

Need for Reservations in Desert Settlement

RECORD OF PROCEEDINGS OF A CONFERENCE TO DISCUSS THE

NEED FOR CROWN RESERVATIONS

IN SCHEMES FOR THE DEVELOPMENT OF THE LITTLE AND BIG DESERTS

OF THE WIMMERA REGION

HELD AT LOWAN SHIRE OFFICE, NHILL ON 26TH AUGUST, 1964.

Address of Committee
c/- Shire Office,
HORSHAM.

WIMMERA REGIONAL COMMITTEE

NEED FOR RESERVATIONS IN DESERT SETTLEMENT

Copies of this Report have been distributed to the following Departments, Organizations and persons.

The Hon. J. C. M. Balfour, M.L.A.,
Minister of Lands and Minister of
Conservation
Lands Department, Melbourne
Horsham Lands Office
Forests Commission, Melbourne
Forests Commission, Horsham
Department of Agriculture, Melbourne
Department of Education, Melbourne
Department of Education, Horsham
Mines Department, Melbourne
State Rivers & Water Supply Commission,
Melbourne
Fisheries and Wild Life Department,
Melbourne
Soil Conservation Authority, Melbourne
Soil Conservation Authority, Horsham
National Parks Authority
Country Roads Board, Melbourne
Central Planning Authority
Other Regional Committees
Federal Department of National Development
Federal Department of Primary Industry
Municipalities in Region
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C.S.I. R.O.
A.M.P. Society
Apriarists Association
Bird Observers Club
Field Naturalists Club of Victoria
Kiata Lowan Sanctuary
Natural Resources Conservation League
Walpeup Research Station
V.W.W.G.A.

Native Plants Preservation Society
National Parks Association
Portland Field Naturalists Club
Royal Australian Ornithologists Union
Western Victorian Field Naturalists
Club - Mrs. Collins
Wimmera Field Naturalists Club
Australian Primary Producers Union
A. Coutts
A. Hicks
W. Middleton
C. R. Crouch
P. L. Williams
A. Warner
R. A. Wallis
C. A. Wallis
R. J. Mitchell
A. J. Williams
A. Grove Jones
E. L. Carland
I. Maroske
National Trust
Nhill Chamber of Commerce
Horsham Historical Society
Kaniva Historical Society
Wimmera Press and Radio
Professor A. J. Marshall
Claude Austin
Ern Peucker
Les Blake
Ian McCann
E. Jackson
D. McK. Shanks
R. Falla
R. Moody
Local Members of Parliament -
R. S. King, M.P.
Hon. Sir Percy Byrnes, M.L.C.
Hon. A. Mansell, M.L.C.
J. McCabe, M.L.A.
M. Whiting, M.L.A.
A. Coulthard
Dewar Goode
Members of Committee

*and C. Field's, who
gave 1 to 475*

REFERENCE SHEET

The areas proposed for reservation as shown on maps included at back of this publication are referred to on pages indicated below.

Proposal Number	Name	Area in Acres	Referred to on Pages Numbered
1	Kiata National Park (proposed)	18,000	7/10, 19, 26/7, 33.
2	Broughton's Water Hole (or Middle Dam)	12,500	7/8, 11/13.
3	Three Sisters	14,000	12, 15.
4	Red Bluff and Concertina Rocks	8,000	17/18.
5	The Crater	14,000	7/8, 12/14, 26.
6	Broken Bucket	11,000	7/8, 24, 42.
7	South Australian Border Reserve (part previously applied for by Forests Commission)	7,000	7/8, 37.

The mapping section of this Report was arranged by Mr. A. J. Pryor, Divisional Engineer of the Country Roads Board, Horsham and member of the Wimmera Regional Committee.

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1. FUNCTIONS OF THE WIMMERA REGIONAL COMMITTEE

The main functions of the Regional Committee are:-

1. to advise as to the potential development of resources within the Region,
2. to provide a common ground for discussion between local administrators and interested parties of problems and methods of co-ordinating public services within the Region,
3. to advise on outstanding problems, regional in character which require attention by executive authorities.

The Wimmera Region comprises the following municipalities, viz:-
City of Horsham, Town of Stawell, and the Shires of Arapiles, Dimboola, Donald, Dunmunkle, Kaniva, Lowan, Stawell, Warracknabeal and Wimmera.

2. MEMBERS OF WIMMERA REGIONAL COMMITTEE

Chairman Cr. C.P. WHELAN, B.D.Sc., L.D.S.

Municipal Representatives

CR. C. P. WHELAN, B.D.Sc., L.D.S., Dentist, Shire of Donald.
CR. J. C. GRANT, Farmer, Shire of Kaniva.
CR. R. A. LEVITZKE, J.P., Farmer, Shire of Wimmera.
CR. G. A. C. PERKINS, Farmer, Shire of Dimboola.
CR. C. T. DODDS, J.P., Farmer, Shire of Lowan.
CR. E. F. GERLACH, Merchant, City of Horsham.

Government Representatives

D. R. ROONEY, B.Agr.Sc., Agronomist, Department of Agriculture.
M. M. ROBSON, Monumental Mason, Stawell.
C. A. R. EVANS, B.E., E.W.S., Divisional Engineer, State Rivers and Water Supply Commission.
CR. M. BOURKE, Farmer, Sheep Hills.
CR. W. M. J. McNAMARA, J.P., Retired Police Inspector.
A. J. PRIOR, B.C.E., A.M.I.E. (Aust.), C.E., Divisional Engineers, Country Roads Board.

Secretary K. H. LOVETT, A.A.S.A., F.I.M.A., L.M.A., J.P.
Secretary, Shire of Wimmera, Horsham.

(The proceedings of this Conference were recorded by Miss R.G. Waldon, a member of the Staff of Wimmera Shire, Horsham who also acted as Assistant Secretary for the Conference.)

WIMMERA REGIONAL COMMITTEE

3. RECORD OF PROCEEDINGS OF A CONFERENCE TO DISCUSS THE
NEED FOR CROWN RESERVATIONS IN SCHEMES FOR THE DEVELOPMENT
OF THE LITTLE AND BIG DESERTS OF WIMMERA REGION
HELD AT THE LOWAN SHIRE OFFICE ON 26TH AUGUST, 1964
COMMENCING AT 2 P.M.

The Conference was convened by the Wimmera Regional Committee and attended by representatives of 32 Organizations and Departments as well as many local interested individuals. The members of the Wimmera Regional Committee acted as a co-ordinating authority by bringing all interested parties together into Conference to enable hitherto unrecorded information, to be placed on record for the guidance and use of authorities charged with the future development of the Desert areas of the Region.

Hereunder is a list of all Organizations and Departments represented at the Conference, together with the names of representatives and other persons present:-

Apiarists Association - A. Moore, W. Freeman, F.A. Murray,
W.L. Ramn.

Agriculture Department - D.R. Rooney, N.K. McSwain.

A.M.P. Society - N. Gowing, Stahl, D. Wilson, N. Allison.

Bird Observers' Club - W. Middleton.

Central Planning Authority - L. Fernando.

Country Roads Board - A.J. Pryor, A. Gawith, T. Bartlett.

Field Naturalists Club of Victoria - E.S. Hanks, A. Hicks.

Wild Life Department - D. Dunbavin Butcher.

Names of Representatives (Contd.)

Other residents from Kaniva area - C. Plummer, A. Coutts,
D. Coutts, G. Champness, P.L. Williams.
Other Residents from Nhill area - F.E. Bound.
H.C. Smale, Donald Shire Secretary.
Mrs. H.E. Bath, J. Barrance, Donald.
Mrs. Taylor, Bendigo
J. Meagher
G.S. Staples
R.G. Staples

Press representatives were present from Wimmera Mail-Times,
Nhill Free Press, Donald Times, Kaniva Times, and members of
the staff of the Australian Broadcasting Commission recorded
extracts from the meeting for use on future programmes.

4. EVENTS LEADING UP TO CONFERENCE

The Chairman (Cr. C.P. Whelan) in opening the Conference traced the events leading up to this Conference with the following remarks:-

"Members of the Committee have always been very conscious of the value of the Natural Resources of the Region and have spent some considerable time in directing public interest to the vital need for the conservation and wise use of these resources.

Last year a very successful Natural Resources Convention was held at Horsham with this object in view and also with the additional objective of endeavouring to combine local experience and knowledge with technical skill to develop the best practicable ways of conserving the basic resources of the Region. That convention dealt mainly with our water catchment areas. This meeting today will deal with the as yet undeveloped parts of the western half of our Region.

Without being critical of any Department, organization or any one person at all, the Committee has felt for sometime now that there is an urgent need for closer collaboration and discussion between local government authorities and the experts of the various interested Departments before land settlement schemes are allowed to commence. We are conscious of the need for more land settlement and this Committee has indeed given its full support to schemes of the past but now that we have had this experience we feel that a Conference such as this one we have convened today, should prove invaluable in safeguarding the remaining natural resources of the Region.

We understand the Government has before it at the present time an application from the A.M.P. Society for permission to open up for settlement an area of approximately 100,000 acres situated in the Little Desert south of Nhill. Of this 100,000 acres it is realized that only about 60,000 to 70,000 acres would be suitable for development. Crown Lands in the Little Desert originally totalled over 500,000 acres so right from the start we wish to emphasise that the proposed crown reservations which will be submitted for consideration today will only form a very small overall percentage.

One of our members has inspected land settlement schemes in Western Australia and this year he obtained from the Lands Minister a letter of policy of his Department indicating that approximately 20% is set apart in Western Australia for the purposes of reserves and roads in all new settlement areas.

The Committee would like to suggest that consideration should today be given to providing Reserves in the remaining uncleared areas of the Little and Big Deserts for:-

- (a) safeguarding areas of worthwhile timber, flora generally and fauna.
- (b) for scientific interest and research (Geology, Botany, Zoology etc.) and with a view to retaining large areas in their primitive condition for the guidance of posterity and to serve as yard-sticks in measuring development.
- (c) the bee-keeping industry.
- (d) camping, stopping places and tourists.
- (e) windbreaks.
- (f) agricultural research areas.

- (g) deposits of road making material and any other valuable minerals.
- (h) other public purposes including water supply and future schools, recreation grounds, public halls, treeplanting, reserves etc.

No doubt other reasons will be mentioned in evidence later on.

We would like to stress that we feel these areas should be earmarked ahead of land settlement schemes and the land excluded from the vast clearing programme which does quickly follow the approval of a scheme. It is too late to save these areas after they have been cleared. We would also like to point out that these areas should not necessarily be confined to land unsuitable for agriculture. All the reasons so far stated are today considered to be legitimate forms of land use.

We have arranged for the evidence tendered here today to be taped and a full transcript will be made available to all interested Departments and organizations through the Central Planning Authority. We hope that the views expressed today will stay on permanent record and that they will serve as a guide to all concerned in the future development of this part of the Region.

I now propose to call for the views of those present here today, using the following general order.

I intend to ask Mr. Middleton to open the proceedings because of his wide knowledge of the Desert areas. He will list a number of areas which local people consider should be withheld from land settlement. In this evidence Mr. Middleton will also cover the bird life of both Deserts.

Other speakers representing Organizations and Departments will follow. Any local interested persons who feel they have a contribution to make will also be given that opportunity later in the day and then finally I will invite the Lands Department Officers and the Minister to wind up the proceedings. The Lands Department is the Department which is charged with the responsibility of arranging Land Settlement Schemes and we hope that the report from this Meeting will be adopted for use by the officers concerned in future negotiations and discussions relating to this area."

5. AREAS PROPOSED FOR RESERVATION - DESCRIPTION OF THE BIRD LIFE OF THE LITTLE DESERT.

W. MIDDLETON, Officer in Charge, Wail Forest Nursery
(Mr. Middleton spoke in a private capacity as a local Field Naturalist.)

On behalf of the Wimmera field naturalists clubs and a large number of individuals who are concerned at the increasing destruction of our native fauna and flora I wish to submit a proposal that several areas in the Little and Big Deserts be withheld from alienation so that they can be left in their natural state for all time.

If no reservations are kept in these two areas we will lose a large number of unique and valuable plant and animal communities.

Development of land must go on and sound development is not opposed but in all land clearing schemes, large or small, we feel there should be at least 10% of the area left in its natural state for the preservation of native fauna and flora. Of course with the addition of special reserves for roads, timber etc. this percentage should be doubled.

The crown land area of the Little Desert has been reduced over the years from almost 500,000 acres to probably less than 300,000 acres today - we need something reserved before it is too late - but the percentage reserved should be based on the original area and not on the balance left today.

Reservations even if in potentially good agricultural country are a legitimate land use.

Their value must increase as time goes on and as the population increases.

In these so called "deserts" of this State we have complex plant and animal communities, peculiar to these areas, that have become adopted over many thousands of years to the semi-arid conditions and it is essential to have some large areas reserved if we are to have any hope of ensuring the survival of a number of species of plants and animals. The complete destruction of vegetation over wide areas in the Little and Big Deserts could have an effect on some migratory and nomadic bird populations. These birds, (at least 30 species in the Little Desert alone) require food while in the areas and those that remain temporarily to breed require nesting sites and territories - they need the native vegetation to obtain these things. Large areas are required for these birds to breed in safe numbers.

As the reserves will be used by many people in the future for scientific studies, recreation, tourism etc. they will have to be large enough to withstand some deterioration that is inevitable when people (particularly tourists) move in these areas.

They have to be large enough to buffer the effects of outside influences and large enough to be of value for scientific work on ecology, taxonomy etc.

Fire is a threat to the animal populations that inhabit these areas - particularly the small resident species. From observations I am quite convinced that there is almost complete mortality of bird species in severe fires in these "deserts". An example of this is the big desert fire in 1959. Immediately after this fire there was no apparent increase in the bird populations in the unburnt fringe areas that I inspected which indicates that most species were destroyed. In addition, the behaviour of birds during fires also supports this view.

In our selection of proposed reservations in the Little Desert we have chosen areas which contain features of special interest and which include as many different plant and animal communities as possible. They are a reasonable size to ensure the safety of most species and to allow movement of animals within each area. They are also fairly evenly distributed across the Little Desert.

Description of areas which I consider should be the subject of crown reservations.

These areas are Kiata 18,000 ac. +
(Application at present before Lands Department to have this area proclaimed a National Park)

Little Desert The Crater 14,000 ac. +
Broughton's Waterhole 12,500 ac. +
S.A. Border (Near areas required for forestry purposes) 9,000 ac. +

Big Desert Broken Bucket 11,000 ac. +

(Shown on map at end of this record of proceedings)

The four proposed Little Desert reservations each contain areas of most of the vegetation associations and their associated animal communities typical of the Little Desert. Thus the safety of animal species is reasonably sure because in the event of one area being destroyed (eg. fire) populations of animals could be re-established from the remaining areas.

Kiata has good Mallee Fowl habitat, but also the important Dwarf Scrub formation dominated by Banksia, Casuarina, Leptospermum and Xanthorrhoea which is the habitat essential for the survival of the two rare birds the Dark Thornbill and the Rufous Field Wren.

Other vegetation formations here are Shrub Woodland dominated by E. Leucoxylon - very good bird habitat. Shrub Woodland dominated by E. baxteri - occurs on the sandy soils Scrub - Melaleuca uncinata and Baeckea. Mallee - Eucalyptus viridis, E. Leptophylla, E. incrassata and Shrub Mallee which has the above Eucalyptus species with numerous shrubs - Good bird habitat.

"The Crater" area has two features of special interest. In the east there is the sandstone outcrop after which the area has been named. In the west there is an extensive depression supporting a Tall Woodland formation of Euc. Leucoxylon E. bicolor and with the addition of numerous interesting shrubs a Shrub Woodland. These woodlands are very good bird areas with some rare plants also occurring.

Other vegetation types in the area include Shrub Woodland with E. baxteri the dominant species and dense shrub layer of Banksia, Callitris, Hakea etc. Shrub Mallee with E. incrassata a shrub layer of Casuarina and Xanthorrhoea. A dense scrub formation near the crater has stunted E. baxteri the dominant species in addition there are numerous shrubs. The Dwarf Scrub formation typical of the Little Desert also is present. Two other Scrub formations occur one is dominantly Casuarina 10 feet high and the other Callistemon, Melaleuca spp, Hakea.

The floristics of the Crater area are of special interest.

Broughton's Waterhole has as one of its special features a permanent water supply around which are several vegetation types which are particularly good bird habitats. These are the Shrub Woodland dominated by E. leucoxylon; Shrub Woodland dominated by E. baxteri; Mallee with E. viridis, E. leptophylla, E. incrassata and these three species with the addition of several Melaleuca species form a Shrub Mallee formation.

The Dwarf Scrub also occurs here and some good wildflower areas in the vicinity of some interesting sandstone outcrops.

The South Australian border area is adjacent to some good quality *E. leucocylon* and *E. camaldulensis* forest required for forest purposes. This area would make a fine reservation for birds.

