treasures of previous dynasties, going back three or four thousand years, the buildings, treasures of Art, Porcelain, , and the thousand and one items which make up the memorabilia of the oldest nation on earth were being faithfully repaired and preserved. And everything is open to the people.

Many pproblems are long term and will take decades to rectify. For example, the taming of China's two largest rivers, the Yangtse and Yellow. Because of intensive land use in their lower reaches the removal of most vegetation in both the lower reaches and watersheds over the centuries have caused recurring problems of flooding and drought. However, in recent times the Yellow river has been dammed at Sanmen Gorge where it comes out onto the plains. The Sanmen Gorge dam is not a toy, it will hold more water than America's Grand Coulee and Boulder dams combined! Recently, the Chinese government approved the construction of a dam at what is known as the three gorges site on the Yangtse. It will make the Sanmen dam look like a toy! It will be the largest Hydro-Electric project yet undertaken on earth!

A few statistics on the building program reveal the thought, organisation and work that goes into rebuilding a nation. The great hall of the People for example: it is sited on Tien an men square which has been enlarged to almost 100 acres. The hall building is 1100 feet long and is fronted by ten columns. It contains a 5000 seat banquet hall, more than 20 reception rooms, each as big as a normal ballroom, and the great hall itself. With two sweeping unsupported balconies this auditorium holds 10,000 people. 14,000 workmen were employed in the construction of the great hall plus hundreds, possibly thousands, of Peking workers who gave their time for nothing on weekends and holidays. The whole structure, buildings, fittings and landscaping was completed in ten months!

By the end of the first decade of communist rule, Peking had 350 Post Offices (and according to Greene they all worked most efficiently), and more theatres than New York. On health, from 171 major hospitals to 1200 hospitals and maternity homes 6000, and health clinics in the communes 200,000 and still not enough!

And what of the Arts? Greene visits the Conservatory of music and the Peking school of dancing, both in Peking. The Conservatory of music accommodated just over a thousand students, and the Peking school of Dance about 300. In both cases students are the cream of all China, they have to be of exceptional standard to be admitted. Tuition and lodging are free in both cases, but where students can afford, they pay for their food. The buildings and the environment had not yet been updated, but the tuition, musical instruments and libraries were superb. Perhaps Green could describe best what he saw after visiting the dance school:

"One of the most delightful experiences I have had in Peking! It gave me the same lift as the Conservatory, here were children, eager, healthy, intensely interested, being given what seemed as first class training ... I was particularly struck by a group of teenage girls going through their basic skills. They had had about five years training. The control, the grace, the 'projection' seemed superb. They work very hard The eagerness and a kind of innocent freshness of these girls was delightful. I asked one

girl of 12 to pose for a photograph, which she did without coyness or shyness. They carried themselves already like experienced artists, and as a matter of fact frequently danced in choruses for performances of the Peking Ballet".

And:

"Perhaps the most remarkable sight I saw this morning was a group of boys and girls studying Spanish dances. What gripped my attention at once was the young instructor. He was 22, Chinese, but Russian trained. I could have sworn he was Spanish and he was SPANISH in this classroom. By sheer volatility of feeling he communicated the Spanishness of these steps to his group of young Chinese. It was an extraordinary and quite wonderful experience to see this man live within these traditional movements, and from INSIDE not just by technique.

The students had not yet caught it - perhaps they never would - so alien, so extravagently extrovert (for them), and it was scarcely possible to watch them while teacher was on stage - This was an outstanding dancer in any language ... I felt that here, as at the Conservatory, I had seen something of the very best of the new China, for me, more immediately moving than the march of tractors off the assembly line.

And the Chinese say their aim is, eventually, to provide the chance of a musical education for every child in China who shows a gift for it.

Felix Greene goes to a children's party in Peking. Let him tell the story.

"I received an invitation yesterday to a children's party. June 1st in China is "Children's Day". So I set out that evening for Chungshan Park. At the gate met a Frenchman who seemed a rather unlikely candidate for a children's party. I think he considered Peking rather dusty, the Chinese tiresome and the regime appalling.

The Park was like a fairyland. Thousands of tiny coloured lights had been strung between the trees, and beneath them some 15 to 20 thousand children were playing, dancing, laughing. Troups of jugglers, Clowns, Actors, Acrobats performed to audiences that shrieked, and applauded with delight. It was an amazing spectacle.

"Its all so organised" said the Frenchman.

"Organised or not, I thought, if London could put on a carnival like this in Hyde Park, or Paris in the Bois de Boulogne, we would have reason to be pleased with ourselves These kids are having the time of their lives.

Yet they never forgot to be polite. We couldn't stop at any show without a dozen little boys and girls leaping up to offer us their seats. In a way this was all part of the fun Wherever we went the Children clapped us (as foreign friends I think, not as foreign devils), and then we had to clap back - that is the custom here; and the kids would clap in rythm simply exploding with merriment, sometimes bringing the shows to a halt. Then the performers clapped too, everybody clapped till we waved and moved on.

I noticed the Frenchman fingering the palms of his hands as if they were getting rather tender, and he raised his eyebrows, shook his head, after all a sufficiently tedious affair" ...