In the Big Desert it is considered essential that the small proposed reservation near the Broken Bucket Tank (permanent water) be connected to unalienated country to the east by a corridor at least one mile wide.

Notes on the birds of the Little Desert

I have recorded approximately 140 species in the Little Desert. 100+ of these would be adversely affected by clearing. 30+ species are migratory or nomadic and use the Little Desert vegetation to breed or as a source of food in passing.

Birds of special interest which have a restricted distribution in Victoria but are residents in the Little Desert and can be regularly observed there are:-

Mallee Fowl, Red Capped Robin, Gilbert Whistler, Crested Bellbird, Southern Scrub-robin, Grey Crowned Babbler, Red-tailed Thornbill, Chestnut-tailed Thornbill, Dark Thornbill and Rufous Field-wren both of these species are confined to the Dwarf Scrub vegetation of the Little Desert, Shy Ground-wren, Purple-backed Wren, Black Chinned Honeyeater, Tawny-crowned Honeyeater, White-fronted Honeyeater, Purple-gaped Honeyeater, Yellow Plumed Honeyeater and Black Winged Currawong.

The habitat of some of these birds is being destroyed by clearing throughout the north west of the state and large reserves are urgently required to ensure their survival.

A list of Birds found in the Little Desert is recorded in Appendix B attached to these proceedings.

In conclusion I would like to say that probably the most important people I represent today are those who are not here - the future generations. We must think of their claim and our approach in this matter of reserves should be a thoroughly unselfish one - after all what right have we got to completely destroy their heritage.

6. FLORA OF THE LITTLE DESERT

A. HICKS, Farmer of Kaniva.

In the whole of the Little Desert there would be close on 600 native species and a number of aliens. The area south of Kiata has quite a number of interesting species, particularly a pink *Boronia* which is known as *Boronia pilosa*. Also a wax plant (*Eriostemon verrucosus*) which is only found here in the Little Desert growing on the northern side, and also the Blue Tinsel lily (*Calcectasia cyanea*).

Further west is the Crater area, which is rather good for plants. We have noted just on 330 species there, and some of the plants growing there are quite rare. There is one in particular, a bush-pea, which is known as *Pultenaea vestita*, and in that area in the Little Desert is the only place in Victoria where it grows.

We were at Broughton's Waterhole only last week, and we found it growing there too. There are other plants growing there - the Gland Flower (*Adenanthos terminalis*), the Wiry Beard-heath (*Leucopogon Clelandii*); they grow in the Little Desert and also in the Big Desert. The Little Desert and the Big Desert are the only two localities in Victoria where these two plants can be found growing.

Further west in around the Broughton's Waterhole area which I have visited often it is quite a good area for plants.

In these three areas I think we can perhaps help to preserve most of the plants that can be found growing in the Little Desert.

It may be impossible to preserve them all but I think in these three areas we can perhaps help to preserve most of them.

A list of 671 species of Flora of the Little Desert compiled by local Botanists is attached to this record of proceedings at Appendix A.

7. KIATA NATIONAL PARK PROPOSAL

K. HATELY, Storekeeper of Kiata.

I am actually speaking on behalf of the Kiata Lowan Sanctuary Committee this afternoon and a lot of what I would like to tell you I'll have to leave out because the Regional Committee has already dealt with that and we have been trying to get the Sanctuary taken over by the National Parks Authority to be made a National Park, and to apply for an extension of 18,000 acres - it's not a big paddock really - on the south of the Sanctuary. The Sanctuary Committee have purchased a 6 chain lane connecting the Sanctuary up with this 18,000 acres of crown land, if it can become a National Park. When the Sanctuary was first formed in 1955 there weren't many Lowans just in the Sanctuary area itself. There were quite a few in the surrounding country around that, but that has all been cleared since. At the present time there is a very high density of Lowans in the Lowan Sanctuary. There have been numerous visitors there, in fact a lot of people go every weekend, and they have never disturbed the birds. The birds have increased and it has proved to us that you can keep the population of birds there even if visitors are allowed in. We were rather dubious about that at the commencement of the venture there. But it has turned out quite a success. Now, in the 18,000 acre area that we would like to get straight south of the Sanctuary there are also a few mallee hens mounds. The density there is not quite as great. There are over 60 pairs of birds, however, in the Sanctuary and the extended area. At the present time there are 30 pairs of birds in the Sanctuary area alone - 730 acres - and there are 14 mounds being worked and the possibility of another 2 or 3 being worked even now as the weather has been so wet. So that venture having been such a success we thought we would try and obtain this 18,000 acres and the area of the

proposal was prepared by the National Parks Authority. They went into it fairly thoroughly and I think that it is before the authorities at the present time. We feel quite sure of course it will be granted and the whole lot will become a National Park. As far as fire danger is concerned I don't think there is any more risk attached to this area than any other portion of the Desert. If it became a National Park adequate fire breaks could be provided. It is a strange thing that the only fires out there have been caused by lightning. In my experience of 30 years or more the fires have always been on land that has been leased. Lightning doesn't seem to strike anywhere else. Now we would very much like to see this go through. All the plants that are out there - Mr. Hicks has given you a few of them - well there is no doubt most of them are there and they are well and truly worth while preserving. In addition if the area is made a National Park it would be a great thing for the tourists. Later on when all the rest of the country is gone it would certainly be a wonderful monument to the pioneers of the Little Desert.

FAUNA OF THE DESERT AND PROPOSED RESERVE AT BROUGHTON'S WATER-HOLE

C. R. CROUCH of Kaniva.

(President of the Wimmera Field Naturalists Club)

(Evidence submitted on tape because Mr. Crouch was unable to attend personally)

My name is Clive Robertson Crouch, President of the Wimmera Field Naturalists Club.

A list of the Desert Fauna of the Wimmera is attached as Appendix B.

This list is one which I have compiled over the last five years and, being the work of an individual, the opinions expressed may not entirely be agreed upon by the majority of Field Naturalists.

Any of the fauna which I have listed as common, or rare, may, in any other parts of our State, be quite the opposite.

This list comprises of 19 native mammals, 24 reptiles, and 121 native birds, of which 8 mammals, 10 reptiles, and 40 birds are found, in our district, in the desert areas only.

Of these the 2 mammals, 3 reptiles, listed below are not likely to be found elsewhere in Victoria.

The Two Mammals referred to above -

THE SOUTH-WESTERN PIG-EE POSSUM - which is little bigger than a mouse and feeds upon nectar, and

THE MITCHELL'S BUFFING MOUSE - which grows to a height of about five inches, an extremely rare mammal - considered

think there is any more risk attached to this area than any other portion of the Desert. If it became a National Park adequate fire breaks could be provided. It is a strange thing that the only fires out there have been caused by lightning. In my experience of 30 years or more the fires have always been on land that has been leased. Lightning doesn't seem to strike anywhere else. Now we would very much like to see this go through. All the plants that are out there - Mr. Hicks has given you a few of them - well there is no doubt most of them are there and they are well and truly worth while preserving. In addition if the area is made a National Park it would be a great thing for the tourists. Later on when all the rest of the country is gone it would certainly be a wonderful monument to the pioneers of the Little Desert.

8. FAUNA OF THE DESERT AND PROPOSED RESERVE AT BROUGHTON'S WATER-HOLE

C. R. CROUCH of Kaniva.

(President of the Wimmera Field Naturalists Club)

(Evidence submitted on tape because Mr. Crouch was unable to attend personally)

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Of these the 2 mammals, 3 reptiles, listed below are not likely to be found elsewhere in Victoria.

The Two Mammals referred to above -

THE SOUTH-WESTERN PYGMY POSSUM - which is little bigger than a mouse and feeds upon nectar, and

THE MITCHELLS HOPPING MOUSE - which grows to a height of about five inches. An extremely rare mammal - considered to be extinct in 1918 but recently re-discovered in the Desert area in 1955 and again in 1958.

The Three Reptiles referred to above -

THE WESTERN BLUE-TONGUE LIZARD - which grows to about twelve inches in length.

THE DESERT COPPER-HEAD SNAKE and THE DESERT SNAKE - Very rare one - Both of these live in the Desert country and grow to a length of about eighteen inches.

I would recommend the area known as "Broughton's Waterhole" together with a large area surrounding it as being very suitable for the preservation of the fauna I have spoken of.

(Bird lists were submitted by both W. Middleton and C.R. Crouch and the list appearing as Appendix B to these proceedings is a combination of both lists.)

9. PLANS FOR DEVELOPMENT TO INCLUDE ADEQUATE RESERVATIONS AND THE SETTING UP OF AN ADVISORY COMMITTEE

J. C. GRANT, farmer and Councillor of Kaniva.

If our land is to be developed it should be done under a planned developmental basis. Now I believe that the various government Departments who are concerned and interested in land development should be consulted for the purpose of retaining areas in their natural state for the purposes which have been stated. They have been stated by Mr. Middleton, they have been stated by our Chairman. And I believe that those areas should be sufficiently large enough to cater for the purposes for which they are being reserved. Now I am of the opinion that the mass clearing of marginal lands should be discouraged, and when applications are made for crown lands they should be granted only on the conditions that certain reservations should be made and those reservations should be approved by the various departments who are concerned with land development. And I would suggest, this is only my suggestion, that a committee consisting of the various Government Departments who are interested and concerned with land development together with local representatives should be formed and that a policy should be adopted by the Government for the preservation of certain areas before any application is granted. Now if this is not done and applications are granted haphazardly we lose the whole of this area and I feel that this may lead to serious consequences in the future. While some people are not concerned as to whether land is mass cleared or whether land is reserved, (some people couldn't care less,) there are many people who do care about this particular question and these people are increasing in number. We find that in the Kaniva Shire they are increasing - they are taking quite a lot of interest in reservation of crown lands for the purposes which have already been stated and which I don't want to make any repetition and state again. We feel too that we should preserve some of nature's gifts. We are entering a period of tourism in Australia and the Government is sponsoring this tourism and many bodies in Victoria are also sponsoring tourism. I don't know whether you would call it a industry or

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with a lot of tourists. Birds and wild life are attractive to tourists and if we can retain areas in their natural state, we are going to add to our Commonwealth and State revenues with tourist traffic. And again it isn't fair, I don't think it's fair at all that these marginal lands should be mass cleared and that the future generations should be deprived of seeing what we have today in its natural state - wildlife, our flowers and all of those things connected with preservation. They should be entitled to see these in the future. Now I believe that these reserves that we are talking about could be of great help in the future with regards to wind breaks and to help perhaps in periods of dry seasons to correct any erosion or wind erosion that might occur. Over the past number of years I think the people, have become a little bit complacent in this respect. We have had quite a number of good years and many people, particularly the younger people, think these good years are going to continue. This is it and this is what it is going to be. But no one knows what the future holds with regards to seasonal conditions and we feel we could have a period of dry seasons. There is only one who knows and that is the Almighty and if we get a period of dry seasons, these reservations, I believe, could be of great value. Now I'm not opposed to bringing this type of land into production at all providing that sufficient areas are reserved on a planned basis, and am of the opinion that a policy such as I have mentioned earlier should be implemented by the Government as soon as possible to deal with future applications. If mass clearing is allowed to go on indiscriminately it is quite possible that we may lose many of the essentials required for future generations. In closing I just want to say this, that the people of the Kaniva District are very interested in this question. We have had meetings. They have been well attended. And we have men there who have been doing nothing else I think over the last week or two but getting into land rovers and they have been racing through the scrub to find out certain areas which they feel should be reserved. They have gone in land rovers, they walked, and I think great credit is due to those people who have done this because their interest is in reservations not only for now but for the future generations to come.

10. TOPOGRAPHY OF LITTLE DESERT AND IN PARTICULAR CRATER AREA AND BROUGHTON'S WATER HOLE

A. COUTTS, Farmer of Miram South.

In his evidence Mr. Coutts indicated on a black board sketch various topographical features of the Little Desert including sandstone rises, box flat, 3 sandhills in the south east which are considered valuable from a fire lookout point of view (Kaniva Silo and the road to Mt. Arapiles may be seen from these hills), Broughton's Waterhole (also known as Middle Dam) - it is $\frac{1}{2}$ mile long by about 15 chains wide and has big white gum timber nearby. He also pointed out a plain to the north, stringy bark and mallee areas, areas where the Mallee Hen is nesting and a flat of 25 acres carrying beautiful white gum timber and box about 40 feet high which should very definitely be reserved. He further stated that there was a lot of wattle country in the area which was ideal for the Mallee Hen because they have to feed all the year round and they like scratching around in the wattle seed.

The features referred to by Mr. Coutts are indicated on map included with this record of proceedings. The areas he particularly desires to see reserved are Broughton's Waterhole and Crater area.

11. MISTAKES IN BIG DESERT DEVELOPMENT AND PROPOSED RESERVES AT CRATER AND BROUGHTON'S WATER HOLE

P. L. WILLIAMS, farmer of Miram

I have lived between the Little Desert and the Big Desert all my life and I am very pleased to know that somebody is interested in the development of the Little Desert because it lends itself to such development. It has the advantage over the Big Desert that it is served by the railway on both sides. Any of the land would be within 25 miles of railhead (this is the Little Desert). The rainfall I would think would be better, and I think the potential there is equal to what the north is, and the North is astounding. Some of my observations of the North are that there have been a few mistakes made in the development of it. What strikes me is that there are no shelter belts, no provision made for shelter belts, narrow roads - about 3 chains I would think would be the most - and the A.M.P. I understand have a lease or option of little over half a million acres and out of that half a million acres provision has only been made for an area of 40 acres reserve. This has made me very conscious of this Little Desert - don't let this happen - some provision should be made in the Little Desert to prevent the same mistakes made. I would like to see in the Little Desert, if its going to be developed, shelter belts left for the time being. They could be removed later if they are not needed. Wide roads, nothing under 5 chains so that there is no sign of soil erosion. The areas described by Mr. Coutts and Mr. Alex Hicks I am very conversant with. The area described by Mr. Hicks is fortunate in having permanent water - there is permanent water there and in fact I hold the title of which I am prepared to hand over this very moment - there is a title of 20 acres there with permanent water, and if given the opportunity of turning it into a reserve - a reserve for preservation of wildlife - I will give it back to the Crown.

12. NEED FOR RESERVATIONS FOR SHELTER BELTS, PRESERVATION OF WILD LIFE AND PROTECTION OF BEE INDUSTRY - ADVOCATES THE RESERVATION OF CRATER AREA.

A. WARNER, farmer of Lawloit.

(This statement was taped by Mr. Tom Shepherd, Shire Secretary, Kaniva Shire and played to Conference)

The President of the Shire of Kaniva Councillor J.C. Grant and the Shire Secretary recently visited Mr. Alf Warner of Lawloit seeking his views relative to the question of Crown Lands reservations.

Mr. A. Warner has been associated with the Little Desert area for over 70 years. For many years, he leased thousands of acres of the Little Desert for grazing purposes and as a result, has an intimate knowledge of those areas in particular and a good knowledge of the area as a whole.

With Mr. Warner's permission, the following precis of his comments has been prepared for presentation to this meeting.

Mr. Warner stated he was not opposed to development of the Little Desert but was emphatic that not less than 5% of the area should be reserved. Such 5%, he suggested, should not be all in one area but should be scattered throughout the remaining Crown lands of the Little Desert. He felt that five or six reserves of 5,000 to 10,000 acres each should be created.

Mr. Warner placed great emphasis on the necessity to retain undeveloped areas as wind breaks. This he considered most essential. He is of the opinion that mass clearing of the scrub land would be very "risky" from the point of view of possible soil erosion. He cited two cases where areas of approximately 2,000 acres each have been mass cleared by two owners and whilst erosion has not occurred to date he felt that the mass clearing of such large tracts of light sandy country, could, unless properly managed, create serious sand drift problems. He also contended that the retention of large areas of the Desert in its natural state is essential in order to preserve the balance of nature.

Whilst discussing mass clearing with Mr. Warner he expressed fear that noxious weeds would be introduced into the area. He stated that he was aware of an area that had been cleared and had become infested with Bathurst Burr and he considered that unless great care is taken Cape Tulip could also become prevalent. The fact that certain noxious weeds and also introduced grasses would, over the years, find their way into the outskirts of a reserve was, in his opinion, one reason for the need for reservations to be made in large areas.

Mr. Warner agreed that the bee-keeping would be very adversely affected if the whole of the Little Desert area is cleared.

With regard to Reservations Mr. Warner expressed the thought that wild life breeding in such reservations would become short of feed in dry seasons and would come out onto the adjoining land to feed, where landowners would be forced to take action to control them. However this could, he reasoned, be overcome if the reservations were adequate in area and some measure of control were exercised over the numbers of particularly kangaroos and emus.

When asked if he would suggest any specific area for reservation, Mr. Warner recommended the locality known to him as "Rocky Hole". This area, from the description given, would probably be the same as that known as "The Crater". He stated that apart from the unique features of the ground surface at this spot it was rich in flora and fauna and extensive deposits of road making materials appeared to exist.

13. RECOMMENDING RESERVATION OF AREA KNOWN AS 3 SISTERS

CR. R.A. WALLIS (A Councillor of the West Riding of the Shire of Kaniva.)

(Evidence submitted on tape because Cr. Wallis was unable to attend personally)

I am Ronald A. Wallis, Councillor of the Shire of Kaniva and I reside approximately twelve miles west of south-west of Kaniva about two and a half miles from the Little Desert.

The area I am recommending to be set aside as a Reserve is situated East of Allotments one and two, Parish of Moray, three and a half miles due south from the north-east corner of Allotment 17, Parish of Leeor. The extent of this area is $1\frac{1}{2}$ miles East and West by 1 mile North and South. This area contains the hills commonly known as "The Three Sisters". One of these hills is approximately 120 feet in height, another approximately 100 feet; the other considerably less in height but similar in width.

In recommending this area for reservation I have taken into account the following reasons:-

Firstly, the area being not suitable for cultivation because of the height and nature of the sand hills.

Secondly, when the surrounding areas are settled, the highest point would make an ideal fire look-out as a considerable distance can be seen in all directions.

Thirdly, the area would be well situated as a picnic reserve, having a reasonable abundance of flora common to the Little Desert.

Further, I consider that prompt applications for reservations be made so that the balance of the Little Desert can be opened for further development.

14. PROPOSED RESERVATION OF APPRECIABLE AREAS OF CROWN LANDS BETWEEN THE KANIVA-GOROKE ROAD AND THE SOUTH AUSTRALIAN BORDER

C. A. WALLIS Farmer of Lillimur South.

(Evidence submitted on tape because Mr. Wallis was unable to attend personally)

I am interested in having appreciable areas of Crown Land between the Kaniva - Goroke Road and the South Australian border declared reserves.

Quite apart from the aspect of flora and fauna preservation, I am of the opinion that, in its present state, the Little Desert, as it is known is an asset worthy of preservation as a wind break.

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Where is there another area of flat country in which dust storms are so rare as the Shire of KANIVA?

Surely some credit for this happy state of affairs must go to the fact that NATURE has cradled this region between two belts of scrub-land.

With the development of the Telopea Downs, and the clearing of vast areas of the State of South Australia (adjacent to the Victorian Border), wind velocities have, without question of doubt, risen appreciably.

Already, quite an area of the Little Desert is Freehold which will, within a short space of time, be cleared, and we will have lost forever, the protection of the stabilizing vegetation which nature has provided.

Another aspect which, in my opinion needs careful investigation, is the possibility of changing weather pattern... particularly rainfall... which may be related to the clearing of large tracts of land.

Granted, some control can be exercised by the Soil Conservation Board: indeed some settlers find themselves burdened with large areas which they are not allowed to clear, but which they must, of course, pay for, and in addition pay quite a high road levy.

If the whole area still remaining Crown Land cannot be reserved, let us have, at least, an extensive area of the deeper sandrises put aside when the area is surveyed. THESE RISES are difficult on which to establish a worthwhile stand of pasture. Left in their virgin state they may well be of inestimable value in time of drought to counter erosion.

...oOoCoOoCoOoCoOo...

History tells us that the Sahara was once fertile land. That is difficult to believe now. Many have seen films of the American Dust Bowl. Who wants to see it happen here !!!

Let us hasten slowly in the settling of this last area of the Little Desert. Once alienated, it has gone forever. Man is no more likely to attempt re-establishment of natural scrub cover... should that become desirable, than he would try to unscramble an egg.

In normal years, dangers are overlooked. However, we only need to look back to 1944... and although this year was not regarded as a complete drought, we remember that even in the heavy country, there was considerable movement of the top-soil.

Had 1944 been followed by an even drier year, what would the result have been?

Though I have seen no relative figures, I should think that doubling wind velocity would have a similar erosive effect on soil as doubling the diameter of a pipe has on a flow of liquid..... i.e. movement quadrupled.

Don't let us gamble the fertile stretch of country we now have to gain a few thousand acres of POOR CLASS COUNTRY which has to be built up before it can become productive.

If we take the risk and win, Good!!!!..... But if we lose, WHO WANTS A LITTLE SAHARA?

15. PROPOSED RESERVE SURROUNDING RED BLUFF

R. J. MITCHELL Farmer of Serviceton North

At a well attended meeting at Kaniva recently, keen interest was shown in the proposal to reserve certain areas in their natural state for the following reasons:-

1. Preservation of flora and fauna.
2. Wind breaks.
3. Road-making material.
4. Tourist attractions.

The area to which I refer is surrounding the Red Bluff, which is approximately mid-way between Serviceton and Murrayville.

Red Bluff is an ironstone hill, 250 feet high according to the county map.

It is in the form of a horse-shoe, rising gradually from the east and falling abruptly to the west.

There are other ironstone hills and outcrops stretching in a southerly direction from the main hill.

To the north-east of Red Bluff is a flat with a soak or well as it is marked on the map.

Since development started in what was originally known as the Big Desert, the only reserve is 40 acres for a Community Centre at Telopea Downs. 160 acres was applied for by the Kaniva Shire Council but this was refused and reduced to 40 acres.

Some time ago the Shire Council also suggested that an area to include Red Bluff be reserved.

Because Red Bluff has not been readily accessible, it has not been explored as much as the country to the south, but it is known that many varieties of wild flowers are to found there.

Recently an inspection has been made with a view to extend the present roads further to the north, and any reserve should naturally adjoin at least one of these roads.

At this stage the exact position of the reserve cannot be named, but it is suggested that it should stretch from the South Australian border and include the features mentioned above - possibly eight to ten thousand acres.

It may not be unreasonable to suggest that a "buffer strip" from the border to the Yanac - Murrayville road or beyond, could be included.

I feel that now is the time to preserve for posterity, reserves in their natural state.

Approximate distances -

Red Bluff to border	2 miles
" " Nth. Serviceton Road	7 miles
" " Yanac - Murrayville Road	22 miles
" " Willoughby's Well	13 "
" " Lake Hindmarsh	45 "

16. PROPOSED RESERVATION OF RED BLUFF AND CONCERTINA ROCKS IN BIG DESERT

(Evidence submitted on tape because Mr. Williams was unable to attend personally)

A. J. WILLIAMS Councillor of North Riding of the Shire of Kaniva.

Approximately 7 miles North of the Telopea Downs Post Office there is a sandstone outcrop which rises gently from the South to approximately 100 feet, and then falls quite abruptly on the Northern side.

This is not a straight face like those of "Red-Bluff" but could be likened to a Concertina. I believe it to be known as the "Concertina Rocks". As this outcrop is distinctively different to the surrounding area it could well be left in its natural state as a Reserve.

Between the Red Bluff and Concertina Rocks there is a large area suitable for development, but I believe we would be justified in retaining these two out-crops as Reserves where the natural flora and fauna could be preserved.

17. URGENT NEED TO PROVIDE FOR NATURE RESERVES

A. GROVE JONES, Manager of Glen Alpine Station, Telopia Downs.

I am a comparatively newcomer to this area, only having been here for a few months but I have had considerable experience on the South Australian Side of the Border in similar country and I would like to speak today on what is the nature of reserve more than anything else.

Proposals for retaining tracts of natural countryside in the form of nature reserves often leads to the question, "What is a reserve?"

There are many view points on this, but broadly they are all motivated by the earnest desire of people to preserve nature in its primitive state, unspoiled by the hand of man, for present day enjoyment, and for posterity.

Some areas would be considered worthy of preserving as natural museums; others for their scenic attractions, and science will always need virgin areas for research.

This is particularly so in the case of the Big and Little Deserts. Over the past few years agricultural science has made rapid strides in developing this type of soil for the use of man, and it is essential that some is left untouched to serve as a yardstick for future scientific investigation.

Thought should also be given to "preserving a reserve", rather than "developing" a reserve, (such as parks and recreation grounds), although sometimes it may be possible to harmonise one with the other with happy results.

In some instances public use would need to be restricted, as may be necessary for some shy species of fauna etc., but love and enjoyment of nature as a whole should be encouraged rather than restricted.

There has been world wide interest in the development of these areas, and as time goes on the proposed reserves, along with the development, will undoubtedly be a unique tourist attractions.

18. PROPOSED RESERVATION OF 2-4 MILE WIDE STRIP SOUTH OF PROPOSED KIATA NATIONAL PARK

CR. E. L. CARLAND, Nhill

I am representing the Rotary Club of Nhill and I have a suggestion to make which I would like to put before the Authorities, in connection with the cutting up of the Little Desert. My suggestion is to continue from the southerly end of the Kiata National Park as it will be a green belt right through the desert until it reaches private or freehold land on the other side. I haven't any preconceived ideas of how wide this green belt should be but my suggestion would be to make it anything from 2 to 4 miles wide to go right through the Desert. Now there are a few advantages in a reservation of this nature which I would like to place before you today. The first one from the tourist point of view, we could in years to come, and we have to remember today that we are not thinking about the next 5 or 10 years but we are thinking of the next 100 years possibly or more than that we hope. A tourist road could go through from Kiata right through to the Arapiles Shire and a person could then take a round trip from say Horsham or any other part up through Dimboola or through Jeparit to the Lake Hindmarsh down to Kiata and through, and pick up Mt. Arapiles and Lake Natimuk which are notable tourist attractions. In the run then you would get a view of the Little Desert, the National Park at Kiata with its multitude of wild life and its well known mallee hen population. Now that is the first advantage in that suggestion. The second one, that very little land would be necessary in addition to the National Park because the National Park would run about half way through the Desert and the little piece that I am suggesting to you today would only be just an extension of that until it reached the freehold country. Now another advantage. It would be a corridor for migrating birds and animals who move from the one climate in the south to the other one which we have in the north. In the north here we have a dry climate and in the south we have a wetter climate and birds and animals do migrate from one part to the other and this would encourage them and allow them to do this, if we left a considerable strip to connect the two areas. Another advantage of this belt would be - we have had fears expressed here today, and I don't altogether hold with a lot of the scare propaganda that has been put over today, but there are fears of soil erosion in the desert and a strip like this would be a very good wind break and a green belt which would mitigate against any possible soil erosion which could become a worry in the future. The other thing, is that on the south end of the Desert there is a different type of vegetation to that pertaining to the Kiata National Park and people travelling through on that proposed tourist road or in that area would see a different type - there is a red gum, box and buloke type of country with its attendant birds and animals as compared with

around Kiata we have the arid scrub type of vegetation. A person would then be able to see all the different types of vegetation which we have in this country by travelling that short distance.

19. SUGGESTING THAT CONSIDERATION ALSO BE GIVEN TO SMALL RESERVATIONS

I. MAROSKE, Head Master. Merbein High School;

Speaking as a field naturalist

I have very little to add to the very eloquent points that were made here today but perhaps I could comment on this business of the size of the reservations and not to let pass or be cast aside out of hand the possibility of smaller reservations. Big national parks are essential. They are desperately and critically necessary at this stage to preserve worthwhile bird populations, and worthwhile communities intact. However, it only needs one match to destroy perhaps 800,000 acres. And, I therefore say that while big national parks are essential we should not cast aside the possibility of smaller reservations scattered throughout any land settlement area. The fact that a private organization can proceed to completely clear, say $\frac{1}{2}$ million acres and leave one very small reservation somewhere in it is quite an extreme situation. It is essential I feel and should not be cast aside out of hand the possibility of square mile reservations, even smaller reservations on suitable areas. They could include perhaps sand dune areas that would always be problems as far as erosion and settlement is concerned. Concerning the smaller reservations of course they are useful as bird refuges and of course as tourist centres. Tourist Meccas for local population. Transport is such a rapid affair these days that it is quite easily possible for people to find us out, to seek us out in this area of the State as well as for the local people. One final point that I would like to make is that having got these reservations we should make every endeavour to see that they are not whittled away. There always seems to be excuses to tackle what we have, to take little bits and carve it up in some way.

That is, of course, quite clearly the case in existing reservations. Most of them started out as quite large timber reserves and so forth, and it is remarkable how they have been whittled away over the years. If we are given these reservations, we should advocate that the law be made such that they can be preserved as intact as possible.

20. VICTORIAN APIARISTS ASSOCIATION - THE IMPORTANCE OF THE LITTLE DESERT TO THE APIARIST

A. MOORE, member of the Association.

The matter under discussion here today is of vital importance to the Victorian Apiarists Association and the Bee Keepers of this State, and to the interstate apiarists who come to Victoria looking for a place to winter their bees.

The value of the Little Desert lies not so much in the amount of honey produced there, although sometimes this is quite considerable but on what it does for the bees in helping them to recover from the loss of bees on the heavy honey production of Grey box and Iron bark.

To give you some idea of the amount of honey produced on this species of trees - 10 sites in the Tarnagulla area carry approximately 400 hives each and produce 8,000 tins of honey plus wax worth £30,000 to £32,000.

In the Bendigo area there are 16 sites. 10 in one area produce 12,000 tins of honey plus 10,000 lbs. of wax, valued at £50,000.

Sites in another area produce honey and wax to the value of £30,000.

The total value of honey and wax from these areas at present prices is approximately £110,000 to £112,000 to the Industry.

As there are thousands more hives in these areas than shown on this scale it gives some idea of the amount of honey and wax produced. The reason I have quoted these figures is to show how we rely on production from these trees for our income. Then we have to give serious thought to the wintering of our bees so that they may recover and gain strength for the spring. So that those that are required for pollination by orchardists for fruit trees, and others, may be at the strength required to do the job properly.

This is where the Banksia in the Little Desert comes in. It gives both honey and pollen to the bees during the winter months so they may breed and come into spring with the young bees necessary to get the hive to full strength quickly.

Over the years we have seen large areas of our Crown Lands disappear through selection and have fought to have them withdrawn wherever possible. Sometimes we were successful, sometimes not. We fight the selection of these areas not only because they vitally affect our income but because we think that not enough thought is given to our natural timber resources.

Also there is the question of soil conservation. We can see already the results of indiscriminate clearing, as we travel over our country, sand drifts and soil scouring through the clearing of the natural cover of scrub and trees. Unfortunately we are not in the position of other countries who produce most of their honey from ground flora. We have to rely on our natural scrub and eucalypts to supply the bulk of our honey.

Our honey exports over the last 3 years have been worth over 1 million yearly to this country and are still rising. In the 3 years 1936-1939 our honey exports totalled 3,986,000 lbs. worth £A65,418. During the period 1960-63 we exported approx. 70 million lbs. of honey worth over £A3.25 million pounds. So you can see that our exports have taken quite a rise. Our home consumption markets would be worth very much more to us. We are not subsidised in any way for our product like they are in other countries. In America, for instance, they are subsidized to the extent of approximately 10 cents per lb. on their honey.

Or in other countries where they realize the value of bees to a country's economy more than we do at present.

For instance in Hungary they are reimbursed to the extent of 30% of all travelling costs up to 100 miles providing they

produce 22 lbs. of honey per hive - which is a very small quantity. If they travel over 100 miles they are reimbursed 40% of their travelling costs.

The Victorian Apiarists Association opposes the opening of the Little Desert for selection. Not only because of its value to apiarists in general but also because of its sandy nature which would make it susceptible to wind erosion once its natural cover is removed. There is also the matter of our native birds and animals to consider. They are a rapidly disappearing race.

There are 30 sites marked on the Crown Lands map apart from the thousands of hives that are wintered on private property at the edge of the desert. This will give you an idea how valuable the apiarist considers this area.

In closing I would like to stress that if this land is opened for selection that you give our case careful consideration for the setting aside of the Banksia areas, so that we can continue to help our exports not only of honey but also in the pollination of fruit trees so that the orchardist has a better crop of fruit for export.

21. ROYAL AUSTRALIAN ORNITHOLOGISTS UNION AND FIELD NATURALISTS CLUB OF VICTORIA SUPPORT CROWN RESERVATIONS

E. S. HANKS, member of both organizations.

I didn't expect to speak today, I'm here to listen for the organizations, the Field Naturalists Club of Victoria and the Royal Australian Ornithologists Union. But, I may say I've taken a great interest in this meeting and it's pleased me to see the local residents coming forward with such logical arguments in favour of things I've believed in all my life anyway, as a city man, and that is National Parks and Soil Conservation and the rest of it. And I'll say that I'll take my message back to the organizations I'm representing and I'll certainly say how pleased I was to be at such a meeting and I'll certainly plug, if you can call it such, that our organizations in Melbourne support you up to the hilt in this attempt to get something worthwhile for future generations. And I might say that there has not been as much foresight in the past in the City of Melbourne - the early fathers made wide streets, very wide, 3 chain roads and a later batch coming on with modern ideas shortened them all, and so you have Sydney road wide at Parkville, wide right through at one time and shortened till it's been a nuisance and a costly experiment to attempt to get anything out of it at all. Now I say, at the present time, the time is running out. You can do this thing now. You won't be able to do it in less than a generation. You won't be able to do it in 10 years time, and therefore I hope that you're successful in your efforts to get proper National Parks for this area.