Green again:

"I went the other day to visit a kindergarten near Peihai Park ... My hostess, Miss Chaing, was the teacher in charge. She sat very trim and neat in blue skirt and rose coloured blouse. Rather correct, like school teachers all over the world. Her voice was gentle, but I suspected this concealed a very determined and efficient nature. The room we sat in was full of sunlight and we could hear the children playing outside. "Our children" Miss Chaing said "when they grow up will take their place in their country's work - they will be children trained in Communist ideals. They will love labor, they will respect people".

"How can you teach the proletarian politics at four" I inquired. "The principles of the education of children" said Miss Chaing, "are expressed in five loves, 1. love of the motherland. 2. love for people. 3. Love of work. 4. love for knowledge. 5. respect for public property"

"How" I began.

"These principles" Miss Chaing continued, "are taught according to age levels, in conversation, songs, nursery rhymes, art and games".

There is a chapter in Felix Greene's book titled "The Chinese Case". It runs to 28 pages. I suspect it was given to Green Officially with the request that he may like to include it in his book ... He did! The chapter is an indictment of the foreign policy of the ruling class in the United States. I will quote the last two paragraphs:

"In China we are extremely poor compared to you, but we are enjoying life. We are enjoying ourselves as we have never enjoyed ourselves before! We work hard, perhaps too hard, We get tired, we don't have much to eat, though no one starves and when we have bad harvests we get even less - but we are as excited as school children. And we are busy - as your pioneers were busy - not making money, but building colleges and schools, and hospitals. We volunteer at week ends and holidays by the thousands to help farmers make dams, and bridges, and new irrigation ditches. We are learning something new every day; millions of us are learning to read and write for the first time in our lives. We are studying to be doctors, and physicists, and geologists, and engineers and dancers and poets.

We are the oldest country in the world, but we are much younger than you are. We are like you when you started America, still able to thrill to new ideas, and we are not alone. We feel that we are moving with history. Africa is waking up, Latin America is waking up, Asia is waking up - and we are all working harder and with greater zest than we have ever done before. But you do not thrill any more you Americans! What new horizons motivate your children? And how will history judge between us? We who are trying to bring health and education, and morality and cleanliness and joy to our old country - and you who stand on the side lines and sneer?

We have never been told the truth about Red China. All we have had per the media is drivel, the product of our Rulers who are scared they may be engulfed in a situation where people would take over the process of Government and destroy forever the smug money making machine of the western world for the few, and degrades people to the lowest level of misery and poverty!

With the few brief extracts from the Communists re-building of China, it shows to an unbelievable extent the will power and the dedication that will be required to re-structure the economy of our nation to bring about self fulfillment and the wonderful purpose of living on a planet which is here for our use - not our abuse!

We are on the threshold of a new Reformation! Are we big enough to carry it forward?

While my admiration is for the Chinese system, it could not be setup here, it simply wouldn't work, we are a different people. However, the basis for any worthwhile reform must be socialistic. The present system of conglomerates controlled by a few people working for their own power and riches while millions of people barely exist is not acceptable.

The move towards a socialist economy must be gradual otherwise such a reform would be destroyed before it took root. The mood of the electorate at the present time is ready for change, the ingredient that is missing is positive leadership. Leadership that,, will carry the people, that will expose the myths of the present froth and bubble economy, of democracy which the media never tires of trying to ram down our throats, myths that have been exposed in earlier pages of this book.

In the long term socialisation of our economy, all public utilities should be owned by the State where the cost of maintenance and updating would be borne by the State, where for example new sources of better and cheaper power would not be inhibited by private enterprise as at present. There would be plenty of room for private enterprise, but certainly not on the scale of present conglomerates. In all industry there must be worker participation at all levels, i.e. the workplace, management and profit. At present markets for all goods are saturated, a fact which the present economic structure ignores. Therefore all production would need to be rationalised, and our own industries protected from cheap international competition. The chief aim of a stable economy must be to produce ample goods for our own use and to see that these are distributed equitably to all those who who need them. If cost of living in money terms is higher in our country what does it matter? What does matter is that everyone gets a reasonable share of the pie. The skinflint present economy of maintaining a million unemployed in our efforts to produce cheaper goods for export to countries who are able to produce their own doesn't make sense!

Education would have top priority in any reformed economy. It seems to me that Miss Chaing's philosophy of the five loves would be a sound base from which to work and in two or three decades we could expect to lift considerably the literacy in the electorates.

Greater emphasis must be given to scientific research for both health reasons and for an improved lifestyle. As spare time increased it should be directed towards the Arts in their many forms, this helps to develop latent talent and expression in people of all ages.

The one thing we have to do to progress is to talk and talk and talk just as the Chinese do. Such talks to include everyone from grandparents to kindergarten level. If we don't know what is in peoples minds how can we plan a society where everyone will fit in?

22. A New Start for a Frustrated Society

Given the trough of economic depression into which our country has been plunged in the last decade, is there any hope of restoring confidence in the community and some measure of prosperity for the Nation? The answer is YES, IF industry and finance concede the need for the Federal Government to begin spending to restore the structures of our society, such as Transport, Education, Health and so on. These have been allowed to deteriorate to an unacceptably low level where neither Government or Private enterprise can function efficiently. Industry and finance are not interested in restoring such structures because there is little or no financial return. They have to be in place, be well maintained and be up to date before private enterprise can operate efficiently and profitably. Until this happens there is no tax base for the Government to do such work.

In our contemporary society where literacy has improved greatly on what it was one hundred years ago there is need for greater co-operation between industry and finance on the one hand and workers and community on the other. There are numerous industries throughout the country where this co-operation is recognised - the workers have some input into management and receive a bonus from profits. This approach makes for a much smoother existence between the four groups mentioned above. However, such examples are all too few. Mostly management and workers exist in a climate of continuous confrontation, which takes its toll in reduced profits, reduced wages, and stress which takes its toll on both workers and management. In such cases one wonders if either side will ever see the light.

As previously noted, Jack Lang when Premier of N.S.W. in the 1929 - 1931 depression would not reduce wages as other States had done, he reasoned that the workers had to maintain their spending power otherwise the whole economy would grind to a halt. Likewise, Franklin D. Roosevelt, when he was elected President of the United States, spent billions of dollars getting the economy of that country back on track in the same depression. From these two examples there is no alternative, but for the Government to begin spending to restore some sanity in our economic structure. I consider the present depression to be worse than that of the 30s. There are far more bankruptcies now in both business and rural industries. For a capitalist economy to operate efficiently there must be an even flow of money circulating all the time this is not happening and never has in my time.

With economic depressions, both major and minor, over the last century the community at large is becoming increasingly frustrated with the manipulation of markets by industrial and financial institutions, and if these people want to continue to operate a capitalist economy they need to get their act in order otherwise they may be frozen out by the introduction of a socialist form of government. We can do without these financial and industrial conglomerates, they are not at all essential for good democratic government, but they can't do without us!

Two or three years ago private enterprise proposed to build a high speed rail link between Melbourne, Canberra and Sydney. After two years of investigation it seems that the idea has been abandoned because it would not be viable and this would be because the vision was too narrow.

A suggestion for an alternative VFT (AVFT) project is appended. The futuristic appeal is much greater because it would lay the foundation for national development for many decades to come. It would be a community project, built, owned and serviced by our own people. Because of this returns would not need to be as high as for private enterprise. Main community benefits would come from increased taxes generated by greatly increased productivity.

The main benefit would be that it would open up about 4000 kilometres of the south east and east coast of the continent for further development and allow for the spread of population especially from the two main cities Melbourne and Sydney where transport has created massive problems.

The rail link itself would be ineffective because it would need supporting projects. These would include a parallel free way, greatly increased power supply, an ample water supply and the restoration of all degraded farming and grazing land. In other words the project would be a complete package. No single item could be left out without greatly reducing the effectiveness of the whole scheme. Once in place it would create ideal conditions for private enterprise to operate.

ALTERNATIVE TO VERY FAST TRAIN PROJECT SUMMARY

THE PROBLEM: A chaotic Transport System.

Thousands of people killed and maimed each year on

horse and buggy roads.

THE SOLUTION: Attached Rail, Road, Gas, and land use plan.

LABOR FOR THE PROJECT: Basically unemployed.

MONEY FOR THE PROJECT: A. \$3.1 billion paid to unemployed last year.

B. \$1 to \$1½ billion from revenue.

C. Balance to \$5 billion recycled from above due to

broader tax base.

D. Billions of dollars accumulating in superannuation

funds.

The above shouldn't present any problems to any Government. Everything is there. \$5 billion per year for 20 years to complete. Let's use people's savings to create visible assets.

Anything less would be a patched up job, and at the end of 20 years we would still be patching

Unemployed figures & costs given by Keating in AGE 22/2/90. On such a project there would be economies of scale, possibly half the cost of same work at present.

The whole project would be owned and financed by Australians. A number of benefits would accrue:

- 1. Unemployment would be drastically reduced.
- 2. It would provide the opportunity to streamline government Departments which can't be done now. It would increase unemployment [employment?].
- 3. It would give the opportunity to spread population.
- 4. Much more primary production could be processed here.
- 5. All heavy freight would be transferred from truck to rail.
- 6. Gas from the N.W. shelf would be piped to population centres.
- 7. All degraded land in the farming and grazing areas would be restored.

The original Very Fast Train idea seemed to be a project of vision, something which is lacking in present day politics. A brief perusal shows that it lacks viability. The resource base of moving people quickly between Melbourne, Canberra and Sydney was not strong enough to justify the expenditure of so much money. The proponents admitted that a major portion of profit would have to come from real estate along the way. More of the present economic strategy? It is not a sound business ethic to depend on side lines for a major portion of profit.

A better idea would be to link Adelaide, Melbourne, Canberra, Sydney, Brisbane and Cairns with an upgraded railway to carry fast passenger, fast goods and heavy goods and supplemented with a 4 lane freeway with no speed limit. This would open up about 4000 Ks of the S.E. and East coast of the continent for further development. Such a project would allow for the establishment of new towns/cities, or the upgrading of present ones. They would need to be planned to suit the contemporary needs of society. The project would allow for the spread of population instead of being crammed into the capital cities as at present. There would be room for a modest increase in population without creating more environmental problems.

The project MUST NOT BE A FREE-FOR-ALL FOR THE DEVELOPERS, which means a peg on real estate prices. The whole project must be viable. Road, and Rail corridors are there, some may need re-routing. The resource base for the project would be all the farming and grazing land in the S.E. and east of the continent, plus the products of Forestry, Mining and fishing, plus the movement of goods, produce and people between centres.