22. WESTERN VICTORIAN ASSOCIATION OF FIELD NATURALISTS SUPPORT CROWN RESERVATIONS

E. MUIR, Senior Vice President of Association.

The Naturalists Association comprises 12 clubs Maryborough, Ararat, Stawell, Portland, Warrnambool, Colac, Horsham, Wimmera, Hamilton, Ouyen and Mildura, and personally we would like to see more of these areas reserved but we realize that with the population of the world growing as it is we cannot stand in the way of progress, and as the various speakers have said if 20% is reserved well, we are behind that. We think that large areas should be reserved because that will combat the impact of alien plants coming into them. The Little Desert has 650 species of plants, I think it is, but about 150 of those are aliens, some of them noxious weeds. So with small areas you get large numbers of alien and noxious weeds coming into them. We would like to see big areas to stop that. I notice too, that on the maps for the areas reserved, they're all nice and square ones. I don't think that's a very good idea. In the Little Desert you have the sand ridges. I'm not very familiar with the Big Desert. And I think the sand ridges should be excluded from the areas to be put under cultivation, because they are the areas that are likely to drift. So you would have irregular areas. The figures quoted by the C.R.B. for sandstone, 2%, to cover the roads that they envisage making, don't seem to be excessive. In any case it wouldn't concern the reservation very much because the sandstone would probably lie under the areas put aside for cultivation. But where they would be on land that is for reservations and National Parks, the National Parks will be excluded any way, they could probably be levelled over when they are finished, with the overburden and nature would regenerate them, after a few years - perhaps 10 or 20 years. So we haven't got very much to fear on those grounds. Anywhere in the area where there are swamps, there wouldn't be very many, I would suggest that those swamps be left and provision be made to channel water into them so that the ibis and the water birds would have somewhere to nest in this locality. All references to wild life has been made on a tourist basis. The economic aspect hasn't been brought up to date. Bird life is something that we must encourage because they get rid of many of the pests. The ibis in particular. The Murray Irrigation Authority have adopted the ibis as their emblem because of the benefit it is to that area. We don't want to see large areas cleared without leaving some reservations because that takes away all the bird life. You can site Heytesbury in that respect, where the cockchafer grub came, or was such a pest. Farmers had to resort to spraying. A very costly business. And the residue of the spray was found in the milk and butter. Well, who wants to eat spray. We don't. So, we want to see the birds in those areas there so they can come in and eat up all the pests. There isn't very much more, only to say that I do support the previous speakers in their remarks.

23. NATIONAL TRUST SUPPORTS CROWN RESERVATIONS

Letter from MR. C. AUSTIN representing the Landscape Preservation Council of the National Trust of Victoria.

The Landscape Preservation Council of the National Trust have asked me to represent them at your meeting to be held at Nhill on August 26th.

Unfortunately owing to a prior and important engagement I will not be able to do this. The Council will no doubt get other representation, but as I am so very interested in the proposals you are putting forward I would be grateful if you would accept the following letter as my personal submission to your meeting.

I am very familiar with the flora and fauna of the area under survey, that is the Little and Big Deserts as I have travelled extensively through them over the past 10 years mainly in search of information on Bird Life. As an 'All Life Farmer' I am also pretty familiar with pastoral needs and problems. I have also visited many of the National Parks in the United States of America and have seen the enormous amount of money they are spending in the preservation of these Parks and in the bringing back into Parkland areas that they now realize should never have been put to any other use. The fact that last year 88 million Americans paid to visit these parks is ample proof that in a crowded community the demand for Primitive areas or National Parks is huge. The time is not so far off when we in Victoria at any rate will have a population density as great as that of the United States.

There are of course many other reasons for preservation, some of which you have listed in your letter to the Landscape Preservation Council.

Some people will argue that we must bring all our land immediately into pastoral production so that we can settle our sons on cheap land help to feed a starving world. This argument is really not good. We still have huge areas of land not in full production. In fact in the light of present scientific knowledge it is doubtful if we yet have any in full total production. It is true that many people in the world are starving but it is distribution at fault not production. If we ever reach the stage when 95% of our land is producing fully that would seem the time when we should decide if the last 5% should also be brought into production. I doubt if it will ever happen as both America and England, crowded countries on our standards, are finding more and more Parks to be necessary. They both have a far greater percentage of their land reserved in this manner than we do.

However the urgency at the moment seems to me to be the fact that with modern machinery we have the power to undo in a few months something that Nature of The Almighty or Evolution; call it what you will; has taken thousands or millions of years to achieve. Once we run a roller and a plough over the Little and Big Deserts we have destroyed FOREVER whole communities of plants insects mammals and birds. They can never be replaced not only in our lifetime but in the whole of future time. Surely NOW is the time to preserve these things for those who come after us.

Might I respectfully ask you that you do all in your power to see that substantial areas of this land under discussion are saved from permanent destruction from the point of view of Wildlife production.

If in 50 or 100 or more years it is found that this land is needed for food production it will be up to the people of that time to decide. If we clear it now they will have no opportunity to decide. We will have made the decision for them, and I don't think they will be very grateful to us.

Might I also point out that the 240 acres said to have been reserved in the Big Desert around Broken Bucket Bore is from

a Nature Preservation point of view quite laughable. It might serve as a refuge for some species of birds on route between other reserves if they exist, but for preservation of species it is quite inadequate. Only large areas to fully support local breeding populations of the many interesting species of all forms of wildlife that the area contains can be of real use.

24. BIRD OBSERVERS' CLUB SUPPORTS CROWN RESERVATIONS

N. LEARMONTH, member of the Club.

From the Bird Observers point of view we have heard some excellent arguments for the preservation of parts of this Little Desert, and I can assure you that the Bird Observers are behind you in every point. I congratulate you, sir, on calling this meeting. I consider that it should be extended and that all the Regional Committees in Victoria, before any crown land is alienated, should hold a meeting such as this. Then you would get the land which at present is crown lands, you would get it put to its proper use. It would be reserved for forests, for National Parks, or whatever they consider necessary. This Little Desert area you can see by the list of natural history, birds, plants is an area which is worth preserving, and as all the speakers have said, if you let it go now you will never get it back. One other point I would like to stress. People say that you disturb one area with your bulldozers the birds and the wild life in that area move out to the next. Mr. President, they can't. The rest of the bushland in Australia is already populated with birds and animals and there is no room for extra ones. Therefore those extra ones perish. Those of you who love Australia and who love the natural life of Australia would support this movement of reservation in the Little Desert.

25. NATIONAL PARKS ASSOCIATION SUPPORTS PROPOSED NATIONAL PARKS AT KIATA, CRATER AREA AND ONE IN BIG DESERT.

J. QUIRK, Vice President of Association.

It gives me a great deal of pleasure to be here today to represent the Victorian National Parks Association at such a representative meeting as this, and I take this opportunity to thoroughly congratulate the Wimmera Regional Committee in taking this action. I know that Mr. Learmonth, the previous speaker, made reference to the very desirability of these types of meetings and I thoroughly endorse the things that he just said. In general the Victorian National Parks Association are at the present time preparing a master plan for National Parks in Victoria. This, of course, is a fairly long range project. At the very best I suppose it will take 2 or 3 years. So far we have looked to a very small extent in the Big Desert area. We have had a look at the Little Desert. And broadly our recommendations in the Little Desert area are that an area of approx. 28,000 acres should be reserved. One of about 18,000 acres at

present adjacent to the Kiata Sanctuary or what will be the Kiata National Park, and the other in the Crater area. That is broadly the reservation we feel should be a minimum in this area. In the Big Desert, which as I say, we have not had time to properly examine, perhaps another member who follows me might be able to assist me more in this respect, we do believe that a significant area should be reserved in the Big Desert. For my part I feel that something like 20,000 or 30,000 acres at least should be reserved there and I think that would be the general feeling of the Council of the Victorian National Parks Association. In my hand here, I have a map of the proposed area that the V.N.P.A. put out about 2 years ago. You can hardly see the area at all on the map of Victoria, so small is the reservation. So I don't think that people who are asking for consideration for preservation for future generations of the indigenous flora and fauna of this country are very greedy people. Rather I think their requests are modest and very easy of accomplishment. This, I feel is a world wide need, this preservation of wild life and Australia I don't think has done what it should have done and I think that it should make up for lost time now. Victorian's I don't think have done either what they should have done. And as part of this country of Australia I think they should start now to make up for lost time. In Victoria, this area has not done what it should have done. I feel that now is the time that it should make up for lost time and see that these areas are reserved. It has been emphasized by previous speakers that we shouldn't make up our minds about the things that might be desired to be done by people of future generations. It couldn't be more wise at a gathering like this to emphasize the points that if these areas are cleared now even the people who invented the atom bomb would not be able to restore them to their previous state, but if some future generations desire to obliterate our parks well, it would be a very simple thing for them to do that, but they certainly can't do anything if these areas are not there. I feel that we should be looking ahead, not 10 or 15 or 20 or 100 years. We should be looking ahead 1000 years. There is no reason why these places won't still exist if man himself doesn't destroy them in a thousand years or 10,000 years time and I'm not opposed to development, I'm not opposed to human habitation, after all I'm one myself but one should keep these things in balance. To think that it's our bounden duty, as I think a lot of people in Victoria do in their particularly small life span, that everything must be fixed up in that time and all these things must be developed and this must be cleared and a road must be put there as though there was one hell of a hurry about it all. There will be plenty of people who come after and I suppose some with a little pioneer spirit will want to do some of these things themselves. I don't think future generations will thank us for clearing Victoria up in the next 10 to 15 years. I'm very sure that they won't. And I sincerely hope that the result of this meeting is to the effect that significant reservations are set aside in both the Big and Little Deserts.

26. NATIVE PLANTS PRESERVATION SOCIETY SUPPORTS CROWN RESERVATIONS AND SUGGESTS FORMATION OF STATUTORY BODY TO INVESTIGATE LAND USE

I. McCANN, Member of Society

The native Plants Preservation Society of Victoria has rather a large membership extending right over the whole of the

State. There are a great many members of course in the Wimmera and there are a considerable number of those members here today. Now the object of this Society is to preserve for the enjoyment and for the study of future generations as much as possible of the remaining native plants in this State. Chiefly it is concerned with preserving small areas of remnants that exist in highly populated areas - that's the prime purpose. It is also interested in preserving large areas such as we are talking about today. and I can say without any hesitation whatsoever, Mr. Chairman, that the Native Plants Preservation Society thoroughly endorses everything that has been said by Mr. Middleton when he opened the speaking this afternoon and what Mr. Hicks from Kaniva said when he supported him. So from the point of view of the Native Plants Preservation Society we are very happy to see such a representative meeting today and hope that something will eventuate from it along the lines of their hope. Now secondly, Mr. Chairman, as a member of the land use committee of the Australian Primary Producers' Union I would like to say that that organization considers that nature conservation is not only a legitimate land use but a very necessary and a very desirable one. And they have, as recently as last July, written to the Premier telling him of their support for the proposed National Park south of Kiata - the 18,000 acres there which the A.P.P.U. believes should be considered as an absolute minimum area. That body is solidly behind nature conservation right throughout the State of Victoria. Now I was very interested in one remark that Cr. Grant made. Mr. Chairman, he said that before we get around to clear areas or start to carve it up some attempt should be made to assess those areas that should be preserved. I think this is the crux of the whole matter. I'm going to suggest, Mr. Chairman, that the Wimmera Regional Committee at some time give consideration to seeing that there is some statutory authority established which will have the responsibility of ensuring that the whole of the remaining crown lands in this State are surveyed with the object of ensuring that desirable areas are preserved for the various purposes that we are considering this afternoon. Now that could be done. It will have to be a political decision of course. It could be done quite easily in my opinion. I feel that all that is necessary is that the Forests Commission which at the present time has the control of the forest resources of all the unoccupied crown land in the State of Victoria as well as the reserved forests as part of their multiple use approach to forestry should have a conservation section staffed by biologists who will be capable and equipped to assess the value of their areas with a view to setting them aside for nature conservation, for tourist enjoyment, and so on, so that we don't leave it to, and I speak very respectfully Mr. Chairman, to a lot of amateurs such as we are here today. I feel that we shouldn't be taking the initiative here, that we should have a statutory authority to do that, and I would suggest that if that is done, Mr. Chairman, that possibly we could have an advisory committee to work with the Forests Commission something along the lines of the Wild Life's investigation Committee, or the Land Utilization Advisory Council and even the National Parks Authority, where we have the representatives of the various Government Departments concerned in this sort of thing and also in the case of the National Parks we have outside interests. It's very important, for instance, that the Municipal Association should be involved in that on a State level and perhaps on a regional level the representation should be from the regional committee. That representation could also extend to such bodies as nature study bodies, youth organizations and certainly land holder bodies; say Primary Producer organizations who are vitally interested in this. I have great pleasure, Mr. Chairman, in supporting on behalf of

those two bodies that I have mentioned the remarks that have been particularly by Mr. Middleton and by Mr. Hicks and also to congratulate Cr. Grant for putting his finger right on the pulse or right on the crux of the matter.

27. NATIONAL MUSEUM ASKS FOR AREAS OF LAND TO BE LEFT IN NATURAL STATE FOR COLLECTING BIRDS, ANIMALS ETC.

The Director of the National Museum of Victoria, Mr. John McNally forwarded a letter of apology and sent the following message to the Conference via Mr. Middleton.

There is one aspect that hasn't been mentioned today regarding land clearing. It does affect the Museum. It affects the museum in as much that their areas for collecting birds, animals and insects is not there any longer. It might appear a bit peculiar that one minute I get up say that we should have reserves to preserve these things and the next minute I say that we want them to shoot birds in, but scientific collections of birds and animals and insects are necessary. These collections have to be maintained; they have to be replaced. The small number of these animals that are collected by Museums doesn't affect the population to any extent at all. So that is only one aspect that should be kept in mind.

28. A.M.P. SOCIETY EXPRESSES VIEWS CONCERNING PROPOSED LITTLE DESERT DEVELOPMENT

N. GOWING, representative.

On behalf of the Society I only want to make three brief points. The first one, and I do want to stress this, the Society in no way wishes to distate or influence the policy in this matter of the Little Desert. We are only looking for a quick decision to the proposals which we have made to the Government so that if required we can enter into the necessary planning and also then investigate fully the possibilities of development in the Little Desert. Now my second point is that our only interest is in the area which lies approximately 3 miles west of the Kaniva-Goroke Road to 3 miles east of the Nhill-Gymbowen road. I understand that an approximate area of 100,000 acres is in that and as has already been said during the meeting that possibly as a rough assessment there is only 60,000 to 70,000 acres of that land which would be suitable for development. My third point is just to mention that we have been only too happy to co-operate with the Lands Department and the Government in the matter of stone reserves and for that matter any other reservations that are required.

29. NHILL CHAMBER OF COMMERCE SUGGESTS EARLY FINALIZATION OF PLANS FOR LITTLE DESERT DEVELOPMENT

F. BOUND, Member of Chamber.

I would like to just add a little to this discussion that been going on for perhaps far too long now, but I feel a little bit like the boy that lit a small fire at the corner of the hay stack to warm himself, because I'm the person who started all this in the local Chamber of Commerce that we should develop the Little Desert, and it does seem to have got out of hand. Our Chamber is right behind everything that has been said this afternoon with reservations. We certainly must have adequate reservations in that area and a lot of very sound common sense, perhaps duplicated more than will be necessary because I'm sure that our Government will see that reservations are made in there and I don't think any of the authorities connected with the developing of this area would for one minute suggest that no provision be made for the preservation of wild life and tourists to be attracted to the area and everything else. I do feel though, that quite a few statements have been made that are rather serious red herrings and are not quite to the point. Such things as erosion and wind velocities being increased are red herrings that definitely do not exist. Our Minister will realize from what he has shown in the Little Desert this morning that large cleared areas have consolidated remarkably well and erosion is quite impossible with them. Somebody did say that the wind velocity had increased tremendously with the clearing of certain areas. The largest blow that Nhill ever had was in 1897 and I would venture to say that there was only one quarter of the cleared land then that there is now. I have with me, I obtained this from one of the A.M.P. representatives and it is going to be too small to be adequate but this is a map showing the ploughed areas and all those little islands in there are the portions that are automatically reserved by being ploughed around. They are sand ridges and various spots that are not suitable for development so that while I feel the Government will make permanent reserves of large areas there will be colossal areas you can see - and anybody that is interested could examine this map, and it is a survey map of the Telopia Downs area showing that large areas will automatically be added to the large areas that have already been suggested for reservation. The only other point that I would like to make on behalf of the Chamber of Commerce of Nhill is this, that Nhill is sandwiched in between two desert areas, one to the north of us and one to the south of us, that restrict very much the rural activity of this area. We see in this an opportunity to extend that area tremendously with a great calculated increase in rural productivity for the area and I would say that that is vital to the district here for its future development, that we not be sandwiched so drastically by two large undeveloped areas and I'm sure that the Government of the day will see fit to allow the A.M.P. to proceed with their scheme. It is vital to the country as a whole. We are looking for an increase in wool exports and wool will be the main output from this area. Therefore we as a Chamber of Commerce urge that firstly the thing be quickly surveyed, it has been going on for a long time now, and we cannot expect the A.M.P. Society to wait for years and years and years. They are ready to go on with the job. Let us get the green light for them, quickly reserve the areas - I think all the areas that have been asked for could be readily reserved without upsetting any part of the scheme at all - and let's get on with the job.