Perhaps the opportunity to spread population would be the most important gain from the whole project. With the spreading of population, the changes in urban lifestyle which we all want to see could be much easier achieved than in a sprawling megalopolis. With a highly efficient transport system industries and business headquarters can be encouraged to move away from congested cities either to smaller towns or to establish new ones. All the social structures can be built around them without congestion. The centralising of high rise froth and bubble in the main cities has been the cause of most of our social problems. We know what is wrong but are too apathetic to make the change.

The impact of the VFT on travel is not at first apparent, but if we consider the journey Melbourne - Wodonga, about 180 miles, would take less than one hour allowing two or three stops. Compare this with a journey from, say, Dandenong-Melbourne about 20 miles and about an hour in the train, much longer by road. Plenty of people travel this distance to work daily. From this one can easily see the impact fast train travel would have on transport.

The Whitlam Government intended to create a greater population centre at Wodonga and acquired substantial areas of land for the purpose. This Government was sacked before it could do much, and a report in the press recently said that the last of the land had been sold back to private Ownership!

Processing of primary production

With ample supplies of power and water much of our primary production could be processed here instead of being sent overseas. If wool, for example, was scoured here its weight would be halved, with a corresponding reduction in overseas freight. But need it stop there? It could be spun into yarn, fabric, even clothing for export. Grains could be processed here, and much of our once manufacturing industries, destroyed over the last decade by deregulation, could be restored.

Freight – road to rail

It is difficult to justify heavy road transport when one train with one locomotive, possibly two, and two personnel can move 2000 tons of freight on one load. The same load would require 100 heavy transports, 100 drivers and all the infrastructure needed to keep these units on the road. The proliferation of heavy transports has meant the construction of heavy duty roads, plus a heavy maintenance commitment, which would not otherwise be needed!

In recent times more heavy transports are becoming involved in road accidents with loss of life, chemical spills with occasional fires and disruption to traffic. The excessive stress to which transport drivers are subjected would be the cause of most accidents.

Additional power

The project would need additional power. This could be provided by piping the gas from the N.W. shelf and linking with reserves in Central Australia. In all, a supply that would last many decades. It could be used to generate electric power if needed.

Water – irrigation – land degradation

In the past farmers and graziers have assumed the prerogative of determining land use without having any qualifying expertise to justify that approach. With land degradation increasing at an alarming rate due to bad land management practices, and in spite of greatly improved land care knowledge these people still persist with this anachronism.

All population centres, old and new, require an ample supply of unpolluted fresh water. Because of bad environmental management in the past such a supply of fresh water is very difficult to obtain anywhere in the country. Perhaps the Murray Darling basin is the worst effected.

There are two major problems keeping the farming community on the bread line, both date from early settlement and both are still relevant today. The first is the strange quirk that the farmers must produce an abundance of food and fibre for the "Old Country", the second was the failure of early planners to see that each settler had enough land to be a viable farming proposition. Both led to the degradation of the soil and both led to the over use and wastage of water.

In the late 20s farmers in the Deniliquin, Finley, Berrigan districts were pressuring governments for irrigation. The approach was: if we only had enough water to grow 30 or 40 acres of lucerne it would be good drought insurance. The Hume dam was built, a weir built across the Murray at Yarrawonga and the Mulwala canal started towards the three centres mentioned, and the first water was available about 1939. As the scheme progressively advanced, instead of 30 or 40 acres many farmers were plowing up and laying out for irrigation almost the whole of their farms, 600 acres and more! The tap was turned on and no government has dared to even slow it down! In a few years a multiplicity of schemes were laid out along the Murrumbidgee and on both sides of the Murray!

Planners failed to confine the scope of the irrigation areas to the amount of water available. They failed to take into consideration the fact that all the areas were within the confines of ancient seas which left extensive gravel deposits as they dried up. When distribution channels were planned they were drawn in the plans as straight lines in the office, and where the channels, even the main channel, crossed these gravel beds they were not sealed!

Water first came to our property near Deniliquin in 1941 and over the next two years 150 acres was laid out for irrigation. With water we changed from mixed farming, wheat and sheep, to dairying, and found that the 150 acres of irrigation along with the dry portion of the farm was barely a viable proposition. Total area of the farm was only 420 acres. Part of the irrigated area took in a box flat, heavy grey soil which opens to big cracks when dry in the summer time. This area always took 10 inches of water for the first watering in the autumn. If it could have been applied by spray instead of flooding two inches would have been enough. At first watering the red loam took six inches. Subsequent waterings took a minimum of three inches on both soil types. Clearly a gross waste of water! I could see water problems ahead so moved to Portland with a 32 inch rainfall, in 1951.

On the Portland property we discovered an underground aquifer which gave ample water for the potato crop, around 40 acres. In this case the water was applied by spray and any quantity of water could be applied, and the crop was watered as needed. With flood irrigation there was no control. The ground had to be filled before the flow moved on.

With nine years' experience with flood irrigation and, up to now, nine years experience with spray irrigation one is in a good position to evaluate the two systems. Spray application would only use one third of the water needed for flood application. Add to this the normal wastage in the channel system, evaporation and seepage, remembering flood watering is carried out mostly in the warmer to hot months of the year when evaporation is at its highest, then add the enormous seepage wastage where the channels cross the gravel beds and the wastage of water in the irrigation areas, mostly in the Murray and Murrumbidgee valleys, and the wastage of water becomes astronomical! The substitution of spray application in place of flood application would result in the loss of little, if any, production.

Also, where flood application flushes off surplus fertilisers and chemicals used in the production of crops and pastures into the drainage system and eventually into the rivers, such hazards would be greatly minimised, if not eliminated, with spray application.

An article in the Magazine 21c winter/spring 1991 quotes the Murray Darling Basin Council as saying that the losses due to land degradation in the cropping and irrigation areas amounts to \$220 million annually. Also in the same article a graph shows the amount of water used for various purposes as follows: Irrigation 74%, Domestic 10%, other rural uses 8%, Commercial and industrial 7%, other 1%. Source of this information is given as "State of the environment in Australia 1985".

The old country vs city wrangle over water supply, which first surfaced in Henry Bolte's day, has surfaced again and was reported in "The AGE" 11/10/91 and is attached (p. 246).

FROM THE FOREGOING INFORMATION THE CASE FOR A PIPED WATER SUPPLY FROM THE MAIN STORAGE DAMS TO THE IRRIGATION AREAS AND APPLIED BY SPRAY, AND THE MOVING OF URBAN POPULATION NEARER TO THE SOURCES OF WATER TO ELIMINATE THE LOOMING BATTLE COUNTRY AND CITY OVER WATER SUPPLIES, IS IRREFUTABLE.

The driest continent on the planet cannot afford the luxury of wasting so much precious fresh water.

Seeing that the whole community would benefit from a re-vamped irrigation system, i.e. a piped supply with spray application, the cost of the change over would be a charge against the total cost of the project.

Four lane freeway

A four lane freeway with no speed limit would complement the VFT by providing independent means of transport. It would allow cars to travel at higher speeds than now and take advantage of modern technology. Which can't be done now because of horse and

buggy roads. Where the freeway could run parallel to the permanent way it would reduce costs. This is an option to be considered or modified.

Finance

This has been set out on page 241. Two further comments could be made under this heading:

"No Government can govern a country unless it controls the finances of that country." And:

"All wealth comes from the natural environment. A well managed environment increases production, and as production increases so does the value of the asset, and at the same time so do the incomes and contentment of the community."

Restoration of degraded land

Teams of land care people with the necessary expertise would be set up to remove this problem. They would work in close co-operation with the land holder. As in the case of irrigation, the whole community would benefit from the exercise, therefore the cost would be a charge against the total cost of the project. In this way the work would proceed until completed, not piecemeal as now. Land holders would be required to follow certain guidelines so the problem would not recur.

Battles over water will split state. savs Crabb it stat

By ROBYN DIXON. state political reporter

Victoria will face water wars between different parts of the state in 35 years if water use con-tinues at its present pace, according to the Minister for Conservation and Environment, Mr Crabb.

He said Victoria would run out of new water sources in 35 years unless the state developed a new approach to water supply and use.

Mr Crabb repudiated "Bolte's divide", a 1964 pledge by the for-mer Premier that not a single drop of water would cross from the north of the Great Dividing Range to the south to supplement Mel-

bourne's water supply.
"Bolte's divide has cost Victoria hundreds of millions of dollars to date in extra costs. Socially, it has divided country people from city folk for nearly three decades. It is time to bury this divide and work towards our common future.

Mr Crabb called for a new era of water trading between regional water authorities to extend the state's water resources and avert

the need for huge new dams.
"Water wars, which are now everyday news in America's west. will be our children's legacy if we fail in this task," Mr Crabb said. Some arid states in the United States have already run out of new water sources, leading to conflicts over water between states and regions.

Mr Crabb released a paper on 'The Next 100 Years' of water management in the state. He said water demand was growing by two per cent a year.

The financial, social and environmental costs of going this way are enormous. Probably close to \$60 billion in the cost of building new dams alone," he said.

Mr Crabb said one option being looked at was water trading, which would allow irrigators in the north of the state to sell their water. If urban communities, including Melbourne could buy water from them, irrigation communities could make tens of millions of dollars by selling water, according to

He said people's tendency to waste water depended on what price they were charged for it.

Nearly 80 per cent of the state's water is used in irrigation, mainly in northern Victoria. Farmers pay \$15 a megalitre for water, and more than 30 per cent is wasted.

Urban communities use 16 per cent of state water. In Melbourne water costs \$570 a megalitre — the cost of providing water is fully recovered from city people. The wastage rate is 10 per cent.

'The value which people place on water has a major influence on how they use it or abuse it. Therefore, it is not surprising that the amount of water that goes lost or unaccounted for in the northern irrigation areas each year equals twice Melbourne's annual consumption." Mr Crabb said.

He said that only two or three per cent of irrigators' water would need to be sold to Melbourne in the next 20 years to satisfy the growth in its demand for w The water trading would irrigators got proper price : about the value of water "v the personal pain of very rises in water costs, not to m

the political pain", Mr Crab "In the interconnected system of the future, water oecome a commodity to be and sold like any other nable goods," Mr Crabb said

A second option being exa would ensure that new dam built only if consumers pa full price for water, includ development cost. Under t ond option, water would be ed from northern Victoria to meet t bourne water demand.