30. COUNTRY ROADS BOARD - RESERVES FOR ROAD MAKING MATERIALS AND REQUIREMENTS FOR ROADS

MR. A. GAWITH - Materials Research Officer of the Country Roads Board.

I have with me a report on an investigation of the sandstone deposits of portion of the Big Desert carried out in survey by a team of Country Roads Board geologists during July of this year. The survey covers principally the western part of the area. They have further work to do on the eastern part.

In the western part of the area considerable deposits of sandstone have been discovered. We note that there is a grid of roads about 4 miles intervals, that is, we have about $\frac{1}{2}$ mile road for every square mile of country and it is possible that future roads might be at 1 mile intervals but probably not closer. For a light form of construction roads require about 150 yards of solid volume per mile of road. For heavy construction about $3\frac{1}{2}$ thousand yards per mile is required. If all possible roads were constructed as light construction it would require about 3000 yards of solid sandstone or about 2000 yards to construct a 4 mile grid to a higher standard. The depth of sandstone in a pit of course is variable. You might get 5000 or 15000 or much less out of it. - our of one acre of pit. One acre per square mile would be about $\frac{1}{6}$ th of one per cent of the area and it seems that to allow for the variation in materials and the fact that you can't use all of it. probably 1 or 2 per cent of the area should be reserved for sandstone pits. In some parts of the area sandstone may not be available, and in that case we may have to construct from a mixture of sand and clay, in which case clay pits would have to be opened up. They might ultimately be of some use for water storage, but possible sandstone and clay supplies should be reserved for future road requirements. The figures I have given are only for constructing the roads once and unless they have a seal coat on them they will require reconstructing at intervals. The area required for the roads to provide for windbreaks, leave room for possible borrow pits and for transport of wide agricultural machinery the 4 mile grid should be at least 3 chains and preferably 5 chains wide on the principal roads. On the one mile grid, or any smaller grid, the one chain road has been found a little bit narrow and probably $1\frac{1}{2}$ chain or 2 chain roads would be required. So that we end up with a requirement of between 8 and 12 per cent of the area for roads. I understand that there is a suggestion that three of the north south roads should be 5 chains wide and probably we would end up with about 10% of the area being required. The development of the sandstone pits should be in an orderly manner and they should be under someone's control so that the material in them should not be wasted by either being buried by overburden or some other reason and if the pits are deep well they can possibly have some use for water storage. If they are shallow, well, some attempt should be made to re-establish them and get vegetation on them. Geologists who have examined this area have told me that there are no other minerals or other materials which have come to their notice which would be of interest.

31. COUNTRY ROADS BOARD - EXTENT OF AREAS REQUIRED FOR ROAD MAKING MATERIALS AND WIDTH OF ROADS

A. J. PRYOR, Divisional Engineer, Country Roads Board.

I did try to escape this, I did prepare some notes and asked Mr. Gawith if he would speak on my behalf. There are just a few points I would like to make. That in providing any road system in a desert area you are not only looking at matters today but you look to the future. We have done a fairly solid investigation of what we think the road needs might be in the area and as set out by Mr. Gawith it amounted to a grid of roughly 4 mile intervals. Based on constructing these roads with suitable materials and resheeting them at regular intervals you arrive at a certain amount of material required to construct these roads and if we provided for a hundred years, and I won't bother you with figures, it works out that roughly for a 4 mile grid, you want something like 40 acres of area reserved for road making materials alone. We have differences of opinion with various Departments and it is our belief that in an area such as the Little Desert and the Big Desert an amount of 2% of the total area should be reserved for road making materials. If you then turn around and work on a possible road system to provide for as Cr. Sanders, a retired Councillor of some 28 years in the Shire of Kaniva, has asked for - a Highway from Kaniva to Portland and so on - it is essential to think in terms of road reserve widths of up to 5 chains. I've got lots of reasons here why that should be so, but I won't go any further on that. The final result is that we suggest that in any development project such as envisaged in both these Desert areas that the area required (a) for road making materials, and (b) for road reserves is approximately 10% of the total area.

32. FISHERIES AND WILD LIFE DEPARTMENT - OFFERING SUPPORT TO PROPOSAL TO SET ASIDE SUITABLE AREAS OF DESERTS FOR PRESERVATION OF WILD LIFE

A. DUNBAVIN BUTCHER, Director.

I don't think it will be inappropriate to first of all make some reference to your Regional Committee. It, I think, holds a unique position here in Victoria as one of the Regional Committees which has shown a great deal of interest over the years in some of the basic matters affecting conservation as a whole. My own Department has particular reason to be thankful to this Committee. Some years ago you ran a very detailed enquiry through your Region on the question of the future of game, game licences and so on. That was before the Government dealt with it. You have had previous meetings on wild life reserves; you had an investigation of your own into the pesticide problem, to my knowledge the one committee in the State which has done so. And today you have called this meeting and I think no one else except the regional committee would be in a position to call a meeting such as we have had today. You are in a unique position to do so and have taken advantage of that position. And I want to congratulate the Committee on what it is doing and on what it has done today.

Mr. Chairman, like a number of other speakers I didn't come here today prepared to talk but I will make several comments. Now my first comment about your own role in attempting to make a positive contribution to conservation compares more than favourably with the so often mistaken concept of what conservation is. Too many people believe that the protection of the individual and animal is the end all of conservation. I will go so far as to say that that viewpoint is a disservice to conservation. You are getting down to fundamentals, the real things, the need for reservations, because without these all the good thinking in the world trying to protect individual animals is not worth a damn. That is why I'm saying that it does a disservice. Because it uses up peoples energy, peoples enthusiasm, peoples money chasing something which is illusive and which in itself makes almost no contribution.

My own Department must obviously strongly support this region in its approach to the question of having reserves in this Little Desert area and the Big Desert area.

Now just one or two other points. I've touched on what other speakers have said and I merely want to emphasize them. That obviously the approach must be on a planned basis. Now what device we use I don't think we'll determine today. But if we are going to have proper utilization of the total resource whether it is agricultural production, national parks, reserves or whatever way you want to look at it it must be on a planned basis, or else we had better forget it. I'd also like to emphasize a point one or two other people made. That I hope we don't confine our thinking in terms of reserves to non agricultural land. Because there is every justification in the world for preserving some agricultural land. Because I think a very strong case can be made that there are many other things of value to man himself in this community than purely agricultural production, important as it is. We have too often thought, all right let the preservation boys have the waste country, but for heavens sake don't give them any land which is worth anything in terms of agricultural production. It is fundamentally wrong thinking. Obviously in agricultural country, agriculture must be able to make the grade of the man, but at the same time don't dismiss the fact that some agricultural land can rightly come within a reserve. Now I was interested particularly in a recorded statement by a Mr. Warner, who someone said was round about 90 years of age, who has watched this country for 70 years, watched its development. He made one particularly important point as far as I myself am concerned, in my own Department's approach to these matters. He expressed his concern that with a reserve that you may finally reach the stage where there are more animals on it than the reserve can carry. And he made the right approach, that management is needed, in fact that on a reserve you can legitimately destroy animals, you may have to destroy animals. Mr. Learmonth made the point that some people say when you clear land what does it matter, the animals will move on to the next piece of territory. They won't and don't, as he said because there's no room for them. Now if you have a reserve you will destroy that reserve if you allow it to become over-populated. Management and the killing of animals on a reserve is legitimate, it is proper management and should be part of the basic approach to reserves. This I think will answer many a farmers worry about a reserve, that you could have an over-abundance of animals moving out into agricultural country. Over-abundance should be met within the reserve, not outside it. And I don't think that this aspect of reservation is very often recognized. But if you don't recognize it you will destroy the reserve system. It is an

important part of it. Mr. Chairman, I said I merely wanted to emphasize several points which were made. Again may I say that your Regional Committee in calling this meeting today to give a number of people representing all kinds of interests the opportunity of expressing their viewpoint on the need for reservations in this part of Victoria is particularly timely, and my own Department without going into specific detail must offer you its general support.

33. NATIONAL PARKS AUTHORITY SUPPORTS MOVE TO PROVIDE SUITABLE AREAS IN THE LITTLE DESERT FOR PRESERVATION OF FLORA AND FAUNA.

DR. L. SMITH, Director

Firstly I must compliment the Wimmera Regional Committee for the excellent arrangement that has been made for democracy to get to work as it has here today. Most of what I should like to have said has been said by other speakers in a far better manner than I myself could say it. But I feel that this perhaps sets the pattern for an approach to development plans in other areas and possibly even to the reservation of such areas as National Parks. Now this sort of thing could well I think be done on a collaborative basis. We might look at two aspects of this matter. First of all the crown land that we are talking about and I hope my friends of the Lands Department will forgive me for trespassing perhaps into their territory, but after all the crown land as I understand it does belong to the people. And it's very proper I think, and I feel sure that the Department might feel glad to have had the opportunity of hearing the views of representatives such as yourselves and certainly from the National Parks point of view I have been very glad to find that there is such a warm feeling in this part of the community for the development of reservations. Not all of these reservations, of course, need necessarily be National Parks, but as everybody here will know we are interested in having a National Park in the Little Desert and I am hoping that, in fact the Authority is hoping that it will be possible to come to finality before too long. I would just like to dwell on one point. It is terribly important that the areas reserved for National Parks should be large enough and need to be worthy of the species that we hope to preserve within the National Park, and (b) for it to be possible for those species to be preserved there because birds and animals must have movement. What we want is an ecosystem which is as complete as we can possibly have it, but obviously we can't have the whole Little Desert. What we do want though of course is planned development. One thing that has impressed me, sir, is that every speaker, I think I'm right in saying this, every speaker who has been here today has been in favour of (a) reservations, and (b) planned development. I don't think I've heard anybody who has said that there should not be either of these two things, and this I think is a most encouraging thing. There is one important aspect of this matter to which I should like to make particular reference. I don't think we need to justify reservations or national parks or wild life reserves at this stage because of the fact that they preserve the native species. But I believe that they go further than that. They are the very essence of the building of a nation.

If we are going to build a strong nation, and I believe we are well on the way to building a strong nation I think everybody here would be offended if I were to suggest that our national character is lacking, but the thing that makes this a nation, an Australian nation is the fact that we have little bits of Australia left in which we can move about and see and enjoy. Now you can convert a nation into fields of corn and you can convert a nation into wide strips of concrete, iron and steel but you won't build a national character that way. You might build a bank balance but you won't build a national character. The people must have portions of their own country, they must have their own wild flowers, their own native birds and animals, they must have their own natural environment in which they themselves can move, and that is why I think it is terribly important that we should not lose sight of this fact, that we must have adequate national reservations. And, as I think it was Mr. Quirk who said, future generations won't thank us for leaving them just a good bank balance. They'll want to see some of the country that was here before they came. What would we think if we couldn't go out into the bush these days and see the sort of country such as is left at the present time; places like Wilsons Promontory, Mt. Buffalo, Bulga Park and Tarra Valley and so on just to mention a few. What would we think if we no longer had the pleasure of moving into areas like these. Now we have the responsibility and the privilege of combining, of uniting our voices and our strength to see to it that so far as it is possible we ensure that adequate reservations are made for our children and our children's children that come after us. Let us remember that it isn't just some foreign horde of people who are going to swim in from the north or the south that we are worrying about, it is simply our own children and their children's children. Now, there are good reasons of course why we should make these reservations on purely economic grounds and sociological grounds. And if people don't have these reservations to go to, well, where will they go? Just let me give you one or two figures. I don't want to clutter up your minds with statistics, but in the last 6 years the number of people going to Wilson's Promontory for example, just one reservation, has gone from something like 27,000 odd people to over 60,000 people. Now there is no compulsion to go down there. The only reason why they go there is that they want to go there. And there have been similar increases in other parts of the National Parks system. Now there has been a great deal of emphasis I think attaching to beauty spots such as Wilson's Promontory and Bulga Park and Mt. Buffalo etc. that we have been rather inclined to say, "Oh, well, the deserts are, well they are deserts." There will be some of you present here today you will recall having seen some films made by Walt Disney, such as "the Water Birds", "The Olympic Elk", "the African Lion" and so on. And there was one that he made, too, you remember that was called "The Living Desert". Now it's all a matter of presentation and understanding. This desert country is fascinating to those people who have the opportunity to get into it and study it. Now we must remember that with the opportunities that are being created for people every day, more people will want to go into such country and become familiar with this particular part of Australia. Now I would like to go on, sir, but I can't, I mustn't because there are others to follow. I hope you will feel from what I have said I'm right behind this plan for planned development of the country and for the reservation of adequate areas for those who come after us and I feel certain that every member of the National Parks Authority would want to join me in complimenting you on having arranged this conference and to endorse the action that you are taking.

34. MINES DEPARTMENT - UNDERGROUND WATER RESOURCES AND SANDSTONE DEPOSITS OF LITTLE DESERT

C. R. LAWRENCE, Hydrogeologist.

The Mines Department over the last few years have been carrying out an exploratory drilling programme for water in the Little and also a little bit of work in the Big Desert. Now, from this work we know that water of quite good quality and quantity is available over most of the Little and Big Deserts. However to the far eastern margins of both of these Deserts the water is highly saline and we think it would be a good idea to consider the underground water resources in the subdivision of these areas, because any development in these areas will be largely dependent on the underground water resources there. The other point that we are particularly interested in also, is the matter of road making materials. Now, underlying both the Little and Big Deserts is this red sandstone which is the only material available for making roads. It would be a good idea to help in the development of these areas if road making reserves were set aside at such localities where the red sandstone was either very close to the surface or at the surface. These are the two fields in which the Mines Department is particularly concerned, and we would just like those matters taken into consideration in any subdivision of the two deserts.

35. STATE RIVERS AND WATER SUPPLY COMMISSION SUPPORTING PROPOSAL FOR PLANNED DEVELOPMENT OF LITTLE DESERT INCLUDING ADEQUATE RESERVATIONS

C.A.R. EVANS, Divisional Engineer.

I think the Commission's views on this can best be expressed by me reading to you a letter which we addressed to the Secretary of the Central Planning Authority when this matter was brought up.

I refer to your letter of 13th February, 1964, with which you enclosed a copy of a letter which your Authority has received from the Wimmera Regional Committee concerning the provision of adequate Crown Reserves in any large-scale settlement schemes, such as the A.M.P. Society's development in the Big Desert.

In regard to the specific case mentioned, the Commission has ascertained that the developmental lease issued to the Australian Mutual Provident Society was granted under the provisions of Section 302 et. seq. of the Land Act 1928, Clause 4 of the developmental lease makes reference to resumption by the Crown of any land required for the purposes specified in Section 14 of the Land Act 1928. Section 14 in turn authorises the resumption of land required for public or other specified purposes; under these powers, provision could be made for essential reserves for water supply and other public purposes of the nature mentioned in the Wimmera Regional Committee's letter.

The Commission concurs however in the view expressed by the Wimmera Regional Committee that it would be preferable

if provision were made in the planning stage of such settlement schemes for adequate reserves for public purposes. It suggests that these requirements could be ascertained if the tentative subdivision plan were referred to the relevant municipality and to the Statutory Authorities concerned with services such as education, agriculture, flora and fauna protection, water supply etc.

Comments made by the Municipality or the consulted authorities could then be taken into account when the subdivisional scheme is being considered before any formal lease is issued to the subdivider.

It is pointed out that a similar procedure is already followed by the Lands Department, which refers to the relevant authorities any applications for the alienation of Crown reserves, unused roads or other Crown Lands.

The Commission has now received a further letter from the Wimmera Regional Committee intimating that the Committee has arranged a meeting to be held at Nhill Shire Office on Wednesday, 26th August, to discuss this question. The Commission has replied to the Committee stating that it will be represented by a Senior Officer at the meeting in question; a copy of this letter has been enclosed with the Commission's reply.