Water storages would be northern Victoria to maint gation supplies. Mr Crabb : cost would be about \$7 bi the next 50 to 100 years.

Mr Crabb is seeking re to the proposals by the en year.

Minister Crabb's proposal to buy water from the irrigation farmers to boost Melbourne's water aupply is a preposterous one. It would concede ownership of Victoria's Precious water to the irrigation farmers! Victoria's water belong all the people of Victoria. Irrigation farmers use 74% of all fresh water use and two thirds of that is wasted! That is where the problem should be solv cut out wastage. A suggestion on how to go about this is outlined in this paper.

It's time we came down to earth on the way we use irrigation water. Why shou the driest continent on the planet be required to waste it's most precious resource - water, in growing food for export to countries well able to look after themselves?

Working with the natural environment mostly involved work on two farms. In the course of this work it has been shown that we can use the natural environment for our purposes without completely destroying it or the creatures therein, in fact we can enjoy the company of those creatures to our mutual benefit.

Old faces and places re-visited records a bit of nostalgia 50 or 60 years on.

The fumbling attempts of modern mud brick buffs to use this ageless material to build modern homes has prompted the inclusion of "The Art of Mud Brick work". This records our methods in the 30s of this century and the durability of this work is evaluated 50 and 60 years on in "Old faces and Places re-visited".

Working for the natural environment records the work of a group of people concerned about the massive destruction of the environment in their area. This is recorded in "Fire in the Australian Environment", and an "Outline of Conservation work in South West Victoria"

A brief outline is given of the muddle-headed attempts by Politicians, Engineers and Administrators over a period of 60 or 70 years in their efforts to establish irrigation in the Riverina and Northern Victoria, in "Our most Valuable Resource - Water".

PART II, "Looking at Australia", first records the enormous damage to the Arid Zone environment by sheep and cattlemen by over stocking in their attempts to remain viable by beating the recurring droughts in this country which are a part of the normal climatic cycle.

Secondly, an attempt is made to describe the outstanding geological features and the colouring in the ancient land of Central Australia.

PART III. A Layman's economics looks at farm economic and political problems which beset one of our most important industries. "More about Economics" shows the feeble attempts by the Federal Parliament to maintain a sound national economic policy. "Democracy" exposes the great myth of democratic government in this country, and "The evolution of Church/Labour Politics" is self explanatory.

PART IV, "Some Thoughts on Religion" exposes the deviousness of Religious Hierarchies, their intrusions into temporal affairs, especially Politics, and the effect on hindering the progress of the society of Man.

Part V, updates degrading environmental events from the late 80s to the end of 1992. A suggestion is put forward for a Very Fast Train Alternative as part of a package which would lift the country out of depression and give us a base for a sound economical future.

Finally, from the foregoing information, we are perhaps the most degenerate race of humans ever to have inhabited the planet. We do not deserve to inhabit the beautiful blue planet Earth, as seen from space.

What now?

Lobsang Rampa, whom I believe to be the most recent extra terrestrial missionary to have worked on our planet, gives the answer:

From 1980 on, natural disasters will increase in number and intensity and around the end of the century, probably about midyear 1999, there will be a major geological upheaval. The planet will tip on its axis and there will be a re-arrangement of land and sea. Climate will change. The east and west coasts of the United States will be inundated. The St.Lawrence River will reverse its flow, water will build up at Chicago and then cut a channel down the Mississippi valley to the gulf of Mexico. South America will be cut in two by a narrow channel and link the Pacific and Atlantic oceans.

The Mediterranean sea bed will rise and reveal buildings of a lost civilisation. Japan will be drowned, probably slide into the deep sea trench which parallels the east coast.

The church that we know will disintegrate. There will be a new Religion and a new Leader. The new Leader is already here, somewhere in the Middle East.

About the year 2008 people from space will land here to settle. This will obviously be another attempt by the Gardeners of the Earth to upgrade the human race to a more caring and sharing society, something the Gardeners have been trying to do for thousands of years. The newcomers will intermarry with the remnants of our civilisation.

This will be the beginning of the Golden Age for our planet.

Eventually, with the intermarrying of all coloured races all people will be a light tan in colour and be known as the race of tan. The Golden Age will last for 200 to 300,000 years, when Earth will start its downward evolution to eventually become a dead planet. In time it could be sucked in to a Black Hole and blown out again as a ball of flaming gas to begin all over again the cycle of Birth, Growth, Death and Decay ...

References

References 1: environmental

A LONG JOURNEY THROUGH LIFE BEGINNING 2/3/1908.

EXTENSIVE TRAVEL THROUGHOUT OUR CONTINENT BETWEEN 1965 &1980. Apart from my own personal experiences, background information in this book is taken from the appended lists of Publications.