36. DEPARTMENT OF AGRICULTURE DOES NOT REQUIRE LAND TO BE RESERVED FOR AGRICULTURE AND FAVOURS ADEQUATE RESERVATIONS FOR PUBLIC PURPOSES

D. R. ROONEY, representing Senior Inspector of Department

Firstly, I want to apologise for the non attendance of Mr. Hore, our Senior Inspector of Agriculture who was invited and was unavoidably detained in Melbourne. I am speaking on his behalf and I wish to make two points. The first is that any discussion on agricultural potential is not in court here today. This subject was discussed in detail in the January issue of the Department of Agriculture Journal and is available for any who wish to see it. The second point is that with regard to the reservation of any area for an agricultural research station. Our Director has replied to the Central Planning Authority already in which he states that it is suggested that a major problem associated with the development of the area will be the keeping of developmental costs down to a figure which does not represent an undue capital charge against its future production potential. The reservation of areas for the future development of a research station will not contribute to the solution of this problem, and it is envisaged that if there is any large scale settlement of the area the development of specialized techniques to suit the environment may be needed. Substantial achievements in this direction can be made by investigations on private property. This already is the basis of our agricultural organization throughout this State. It has been successful in the past and I think that in the future developmental phases of agriculture in this region this will also apply. There is a local officer available

stationed in Nhill who will be participating in experimental and advisory work in the developmental areas so that the Department's need will be satisfied there. The Director concluded his letter by saying "the reservation of a specific area for development as a research station is not recommended and it is conceded to be in the general public interest however, to ensure some generous reservation to cater for the development of civic requirements and to ensure the preservation of any flora and fauna that may be peculiar to the area."

37. FORESTS COMMISSION RECOMMENDS RESERVATION IN MOREY AND DING-A-DING AREAS

R. T. SEATON, Forests Resources Officer

I am here today representing the Forests Commission with the Divisional Forester and Mr. Middleton whom you have heard earlier as he was speaking as a member of the Bird Observers Club. Now the point I want to make today is simply this, that the Forest resources in the way of commercial timber in the north west part of the State are lamentably absent, and in the Little Desert we have very little timber of commercial importance. I exclude of course the use of the flora for bee keeping. The main species in the Little Desert of commercial importance is the yellow gum, and the Forests Commission some years ago conducted a survey right through the Little Desert to ascertain what reservations should be made in the interests of the people generally. That was done and in 1958 the Forests Commission wrote to the Lands Department and recommended quite a meagre area of approximately 2,000 acres in the Parish of Morey and Ding-a-ding in the southwest corner of the region. It is adjacent to the South Australian border. Some 2,000 acres we recommended for dedication as State Forest, and also if the Lands Department would be so kind that we did suggest a further 2,000 acres adjacent to it be reserved for alienation for the time being. I am very interested to hear today the remark by Mr. Butcher and that is that the areas that the Forests Commission desire to be reserved are also suitable for agricultural pastoral use. It is a fact that the areas of yellow gum in between the sand hills are on heavier soil and there is a retention of moisture and it would be suitable for agricultural purposes. But the point I am making is its because of those factors that we have some timber that is of commercial importance. Therefore, sir, that is the proposition of the Forests Commission. It stems not because of this conference here today and the proposed settlement of the Little Desert but a reservation we consider is essential in the interests of those who are already occupying land to the north and the south. Their timber requirements are either obtained from private property and that is of diminishing importance or it is imported into the area. So therefore, Mr. Minister, I would like you to take note, sir, of the very modest reserve that the Forest Commission are suggesting your Department should make available in the Little Desert area. And in conclusion, Mr. Chairman, as a member for many years of a Regional Committee in East Gippsland, may I congratulate the Wimmera Regional Committee on the very successful conference and the work that you are undertaking in forwarding a planned project for the Little Desert.

38. SOIL CONSERVATION AUTHORITY SUPPORTS PROPOSAL FOR RESERVATIONS
AND THE APPOINTMENT OF A CO-ORDINATING BODY TO PLAN LAND USE

R. G. DOWNES, Chairman

I think throughout the afternoon there has been enough said by various people to indicate that in modern society there are many conflicting views with regard to how any particular parcel of land shall be used. It appears that we need land for production, food, fibre, forestry, we need land for transport, we need land for industrial and urban use, we need land for recreation, and we need land for reference area. In the reference areas are the wild life reserves and national parks and so on that have been spoken about most today. Usually when these conflicting views of land use are brought under discussion one is confronted with an awful lot of emotional arguments. You get the one eyed people who plug for their own particular point of view. As one of the earlier speakers has said this afternoon's meeting has been singularly free from this type of emotional argument except in one or two respects. It came to my ears on one occasion this great urge to develop and develop quickly because of the shortage of food throughout the world. At the present time the world's problem is not necessarily the development of new land. The world's problem is the proper use of the land which is already developed and its even bigger problem is control of the population of the human species in the world today. I heard another argument which affects me because there were some suggestions that if we cleared the whole of the Little Desert the sands of time would smother us very quickly and we would have another Sahara on our hands. This of course is just as far from the truth as the previous argument that we need to develop the whole of this country in the next 10 years. You could have some troubles but by and large I think the Little Desert area is probably a safer proposition than the Big Desert area. And either of these are probably safer than a lot of the land we have already developed and conquered and got into a condition which you can farm safely in some of our northern Mallee country. Well now, from the conservation point of view, I think it is important to understand what conservation really means. And conservation basically is a matter of proper land use, and it doesn't matter whether you are going to use that land to build houses on, whether you are going to use it to put an aerodrome on farm, whether you are going to use it for a National Park or wild life reserve, it requires careful consideration with regard to the nature of the land and how you adapt it and use it to your own purpose. The point is that if you are going to do the right thing and you are going to use land for the right purpose and in the right way it will continue to give you service for that purpose, not just for 1, 2, 3, 4 or 5 years but indefinitely. And so from both sides of the fence those who wish to preserve who I call the preserving conservationists, and those who wish to produce, the productive conservationists, I think it is most important that we all get the same single objective, the proper land use and that we come together and we don't start arguing. And this brings me then down to the core of the whole problem here this afternoon. It is important before you decide what to do with land that you know something about it, and in this State there is very little known about a lot of areas. My own organization over the 10 to 15 years since we have been able to operate in this particular field has started doing soil ecological and land use surveys. We have just published this study of the north western part of Victoria in the Mallee. The big one that we have done of the south western part of this State which is the basic philosophy, behind the whole of our approach and system of study of land, is to be published we hope sometime next year. It has taken a long time to get it through because it is the classic example we hope will serve as the bases to the whole of our idea in land study, and this information is basic and will provide a lot of the answers to the

problems that are confronting you today. Not in this region because we haven't done this area. This happens to be the gap between the south western region that we've surveyed and the Mallee Region to the north. But basic to the answers of these problems today is the necessary, adequate study of the area. Before you start to determine land use you have got to know the nature of the country itself and its capabilities, both physical and then you impose on that the economic possibilities of the sorts of uses that you have in mind. I think Mr. McCann raised this point of study and consideration perhaps by statutory authority in sorting out these problems of land use its difficulties between conflicting interests. It may be of interest to you that the weekend before last I spent up in New South Wales among other things attending a conference called by the Institute of Foresters. They felt that in the State of New South Wales they had no means of bringing together the conflicting interests of various Departments in determining some of the problems of land use, and they did this study, or this symposium in relation to the Barrington tops area near the Hunter Valley. I was asked to be the guest speaker because in New South Wales they firmly believe that Victoria has solved all the problems of getting over this conflicting business of the needs and interests of people from one Department to another and from one group of the community to another. Then perhaps you don't know we have gone a long way and I'll just indicate the way in which we have done a far better job than they have been able to do in New South Wales. At the top perhaps is the Land Utilization Advisory Council set up under the Soil Conservation Act. Its statutory function is to determine land use in water supply catchments and that is the limit of its charter at the moment, although from time to time the Government has asked the Land Utilization Advisory Council to do other jobs for it, in this field. The Land Utilization Advisory Council, of which I am the Chairman, consists of the heads of the Departments - Forest Department, Water Supply, Agriculture and Lands - Departments very much concerned with land use in the catchment areas. Set up as a Premier's Committee is the Wild Life Reserves Investigation Committee set up at the instigation of Mr. Butcher's Department where again you have representation at a high level from various departments who are concerned with sorting out land use problems and this way we have the Forests Commission again, the Water Commission, the Lands Department, Fisheries and Wild Life and the Soil Conservation Authority represented to sort out problems concerning areas which should be set aside as wild life reserves. So, I think this meeting should know that at least in Victoria we are perhaps a little further ahead than they are in some other States in sorting out the conflicting land use interests. And perhaps Mr. Minister, you might care to accept the suggestion of Mr. McCann that a statutory body, I think this is very easily fixed, it just requires a slight amendment to our Statute to broaden the charter of the Land Utilization Advisory Council for which it has been used from time to time outside the catchment areas and I think you have the answer. Whether the present representation on it is broad enough to cover the whole of this State I wouldn't know and is subject to further consideration. But that is one way in which we can get on with a suggestion that has been put up by Mr. McCann. Finally I would just like to thank the Regional Committee for having this conference. I think it is most interesting to get a group of people covering a wide range of interests discussing land use problems. They are really the fundamental and important issues of our age.

39. CENTRAL PLANNING AUTHORITY - CONGRATULATING WIMMERA REGIONAL COMMITTEE ON ARRANGING CONFERENCE

L. FERNANDO, Assistant Secretary.

Firstly, Mr. Chairman, may I on behalf of the Central Planning Authority congratulate you on an excellent conference. This conference today is a perfect example of how Regional Committees should function and it indicates very clearly the role that Regional Committees can play in developing Victoria, and particularly the important role of the Wimmera Regional Committee in your Region. Mr. Chairman, the Authority is well aware of the particularly good work of your Committee and if as a result of this Conference today, your Committee decides to make any recommendations to the Authority I can assure you that the Central Planning Authority would give your recommendations very fair and very serious consideration.

40. LANDS DEPARTMENT WILL GIVE FULL AND THOROUGH CONSIDERATION TO PROPOSALS OUTLINED AT THIS CONFERENCE

L. W. BIRCH, Secretary.

I would like to thank your Committee, sir, for the opportunity of being present at this meeting today as the representative of the Department of Crown Lands and Survey, and like you, I am very pleased to have with me on this occasion the Honourable the Minister. Now while this subject which is being discussed at this meeting today on the subject of crown reservations and land settlement schemes is being confined to the Wimmera Region it has a general application right throughout the State and perhaps I could be excused if I make a few brief references to this general application with perhaps some historical reflections. Settlement in the State of Victoria commenced in the year 1837 when it was known as the Port Phillip District of the Colony of New South Wales. The Colony of Victoria came into existence in 1851 but it was not until the Constitution Act of 1855 that the Department of Public Lands under the control of the Surveyor General, Captain Andrew Clark, came into existence. What we see about us today is the achievement of a limited number of people over a comparatively short period of less than 130 years. The Lands Department as the original planning authority of this State, has played its part in the progress that you see about you today and which has gone on down the years. In fact the picturesque townships, wide roads and the large reserves which still exist will remain forever a monument to the early surveyors and planners of this Department. Naturally as the State is developed specialist authorities have been set up, and you have heard from them today, to follow on the earlier activities of the Department, including the Forests Commission, the Soil Conservation Authority, the National Parks Authority and the Central Planning Authority and its Regional Committees and others.

Now just a brief history of the legislation relating to Land Settlement. The first legislation of the Victorian Government for the purpose of regulating the sale and occupation of crown lands was passed in 1860, and since then there have been nearly 80 amending and consolidating Acts. However, from the very earliest times the Lands Acts have always provided for crown reservations which actually mean the reservation of crown

land for sale or alienation of leasing. And of course these provisions have been administered by the Department along with those relating to the sale, leasing and licensing of crown lands. The Department in fact has had both sides of the picture to administer in the best interests of the State.

Crown land may be reserved - I'll just give you an idea now of procedure - crown land may be reserved for practically every public purpose and the Land Act provides that this may be done in 2 ways (a) temporarily, or (b) permanently. In both cases the act of reservation is done by the Order of the Governor in Council and published in the Government Gazette. In the case of temporary reservations these may be revoked by Order of the Governor in Council and published in four consecutive issues of the Government Gazette. But lands permanently reserved can only be revoked by legislative action in Parliament. Those are the two distinctions between temporary reservations and permanent reservations are that permanent reservations before they can be revoked must come before the Parliament of the State. So that you could say in fact that there is no such thing as a permanent reservation because of the Parliament of the State says that this permanent reservation is to be revoked, well it passes.

Now I would like to give you some figures in a general way. The total area of the State is approximately $56\frac{1}{4}$ million acres. Of this area $33\frac{3}{4}$ million acres have been alienated or in course of alienation. Of the balance of the area of the State, namely $22\frac{1}{2}$ million acres, 7,830,000 acres are held under annual grazing licences and other temporary forms of tenure, which I should explain are terminable at short notice if the land is required for any other purpose whether it be for settlement or reservation, and there are now 1,631,000 acres of roads used and unused. The remaining area of the State consists of reserved State forests 5,625,000 acres, reserved national parks 562,500 acres, unoccupied crown lands 1,957,000 acres, reserved water frontage reserves, beds of rivers and lakes etc. 3,588,000 acres, and public reserves - these are reserves for recreation and all public parks, water reserves and all that sort of thing - 1,305,000 acres. Now the total of all these reservations, they are all reserved except the unoccupied crown lands, which is to all intents and purposes open to the world, a total of 13,000,000 acres or nearly one quarter of the total area of the State still remains in its virgin state. I hope I have not bored you with these figures but they do give a broad picture of the State as a whole in the matter of reservations as you have been discussing today.

It is still a definite policy of the Department to provide reserves for public purposes wherever they are necessary in all subdivisions of crown lands and the Department is often guided by other Departments and instrumentalities and municipal councils in this regard. However, it is required on some occasions where large reservations are desired, to weigh up the conflicting interests of settlement and development on the one hand and the desirability of reservation on the other. As you well know there are often varying opinions even in the locality concerned. Land is one of the fundamental bases of life and nearly every human activity has some association with it. Animals must die, trees and plants must die so that man may live. Migration to Australia is still proceeding at the rate of 125,000 persons per annum, which of course puts our resources under continuing pressure. In different parts of the State at different times there has been considerable development I would just like to quote from a memorandum which was presented to the Surveyor-General by the Deputy Surveyor General on the 19th October, 1858, that is 106 years ago. And this is what it

said - In the basin of the Murray between the Loddon and the Ovens about $3\frac{1}{4}$ million acres has been reported by Mr. Skeam inspecting surveyor, as second and third class pastoral land. My own impression of this extensive tract of country is that the constituents of the soil are generally such as would be highly conducive to the growth of cereals and the vine, but that owing to the aridity of the climate and the level nature of the greater part of the tract and the well defined character of the minor channels of drainage the soil in this part of the territory is in general too dry in summer and too wet in winter to admit of its being successfully cultivated at present, but that in some future period the location of a dense population in the basin of the Murray should render possible the cultivation of this region then by making use of the larger, everflowing rivers for the purpose of irrigation on an extended scale and combining there with it an adequate system of drainage I believe that $3\frac{1}{2}$ million acres alluded to could nearly all be rendered productive and would prove to be peculiarly adapted to the growth of wheat, vines and lucerne together with many of those products of southern Europe which have not yet become objects of culture in Victoria.

In your own locality development is proceeding under the auspices of the A.M.P. Society which I am given to understand is giving indications of success and this of course will not only add to the wealth of the State as a whole but will also benefit your own municipalities, towns and businesses generally. However, it is quite obvious that in the class of country concerned safeguards are necessary against erosion and the preservation of flora and fauna is desirable. Fortunately there are still large areas of virgin crown lands available for reservation as well as settlement in this region and the Department is prepared to give full consideration to any proposals which emanate as a result of this meeting. There are already two large national parks in this part of the State, namely at Wyperfeld and Hatta, and the Department has under consideration two other areas in the Parish of Watthe and south of Kiata in the Little Desert either as wild life reserves or national parks. However, without funds available for supervision, fire precautions, tracks and access roads and perhaps fencing these areas will be little better for their purpose than ordinary crown land. As I have mentioned before in considering the development of crown lands the Department normally designs a plan of subdivision providing for roads, reserves and other features and generally consults with the Shire Councils and Government Authorities regarding their requirements in advance of the land being made available for application. However, the development of the Big Desert by the A.M.P. Society under development lease as provided by special legislation was a departure from the established order as laid down in the Land Act and the survey regulations have not proceeded according to the predetermined plan of subdivision as in other crown lands. It has been dealt with more or less in the face, roads being extended as required clearing and sowing down have been carried out by the Society to meet the requirements of purchasers. In this way except for an area for township purposes, suitable reservations for other public purposes have not been preserved. However, there is provision in the Society's lease for the excision and reservation of areas required for public purposes and much closer attention would be paid to this aspect of the settlement in future. Up to date the extent of reserves has been subordinated to clearing and development with the emphasis on speed. The action of the Wimmera Regional Committee has been timely in drawing attention to the need for more extensive reserves and I'm sure its submissions will be given very serious thought. As a matter of fact a start has already been made in this direction and it is proposed to reserve an area of 300 acres

on Chapple road within the development lease at an early date. I think a reference has been made to reservation of a percentage of the leased land, I think 5% has been mentioned, this would entail the reservation of something like 16,500 acres in the Big Desert which if carried out in say 300 acre blocks would mean 55 separate reservations. Design of these would entail a large amount of work and a point to be watched would be the creation of conditions ideal to the breeding of rabbits. Although I understand that there is no rabbit menace in the area at present extensive areas of natural cover adjoining lush grass paddocks could create this. The idea of leaving a percentage of natural cover on alienated land is not new and it still applies in the Mallee where both in leases and crown grants there is a provision that 3% of the land must be left in its natural state, but with the advent of the rabbit this has gone by the board and it is very difficult to police especially on properties after they become freehold. It is thought that it would be better to concentrate on sandstone ridges which could give certain tourist attraction and supply needed road making material. Also areas useless for development such as sand ridge country and areas of deep sand. I understand that the A.M.P. Society believes that 30,000 to 50,000 acres of this leased land will be found unsuitable for development. A few bore points could be reserved for public use, particularly for travelling stock, and of course unusual features, areas of scientific interest and the like could be provided for. All these things must be done in collaboration with the A.M.P. Society and in advance of clearing operations.