TITLE	AUTHOR	PUBLISHER	DATE
THE LAST OF LANDS.	Edited by Webb, Whitelock, Brereton.	Jacaranda Press, Milton, O'land.	1969.
AUSTRALIA,WET OR DRY.	B.R.DAVIDSON.	Walstead Press. N.S.W.	1969.
PEOPLE.	WM. VOGT,	Wm Clowes Ltd . London.	1960
LIMITS TO GROWTH.	MEADOWS, SANDERS, BEHRENS.	Pan Books Ltd. London.	1972
THE POPULATION BOMB.	PAUL ERLICH.	Pan Books Ltd. London.	1956.
CHEMICAL & BIOLOGICAL WARFARE.	HERSH.	MacGibbon & Kee Ltd. ?	1968.
THE ENVIRONMENTAL CRISIS. HELFRICH.		Yale University.	1970
SILENT SPRING.	Rachael Carson.	Hamish Hamilton. London.	1968.
SINCE SILENT SPRING.	Graham.	Hamish Hamilton. London.	1970.
A DIFFERENT KIND OF COUNTRY.	Dasman.	The MacMillan Co. New York.	1968.
THE AUSTRALIAN ENVIRONMENT. CSIRO.		Dominion Press Melbourne University.1949.	

NATURE CONSERVATION IN VICTORIA.	FRANKENBERG.	Vic. National Parks Association	?
FLYING FOX & DRIFTING SAND.	FRANCIS RATCLIFFE.	Angus & Robertson Sydney.	1947.
THE NORTHERN MYTH.	B.R.DAVIDSON.	The Griffin press Adelaide.	1965.
THE MENACE OF ATOMIC ENERGY.	NADER, ABBOT.	W.W. NORTON U.S.A.	1977.
THE GREAT EXTERMINATION.	JOCK MARSHALL.	WM Heinman. London.	1966.
THE ENVIRONMENTAL REVOLUTION.	NICHOLSON.	Hodder & Staughtor London.	า 1970
CONSERVATION.	ED.BY A.B. COSTIN.	Penguin Books Ltd.	1971.
THE STRUGGLE FOR THE NORTH.	J.H. KELLY	Aust. Book Soc. Sydney.	1966.
THE NUCLEAR BARONS.	PINGLE & SPIGLEMAN.	Michael Joseph London.	1982
RACE TO THE FINISH	MURPHY.	John Murray Publishers London.	1981.
THE FIGHT FOR THE FORESTS.	R & V ROUTLEY.	Research School Of Soc. Science, Canberra	1973.
MANAGEMENT OF AUST. RANGELANDS	CSIRO.	CSIRO	1984.
CONTINENT IN CRISIS.	DAVID SMITH.	Penguin Books Vic.	1990.
AUST ECOSYSTEMS.	ED. SAUNDERS, HOW, HOPKINS.	Surrey Beatie & Sons. NSW.	1990.
REPORT TO MINISTER FOR ENVIRONMENT.	FORESTS COMMISSION	VICTORIA.	1982

References II. Economic-political

GREAT BUSINESS DISASTERS.	Ed. Isadore Barmash.	Balantine Books. N.Y.	1972.
THE TRUTH OF THE MATTER.	GOUGH WHITLAM.	Penguin Books.	1979.
DEATH OF THE LUCKY COUNTRY.	DONALD HORNE.	Penguin Books	1976.
OIL IN TROUBLED WATERS.	JIM CAIRNS.	Widescope int- -ernational.	1976.
THE THIRD WAVE.	ABE DAVID TED WHEELRIGHT.	Left Book Club Co	1989.
SECRECY.	JIM SPIGELMAN	Angus & Robertson.	1972.
THE HILLBILLY DICTATOR.	EVAN WHITTON.	ABC Enterprises.	1989.
A SECRET COUNTRY.	JOHN PILGER	Jonathan Cape,Lond	lon. 1989.
The controllers.	HYLDA ROLFE.	Cheshire Publishing	Co. 1967.
Big business in AUSTRALIA.	AUS.INST.OF SCEINCE.	Angus & Robertson.	1970.
AN AMERICAN EXPERIENC	E. ALLAN ASHBOLT.	Victor Collancz London.	1966.
BLEEDING EARTH.	ALISTER BRASS.	Wm Hieneman Lond	don. 1968.
TWO WAY PASSAGE.	RICHIE CALDER.	Wm Hieneman Lond	don. 1964.
THE CORRUPTED LAND.	FRED COOK.	Lowe & Brydone Lo	ndon. 1967.
A CURTAIN OF IGNORANCE	E. FELIX GREENE.	Powe & Brydone Ld	n. 1965.
GREAT AUST. TAKEOVER BOOK. GORDON McCARTHY	У .	Angus & Robertson.	1973.
A CERTAIN GRANDEUR.	GRAHAM FREUDENBEI	RG. McMillan.	1977.
I REMEMBER.	J.T. LANG.		

THE GREAT BUST. J.T. LANG.

AUSTRALIAN GEOFFREY SAWER. 1977.

GOVERNMENT TODAY

LIVING 'WITH ASIA. J.F. CAIRNS. Landsdowne Press. 1965.

AFTERNOON LIGHT. R.G, MENZIES. Cassell Aust. P/l. 1967.

AUTOBIOGRAPHY. CHARLES CHAPLIN. Bodley Head London. 1964.

EVATT. ALLAN DALZIEL. Landsdowne Press Melb. 1967

LOOKING AT THE ED. RAY ATCHISON. Cheshire Publishing. 1974.

LIBERALS.

AUSTRALIA & WORLD CROUCH WHEELRIGHT Penguin Books. 1980.

CAPITALISM. WILTSHIRE.

THE WALL HAS TWO FELIX GREENE. Jonathan Cape London. 1964.

SIDES.

References III. Religion

THE HERMIT.	LOBSANG RAMPA.	Corgi.	1971.	
THE THIRD EYE.	LOBSANG RAMPA	Corgi.	1958.	
DOCTOR FROM LHASA.	LOBSANG RAMPA.	Corgi,	1960.	
THE RAMPA STORY.	LOBSANG RAMPA.	Corgi.	1962.	
CAVE OF THE ANCIENTS.	LOBSANG RAMPA.	Corgi.	1963.	
LIVING WITH THE LAMA.	LOBSANG RAMPA.	Corgi.	1964.	
WISDOM OF THE ANCIENTS.	. LOBSANG RAMPA.	Corgi.	1965.	
THE SAFFRON ROBE.	LOBSANG RAMPA.	Corgi.	1966.	
CHAPTERS OF LIFE.	LOBSANG RAMPA.	Corgi.	1967.	
BEYOND THE TENTH.	LOBSANG RAMPA.	Corgi.	1969.	
THE THIRTEENTH CANDLE.	LOBSANG RAMPA.	Corgi.	1972.	
TWILIGHT.	LOBSANG RAMPA.	Corgi.	1975.	
THREE LIVES.	LOBSANG RAMPA.	Corgi.	1977.	
I BELIEVE.	LOBSANG RAMPA.	Corgi.	1977.	
TIBETAN SAGE.	LOBSANG RAMPA.	Corgi.		
YOU FOREVER.	LOBSANG RAMPA.	S.Weiser, Maine.	1990.	
THE BIBLE.	VARIOUS.	King James version.		
ADVENTURE IN ARCHAEOLOGY. NATIONAL GEOGRAPHIC. U.S.A.				
GROUND WORK OF BRITISH HISTORY.	WARNER & MARTIN.	Blackie & son Ldn.	1920.	

BRITISH HISTORY. WARNER & MARTIN. Blackie & son Ldn. 1920.

WORLDS BEFORE OUR OWN. BRAD STEIGER. Berkley-Putnam 1978.

CATHOLIC ACTION &

POLITICS. TOM TRUMAN. Georgian house. Melb. 1959.

CATHOLIC Church &

freedom. DENIS KENY. University O'land Press. 1967.

POINT OF VIEW. B.A. SANTAMARIA. Hawthorn Press Melb. 1969.

QUESTION BOX. B.L. CONWAY. Gaulist Press. N.Y. 1903.

THE POLITICS OF NIALL BRENNAN. Hedges & Bell

CATHOLICS. Maryborough. Vic. 1972

THE BEGINNINGS OF Arrow Books,

RELIGION. E. 0. JAMES. (Hutchinsons) London. 1958.

THE ROSWELL INCIDENT. CHARLES BERLITZ. Granada Publishing

London. 1980.

THE BERMUDA TRIANGLE. ADI-KENT, Howard & Wyndham,

THOMAS JEFFREY. London. 1975.

GOLD OF THE GODS. ERIC VON DANIKEN. Souvenir Press. Ldn. 1973.

MIRACLES OF THE GODS. VON DANIKEN. Souvenir Press London. 1975

CHARIOTS OF THE GODS. VON DANIKEN Souvenir Press London. 1969

RETURN TO THE STARS. VON DANIKEN. Souvenir Press London. 1970

WHY I AM NOT A CHRISTIAN. BERTRAND RUSSELL. Unwin Bros. Ltd. 1947.

THE PROPHECIES OF NOSTRADAMUS. Corgi. London. 1973.

THE BOOK OF MORMON. DAVID O. McKAY. Salt Lake City USA. 1963.

THE GREAT CONTROVERSY. ELLEN G. WHITE. Pacific Press

Assoc. California. 1911.

RECONCILIATION. J.H. RUTHERFORD. Watch tower & Bible Soc.1928

DELIVERANCE. J.H.RUTHERFORD. Watch Tower & Bible Society. 1926

RELIGION AND THE

RISE OF CAPITALISM. R.H. TAWNEY. Penguin Books Ltd. 1926.

CRUX ANSATA. H.G.WELLS. Free Citizens Press Sydney. About 1940?

BY WHAT AUTHORITY. T.(TED) NOFFS Eyre & Spottiswoode London.1979.

ETERNAL MAN. PAULWELS & BERGIER. Souvenir Press, Herts. 1972.

GOD DRIVES A FLYING

SAUCER. R.L. DIONE. Corgi Book London 1973.

SECRET OF THE

AGES. B. LE POER TRENCH. Granada Publishing ldn. 1976.

ANCIENT AUSTRALIA. CHARLES LASERON. Angus & Robertson Syd. 1954.

OUTLINE OF HISTORY. H.G. WELLS. The Waverly Book Co, London 1920.

CATHOLIC PAMPHLETS. VARIOUS.

THE SOCIALIST SIXTH OF THE WORLD. HEWLETT JOHNSON.

IN GOD'S NAME. DAVID YALLOP. Corgi. Jonathon Cape 1984.

LIGHT YEARS. GARY KINDER. Penguin Books London. 1987.

OUT ON A LIMB. SHIRLY MACLAINE. Bantam Books New York. 1983.