As for the Little Desert, proposals have been made for portion of it to be made available to the A.M.P. Society for development under certain conditions. Now there are also proposals that a large area be proclaimed a National Park. These areas are separate and do not overlap. There are apparently opinions for and against in both cases and at this stage the Government has not made a decision on either proposal. If it is desired that some form of settlement of portion of the Little Desert is justified whether under the auspices of the A.M.P. Society or not, it is certain that this will not be done without reference to other interested Government Departments and Shire Councils and without first making a tentative subdivision providing for roads and reserves. I presume that as a result of this conference that the Department at some stage will be presented with a consolidated plan showing the different areas that have been talked about today - there seem to be so many of them that I doubt if there would be any other land left for any other purpose - but that is just on a rough view. You can't very well picture these areas unless you have got the plan in front of you. But I can assure you that when the Regional Committee makes its proposals known to the Department and the proposals of this conference known to the Department that they will receive full and thorough consideration.

41. LANDS DEPARTMENT - EXPLAINING WHY RESERVATIONS WERE NOT MADE IN BIG DESERT AND PROMISING THAT PROVISION WILL BE MADE FOR SUCH AREAS IN LITTLE DESERT

D. A. MADDEN, District Surveyor

My Secretary has left me very little to say. I think he has explained to your satisfaction the reason why reserves were not left in large numbers in the Big Desert. I think the

A.M.P. Society travelled so fast we could hardly get ahead of them in provision of reserves. But I have taken this matter up for some considerable time with the Regional Committee. I have discussed this matter with Mr. Lovett and others and I think they might be satisfied that the matter is not being forgotten. As the Secretary said there is provision in the Act to provide for reserves and in the development area so that reserves can still be provided in the Big Desert. I think that a statement today or more than one statement, of $\frac{1}{2}$ million acres was not correct. It would be 328,000 acres of which over 100,000 acres have now been sold. I think that is the figure. Mr. Gowing could correct them. So there still remains a couple of hundred thousand acres. Now all of that will not be developed. There will be large areas left. But I say this for my own purposes. If any proposals can be put forward and the Secretary has given you the OK to put them forward, as to where any particular areas of some particular value for reservation, if they are put forward well they can all be considered now as long as they are ahead of development. And I think we can do that. If the Little Desert is eventually developed I think that a sort of a broad plan as Mr. Butcher suggested it, a broad plan beforehand in which any areas which ought to be reserved be considered before any actual work is suggested. Some of them suggested might be a little bit impossible. But anyhow I think I can say for myself as District Surveyor now that I am alive to the great need of some reservations you can expect them in any future development.

42. THE HON. J.C.M. BALFOUR, M.L.A., MINISTER OF LANDS AND MINISTER FOR CONSERVATION AGREES THAT THE DEVELOPMENT OF THE LITTLE DESERT SHOULD BE WELL PLANNED AND THANKING COMMITTEE FOR ARRANGING SUCH AN INTERESTING CONFERENCE

Possibly I am rather a "ring-in" today. I don't think I was actually invited when the first invitations went out. But when as Minister of Lands Mr. Birch told me that he had been invited to this meeting and wished to accept the invitation and when as Minister for Conservation Mr. Downes, the Chairman of the Authority told me he had been invited and wished to accept the invitation, I thought that I had better come along too. They both had told me that it was time I got to know something about the area.

I must admit that I have been here on previous occasions but I always feel that the more often you visit a place the better you get to know it. And so I felt that in their company it would be a very opportune time for me to come here and I must say it has been a great pleasure this afternoon to listen to the various speakers at this very excellent meeting. Today we did see something of the Little Desert and tomorrow and Friday we hope to see some more. I do at this stage want to thank your Shire President and the Councillors of the Lowan Shire for meeting us at their boundary this morning, for conducting us on that short tour into the Little Desert and for the very generous hospitality extended to us today. It is greatly appreciated, sir, and thank you for the very kind thought. I would also like to compliment you on your very fine municipal buildings here and for the way in which you have coped with this very large and well attended meeting this afternoon. To you, Sir, as the Chairman of the Regional Committee, might I congratulate you and your Committee for having arranged this meeting. I have had some experience with Regional Committees having been a member of the West Gippsland Regional Committee for I think some 4 or 5 years. So I know what Regional Committees are supposed to do. I have also over the past 9 years had quite a deal to do with the Division of State Development under which the Central Planning Authority

comes and what Mr. Lew Fernando said to you is quite true, that the Division does look upon the Wimmera Regional Committee as a copybook committee. They are very delighted with the work which you are doing here, and I think this afternoon we have seen an example of what regional committees were really meant to do - to bring together a great number of people for the general planning and development of their Region. I think possibly the main theme today has been planned development, and I must confess I believe in that. Again having had some experience in the planning of a small region of the State, the Latrobe Valley Region, certainly our difficulties there and our problems were quite different to what yours are here. What was done in that area in 1948 certainly paid dividends and is an excellent example of what planned development can be. And I believe that if this area here is to be developed that firstly it should be planned. And so, although I have come here today to listen to you, I come here with a completely open mind, I would go along with you on that, that any development which takes place should be well planned. Now, Mr. McCann did mention that possibly a statutory authority should be set up for that planned development. I think Mr. Downes has answered Mr. McCann fairly well in as much as he has told you that we have the Land Utilization Authority. Very recently at the request of the Government they did a job in the Western District area and there is possibly no reason why their jurisdiction could not be extended if it were thought that they were the suitable type of body to carry out this planned development. And I can assure you that in all these things, although it may not be quite obvious to everybody, generally the various departments do liaise with each other. I think it is very wise that in these areas we reserve certain pieces of land for road making materials, certain pieces for forests, certain pieces for fauna and flora. The actual sizes of those pieces of land, possibly has to be worked out, but in principle it is good and I would this afternoon congratulate everybody, and I think there were about 35 speakers, for the very concise way in which they have put forward their ideas. And certainly your Regional Committee has gone to a deal of trouble when they take tape recordings which are extremely interesting from people who for some reason or other were not able to be with us. So I say to you, sir, many congratulations for having, well, firstly having convened the meeting, secondly for the way in which everything has been presented, and as Mr. Birch has said, we will look forward to getting a transcript of everything that has gone on and I can assure you all the various points that have been made will receive a great deal of consideration.

43. CHAIRMAN'S CLOSING REMARKS

In closing the Conference the Chairman, Cr. C.P. Whelan, said

That concludes the evidence that we have asked for today and in winding up this meeting I would just like to thank the speakers for their co-operation and for the matter they gave to us. They have helped us immeasurably in fulfilling at least another platform in the constitution of these committees because one of the purposes of the formation of these committees was to enable some common platform to be given to interested

bodies to present their opinions so that they could eventually receive the sanction of the Government authorities through the Central Planning Authority. This meeting today has been convened just to give that platform. The other thought that comes to my mind is this, that if I were a minister of religion and I had to choose the text of a sermon that would be appropriate for the discussions that have gone on today, I would without hesitation choose the very well known one "What would it profit a man to gain the world and lose his immortal soul". In other words 'What does a man exchange for his soul?' Next to the gift of life God's greatest gift to man is the land and all the things that go with it. And that land was given to us not to pillage and to spoil but to place on it the imprint of our personality in accordance with the Divine plan. And if we dispoil the land and don't use it as we are expected to use it, our children as yet unborn, and their children and their children's children will cry out against us in execration. And I believe that there is a tremendous responsibility placed upon us to use the gifts that God has given us, to use upon the land our ability, natural and acquired, to make sure that mammon is not to be the yard stick by which our success is developed but that the manner in which you have used the gift that God has given us. Thank you Mr. Minister for coming along yourself, as I said earlier, you have lent dignity and given status to this meeting. Thank you Mr. Birch as a very busy man, the Secretary of a very important Department. Thank you Mr. Madden and thank all Departmental Officers of whom I have spoken a little earlier in this meeting, for coming along and making their contributions. And to you the general public thanks again for the confidence you have shown in such large numbers. Now go away and be apostles of the platform that you have heard preached here today, the platform of reason, planned, enlightened development, not for self interests but in order to do the best for everybody in this great land of ours. Thanks once again and God bless you all.

THE FLORA OF THE LITTLE DESERT.
(Compiled by Local Botanists)

PTERIDOPHYTA

POLYPODIACEAE

Cheilanthes tenuifolia
Pteridium aquilinum

Rock fern
Common bracken

MARSILEACEAE

Marsilea drummondii
Pilularia novae hollandiae

Nardoo
Pillwort

OPHIOGLOSSACEAE

Ophioglossum coriaceum

Adder's tongue

ISOETACEAE

Isoetis drummondii

Quillwort

SPERMATOPHYTA

CUPRESSACEAE

Callitris }
Presissii }

Slender cyperus pine

Callitris }
Rhomboidea }

Oyster bay pine

POTAMOGETONACEAE

Potamogeton tricarinatus
Ruppia martima
Althenia australis

Floating pondweed
Sea tassel
Austral water-mat

SCHEUCHZERIAEAE

Troglochin calcitrapa
" centrocarpa
" minutissima
" mucronata
" turrifera
" procera

Spurred arrow grass
Dwarf arrow grass
Tiny arrow grass
Prickly arrow grass
Turret arrow grass
Water ribbons

HYDROCHARITACEAE

Ottelia ovalifolia
Vallisneria spiralis

Swamp lily
Eel-grass

GRAMINEAE

Themeda australis
Rottboellia compressa
Neurachne alopecuroides
+ Phalaris minor
+ " parodoxa
+ Ehrharta calycina
+ Polypogon monspeliensis
" maritimus
Alopecurus geniculatus
Agrostis avenacea
Dichelache crinita

Kangaroo grass
Mat grass
Fox tail mulga grass
Lesser canary grass
Bristle-spiked canary
grass

Beard grass

Marsh Foxtail

Long hair plume grass

Stipa acrociliata	Graceful spear grass
" elegantissima	Feather spear grass
" mollis	Soft spear grass
" semibarbata	Fibrous spear grass
" variabilis	Variable spear grass
" macalpinei	Golden spear grass
Sporobolus virginicus	Coast rat tail grass
+ Avena alba	Wild oat
+ " fatua	Cultivated oat
+ " sativa	Small hair grass
+ Molineria minuta	Silvery hair grass
+ Aira caryophyllea	
Amphibromus neesii	
Danthonia eriantha	
" caespitosa	
" gemiculata	
" setacea	
" duttoniana	
" penicilhata	
+ Pentaschistis airoides	Porcupine grass
+ Triodia irritans	Grey beard grass
Amphipogon strictus	Salt grass
Distichlis distichophylla	Common reed
Phragmites communis	
+ Koeleria pheleoides var	Annual Cat's tail
azorensis	Michel's avellinia
+ Avellina michelii	Squirrel-tail fescue
+ Vulpia bromoides	Rat's-tail fescue
+ " myuros	Red brome
+ Bromus rubens	
+ " gussonii	Shell grass
+ Briza maxima	Shiver grass
+ " minor	Cane-grass
Eragrostis australasica	Common love grass
" brownii	Mallee love grass
Eragrostis dielsii	
" fordeana	Tussock grass
Poa caespitosa	Knotted meadow grass
" drummondiana	
" bulbosa	Annual meadow grass
" annua	Indian couch grass
" fordeana	Perennial rye grass
Cynodon dactylon	Common wheat grass
+ Lolium rigidum	Barley grass
+ Lolium perenne	Sea barley.
Pholurus incurvus	
Agropyrum scabrum	
+ Hordeum murinum	
+ " martimum	

CYPERACEAE

Cyperus gymnocaulos
 " rotundus
 " rutilans
 Heleocharis acuta
 " pusillia
 Scirpus antarcticus
 " cernuus
 " nodosus
 " platycarpus
 " fluitans
 Schoenus apogon
 " brevifolius
 " tesquorum
 Cladium articulatum
 " glomeratum
 " junceum
 " gunnii

Nut grass leaf-rush
 Common spike rush
 Coarse club rush
 Grassy club rush
 Knotted club rush
 Floating club rush
 Fluke bog rush
 Short leaf bog rush
 Jointed twig rush
 Soft twig rush
 Bare twig rush
 Slender twig rush

Gahnia radula
 " trifida
 Lepidosperma carphoides
 " congestum
 " laterale
 " longitudinale
 " viscidum
 Caustis pentandra
 Chorizandra enodis
 Carex appressa
 " bichenoviana
 " gaudichandiana
 " inversa

Thatch saw sedge
 Coast saw sedge
 Black rapier sedge

Broad sword sedge
 Common sword sedge
 Sticky sword sedge
 Thick twist rush
 Black bristle rush
 Tall sedge

Tufted sedge
 Knob sedge

RESTONACEAE

Leptocarpus tenax
 " brownii
 Hypolaena fastigiata
 Lepidobolus drapetecoleus

Slender twine rush
 Coarse twine rush
 Tassel rope rush
 Burly chaff rush

CENTROLEPIDACEAE

Aphelia gracilis
 Centrolepis aristata
 " glabra
 " polygyna
 " strigosa
 Trithuria submersa

Slender aphelia
 Pointed centrolepis
 Smooth centrolepis
 Wiry centrolepis
 Hairy centrolepis
 Trithuria

JUNCACEAE

Luzula campestris
 Juncus bufonius
 + Juncus capitatus
 + " articulatus
 " holoschoienus
 " pallidus
 " pauciflorus
 " polyanthemus
 " radula

Field wood rush
 Toad rush
 Capitate rush

Giant rush
 Loose flowered rush
 Common rush
 Scraper rush

LILIACEAE

Burchardia umbellata
 Anguillaria dioica
 Bulbine bulbosa
 Thysanotus tuberosus
 " patersonii
 " dichotomus
 Dichopogon strictus
 " fimbriatus
 Arthropodium minus
 Chamaescilla corymbosa
 Tricoryne elatior
 Caesia vittata
 Dianella laevis
 " revoluta
 Calcectasia cyanea
 Bartlingia sessiliflora
 Lomandra effusa
 " glauca
 " juncea
 " leucocephala
 " micrantha
 " caespitosa
 Xanthorrhoea australis

Milk maids
 Early nancy
 Bulbine lily
 Common fringe lily
 Twining fringe lily
 Branching fringe lily
 Chocolate lily
 Nodding chocolate lily
 Small vanilla lily
 Blue squill
 Yellow autumn lily
 Blue grass lily
 Smooth flax lily
 Spreading flax lily
 Blue tinsel lily
 Nodding lily
 Scented mat rush
 pale mat rush
 Desert mat rush
 White mat rush
 Small flowered mat rush
 Austral grass tree

AMARYLLIDACEAE

Hypoxis glabella

Yellow star

IRIDACEAE+ Homeria collina
+ Romulea Rosiea

One leaved cape tulip

ORCHIDACEAE

Dipodium punctatum
 Prasophyllum elatum
 " fuscum
 " fusco-viride
 " nigricans
 " odoratum
 " pallidum
 Calochilus robertsonii
 Thelymitra aristata
 " antennifera
 " azurea
 " chasmogama
 " epipactoides
 " ixoides
 " luteo-ciliata
 " macmillanii
 " pauciflora
 " nudo
 Microtis porrifolia (unifolia)
 Corysanthes unguiculata
 Acianthus exsertus
 " reniformis
 Eriochilus cucullatus
 Leptoceras fimbriatum
 Lyperanthus nigricans
 Caladenia angustata
 " cardiochila
 " carnea
 " cucullata
 " deformis
 " dilatata
 " filamentosa var
 " tentaculata
 " patersonii
 " reticulata
 Diuris maculata
 " pedunculata
 Glossodia major
 Orthoceras strictum
 Pterostylis barbata
 " longifolia
 " mutica
 " nana
 " pusilla
 " reflexa
 " robusta
 " rufa
 " vittata

Hyacinth orchid
 tall leek orchid
 Tawny leek orchid
 Dusky leek orchid
 Dark leek orchid
 Sweet leek orchid

Brown beard
 Scented sun orchid
 Rabbits ears

Stout sun orchid
 Dotted Sun orchid
 Fringed sun orchid
 Salmon sun orchid
 Slender sun orchid

Common leek orchid
 Small helmet orchid
 Mosquito orchid
 Gnat orchid
 Parson's bands
 Fringed hare orchid
 Red beak orchid
 Slender caladenia
 Fleshy lip caladenia
 Pink fingers
 Hooded caladenia
 Blue fairies
 Fringed spider orchid

Tailed caladenia
 Common spider orchid
 Veined caladenia
 Leopard orchid
 Snake orchid
 Wax lip orchid
 Horned Orchid
 Bearded greenhood
 Tall greenhood
 Midget greenhood
 Dwarf greenhood
 Ruddy hood
 Striped greenhood

Rusty hood
 Banded greenhood

CASUARINACEAE

Casuarina stricta
 " luehmannii
 " muelleriana
 " paludosa
 " distyla var pusilla

Drooping sheoke
 Buloke
 Slaty sheoke
 Swamp sheoke
 Shrubby sheoke

URTIACEAE

+ *Urtica urens*
Parietaria debilis

Dwarf nettle
 Forest pellitory

PROTEACEAE

Isopogon ceratophyllus
Conospermum patens
Persoonia juniperina
 " *rigida*
Grevillea aquifolium
 " *ilicifolia* var
 angustiloba
 " *rosmarinifolia*
 " *lavandulacea* var
 sericea
 " *huegelii*
Hakea flexilis
 " *ulicina*
 " *rostrata*
 " *rugosa*
 " *vittata*
Banksia marginata
 " *ornata*
Adenanthos terminalis

Horny conebrush
 Slender conospermum
 Prickly geetung
 Hairy geebung
 Prickly grevillea

Holly grevillea
 Rosemary grevillea

Lavender grevillea
 Comb grevillea
 Flexile hakea
 Fuzze hakea
 Beaked hakea
 Wrinkled hakea
 Striped hakea
 Silver banksia
 Desert banksia
 Hair bush

SANTALACEAE

Exocarpus cupressiformis
 " *spartea*
 " *stricta*
 " *aphylla*
Santalum acuminatum
 " *persicarius*
Choretrum glomeratum var
 chrysantherus
 " *glomeratum*
 " *spicatum*
Leptomeria aphylla

Cherry ballart
 Broom ballart
 Pale fruit ballart
 Leafless ballart
 Sweet quandong
 Bitter quandong

Common sour bush
 Spiked sour bush
 Leafless currant bush

LORANTHACEAE

Amyena miquelii
 " *pendula*
Lysiana exocarpi
Phrygilanthus eucalyptifolius

Stalked mistletoe
 Drooping mistletoe
 Harlequin mistletoe
 Common mistletoe

POLYGONACEAE

Rumex brownii
 " *dumosus*
 + " *acetosella*
 + " *crispus*
Polygonum prostratum
Muehlenbeckia adpressa
 " *cunninghamii*

Swamp dock
 Wiry dock
 Sorrel
 Curled dock
 Trailing knotweed
 Climbing bignum
 Tangled lignum

CHENOPODIACEAE

Rhagodia nutans
Chenopodium atriplicinum
 " *psedomicrophyllum*
 " *murale*
 " *pumilio*
 " *glaucum*
Atriplex semibaccatum
Bassia uniflora

Nodding saltbush
 Purple goosefoot

Sowbane
 Pale goosefoot
 Berry saltbush

Kochia tomentosa
 " excavata
 " crassiloba
 Enchylaena tomentosa
 Salicornia blackiana
 Arthrocnemum halocnemoides
 var pergranulatum
 Suaeda maritima
 Salsola kali

Silky bluebush
 Bottle bluebush
 Barrier saltbush

Shrubby glasswort
 Seablite
 Prickly saltwort

AMARANTHACEAE

Trichinium obovatum
 " erubescens
 " macrocephalum
 " exaltatum

Silver-tails
 Hairy-tails
 Feather-tails
 Lamb-tails

PHYTOLACCACEAE

Gyrostemon australasicus

Wheel fruit

AIZOACEAE

Mesembrianthemum
 aequilaterale
 " disphyma australe

Angular pigface
 Rounded pigface

PORTULACAEAE

Calandrinia pygmaea
 " calyptrata
 " corrigioloides
 Calytonia australasica
 Montia fontana

Pigmy purslane
 Pink purslane
 Strap purslane
 White purslane
 Water blinks purslane

CARYOPHYLLACEAE

+ Cerastium tetrandrum
 + " glomeratum
 + " semidecandrum
 + Moenchia erecta
 Sagina apetala
 Spergularia rubra
 " diandra
 Polycarpon tetraphyllum
 Scleranthus pungens
 " minusculus
 + Tunica velutina
 + Silene conica

Mouse ear chickweed
 Lesser Mouse ear
 chickweed
 Erect moenchia
 Small perlwort
 Sandspurrey
 Lesser sandspurry
 Four leaved allseed
 Prickly knawel
 Cushion knawel
 Velvet carnation
 Striated catchfly

RANUNCULACEAE

Clematis microphylla
 Ranunculus sessiliflorus
 " robertsonii

Small clematis
 Small flowered buttercup
 Slender buttercup

LAURACEAE

Casytha glabella
 " melantha
 " pubescens

Tangled dodder laurel
 Large dodder laurel
 Downy dodder laurel

PAPAVERACEAE+ *Humaria officinalis*

Humitory

CRUCIFERAE

Cardamine hirsuta
Alsyssum linifolium
Blennodia cardaminoides
Sisymbrium
Stenopetalum lineare
Menkea australis
+ *Capsella bursa-pastoris*
Lepidium hyss opifolium
" *monophifolium*
+ *Rapistrum rugosum*

Common bitter cress
Desert alyssum
Sand cress

Narrow thread petal
Hairy spectacles
Shepherd's purse
Rubble peppercress
Winged peppercress
Giant mustard

DROSERACEAE

Drosera pygmaea
" *whittakeri*
" *glanduligera*
" *spathulata*
" *auriculata*
" *peltata*
" *planchonii*

Tiny sundew
Scented sundew
Scarlet sundew
Spoon leaf sundew
Tall sundew
Pale sundew

CRASSULACEAE

Crassula colorate
" *sieberiana*
" *macrantha*
" *bonariensis*
" *excerta*

Dense stonecrop
Austral stone crop
Rufous stone crop
Purple stonecrop
Large fruited stonecrop

PITTOSPORACEAE

Pittosporum phillyraeoides
Bursaria spinosa
Billardiera cymosa

Weeping pittosporum
Sweet bursaria
Sweet apple berry

ROSACEAE

Acaena ovina
" *anserinifolia*
Aphanies arvensis
" *dentamera*

Sheep's burr
Bidgee widgee

LEGUMINOSAE

Acacia acinacea
" *armata*
" *brachybotrya*
" *calamifolia*
" *farinosa*
" *glandulicarpa*
" *hakeoides*
" *ligulata*
" *melanoxylon*
" *mittchellii*
" *mollissima*

Gold dust acacia
Hedge acacia
Silver mulga
Wallowa
Mealy acacia
Hairy pod acacia
Hakea acac
Umbrella bush
Black wood
Mitchell Wattle
Black Wattle

Acacia myrtifolia	Myrtle acacia
" pycnantha	Golden Wattle
" rigens	Nealie
" salicina	Native willow
" sclerophylla	Hard leaf acacia
" spinescens	Spiny acacia
" trineura	Three nerved acacia
" enterocarpa	
" montana	Mallee acacia
" sp. (off A. microcappa)	
Cassia eremophila	Desert cassia
Gompholobium huegelii	Pale wedge pea
" minus	Dwarf wedge pea
Sphaerolobium vimineum	Leafless globe pea
Viminaria denudata	Golden spray
Daviesia genistifolia	Broom bitter pea
" brevifolia	Leafless bitter pea
" pectinata	Thorny bitter pea
" ulicina	Gorse bitter pea
Phyllota pleurandroides	Phyllota
Pultenaea d'altonii	Hoary bush pea
" densifolia	Dense leaf bush pea
" largiflorens	Twiggy bush pea
" laxiflora	Loose leaf bush pea
" " var pilosa	
" pedunculata	Matted bush pea
" prostrata	Silky bush pea
" tenuifolia	Slender bush pea
" " var glabra	
" vestita	
Eutaxia microphylla	Eutaxia
Phyllota pleurandroidies	
Dillwynia hispida	Rough parrot pea
" glaberima	Heathy parrot pea
" floribunda	Showy parrot pea
" uncinata	Silky parrot pea
+ Trifolium angustifolium	Narrow leaf clover
+ " procumbens	Hop clover
+ " arvense	Hare's foot clover
+ " tomentosum	Woolly foot clover
+ " subterraneum	Subterranean clover
+ Medicago hispida	Rough medick
+ " sativa	Lucerne
+ Platylobium obtusangulum	Common flat pea
Templetonia stenophylla	Leafy templetonia
Swainsonia procumbens	Pretty swainson pea
+ Vicia	
Kennedya prostrata	Scarlet coral pea
<u>GERANIACEAE</u>	
Pelargonium australe	Austral stork's bill
" rodneyanum	Rosy stork's bill
Geranium pilosum	Cut leaf cranes bill
Erodium cygnorum	Blue heron's bill
+ " botrys	Long stork's bill
<u>OXALIDACEAE</u>	
Oxalis corniculata	Yellow wood sorrel
<u>RUTACEAE</u>	
Correa reflexa	(small orange red form)
Zieria veronicea	Pink zieria
Boronia caeruleascens	Blue boronia

Boronia inornata
 " polygalifolia
 " pilosa
 " filifolia
 Pleurandropsis phebaloides
 Eriostemon gracilis
 " verucosas
 Phebalium pungens
 " stenophyllum
 " brachyphyllum

Desert boronia
 Waxy boronia
 Hairy boronia
 Slender boronia
 Downy star bush
 Small leaf wax flower

Prickly phebalium
 Narrow leaf phebalium

TREMANDRACEAE

Tetratheca ciliata

Pink eyes

POLYGONACEAE

Bredemeyera volubile
 " scoparium
 " calymega
 " polygaloides

Love creeper
 Broom milkwort
 Blue spike milkwort
 Small milkwort

EUPHORBIACEAE

Poranthera microphylla
 Pseudanthes ovalifolius
 Amperea spartioides
 Beyeria leschenaultii
 Bertya mitchellii

Small poranthera
 Small poranthera
 Broom spurge
 Pale turpentine bush
 Olive bertya

STACKHOUSIACEAE

Stackhousia monogyna

Creamy stackhousia

SAPINDACEAE

Dodonaea cuneata
 " attenuata
 " bursariifolia

Wedge leaf hop bush
 Slender hop bush
 Small hop bush

RHAMNACEAE

Cryptandra leucophractum
 " tomentosa
 " propinqua
 Spyridium spathulatum
 " subochreatum
 " bifidum
 " eriocephalum
 " vexilliferum

White cryptandra
 Prickly cryptandra
 Silky cryptandra
 Spoon leaf spyridium
 Velvet spyridium
 Forked spyridium
 Heath spyridium

MALVANCEAE

Plagianthus glomeratus
 " squamatus

Clustered plagianth

STERCULIACEAE

Thomasia petalocalyx
 Lasiopetalum behrii
 " baueri

Paper flower
 Pink velvet bush
 Slender velvet bush

DILLENIACEAE

Hibbertia virgata
 " fasciculata
 " sericea
 " stricta

Twiggy guinea flower
 Bundled guinea flower
 Silky guinea flower
 Erect guinea flower

GUTTIFERAE

Hypericum gramineum

Small St. Johns wort

ELATINACEAE

Elatine gramineum

Small Water wort

FRANKENIACEAE

Frankenia pauciflora

Common sea heath

VIOLACEAE

Hybanthus floribundus

Shrub

THYMELAEACEAE

Pimelea dichotoma
 " glauca
 " humilis
 " octophylla
 " phyllicoides
 " spathulata
 " stricta

Smooth rice flower
 Dwarf rice flower
 Downy rice flower
 Hairy rice flower
 Spoon rice flower
 Erect rice flower

LYTHRACEAE

Lythrum hyssopifolia

Small loosestrife

MYRTACEAE

Eucalyptus baxteri
 " behriana
 " calycogona
 " dumosa
 " gracilis
 " incrassata
 " largiflorens
 " leptophylla
 " leucoxylon
 " " var
 " pauperita
 " oleosa
 " viminalis var
 " racemosa
 " viridis
 Leptospermum myrsinoides
 " scoparium
 Kunzea pomifera
 Callistemon rugulosus
 Melaleuca acuminata
 " decussata
 " gibbosa
 " halmaturorum
 " neglecta
 " pubescens
 " uncinata
 " wilsonii
 Baeckia behrii
 " crassifolia
 " ericea
 Calytrix tetragona
 Lhotzkya alpestris
 Micromyrtus ciliatus
 Darwinia micropetala
 Eucalyptus calycogona

Brown stringbark
 Bull Mallee
 Red Mallee
 Dumosa Mallee
 White Mallee
 Yellow Mallee
 Black Box
 Narrow leaf Mallee
 Yellow Gum

Oil Mallee

Manna Gum
 Green Mallee
 Silky Tea Tree
 Manuka
 Muntries
 Scarlet Bottle brush
 Creamy honey myrtle
 Cross leaf honey myrtle
 Slender honey myrtle
 Kangaroo paper bark
 Mallee honey myrtle
 Moonah
 Broom honey myrtle
 Crimson honey myrtle
 Broom heath myrtle
 Desert heath myrtle
 Mat heath myrtle
 Common fringe myrtle
 Snow myrtle
 Fringed heath myrtle
 Small scent myrtle
 Red Mallee

OENOTHERACEAE

Epilobium junceum
+ Oenothera biennis

Hairy willow herb
Evening primrose

HALORAGIDACEAE

Loudonia behrii
Halorrhagis elata
" tetragyna
" heterophylla
Myriophyllum integrifolium
" verrucosum
" elatinoides

Golden pennants
Tall raspwort
Poverty raspwort
Rough raspwort
Small water milfoil
Red water milfoil
Coarse water milfoil

UMBELLIFERAE

Hydrocotyle laxiflora
" callicarpa
" capillaris
Eryngium rostratum
Xanthosia dissecta
Dancus brachiatus
Lilaeopsis australica

Stinking pennywort
Small pennywort
Thread pennywort
Blue devil
Cut leaf xanthosia
Austral carrot
Lilaeopsis

EPACRIDACEAE

Epacris impressa
Brachyloma ericoides
" daphnoides
" depressum
" ciliatum
Acrotriche serrulata
Monotoca scoparia
Astroloma canostephioides
" humifusum
Styphelia adscendens
Lissanthe strigosa
Leucopogona clelandii
" costatus
" ericoides
" glacialis
" rufus
" virgatus
" woodsii

Common heath
Blush heath
Daphne heath
Spreading heath
Fringed heath
Green ground berry
Prickly broom heath
Flame heath
Cranberry heath
Golden heath
Peach heath

Twiggy beard heath
Pink beard heath
Twisted beard heath
Ruddy beard heath
Common beard heath
Broom beard heath

PRIMULACEAE

Samolus repens
+ Anagallis arvensis

Creeping brookweed
Pimpernel

LOGANIACEAE

Mitrasacme paradoxa
" distylis
Logania linifolia

Wiry mitrewort
Tiny mitrewort
Flax leaf logania

CENTIANACEAE

Sebaea ovata
Centaurium pulchellum
Villasia reniformis
+ microcala filiformis

Yellow centaury
Austral cantuary
Yellow march flower
Slender microcala

CONVOLVULACEAE

Convolvulus erubescens
Dichondra repens
Wilsonia rotundifolia

Blushing bindweed
Kidney weed
Round leaf wilsonia

Vtricularia dichotoma
Polypompholyx tenella

Myoporum platycarpum
 " parvifolium
 " deserti
 " viscosum
 Eremophila gibbifolia
 " longifolia

Plantago varia

Opercularia scabrida
" varia
Asperula conferta

Halganian cyanea
Cynoglossum australe
" saueolans
+ Echium plantaginum
Plagiolothrys clachanthus

LABIATAE

Prostanthera aspalathoides
" denticulata
Ajuga australis
" " var
" grandiflora
Teucrium racemosum
Westringia rigida
" eremicola
+ Lamium amplexicaule

SOLANACEAE

+ *Lycium ferocissimum*
 Solanum nigrum
 " *aviculara*
 " *simile*
+ *Nicotiana glauca*

Verbascum virgatum
thapsus

Blue rod
Stalked brooklime
Small mud mat
Common mud mat
Common mud wort
Eastern speedwell
Wandering speedwell
Cup speedwell
Purple eye bright
Common bartsia

Purple bladder wort
Pink bladder wort

Sugarwood
Creeping myoporum
Turkey bush
Sticky boobialla
Scaly emu bush
Berrigan

Variable plantain

Rough stinkweed
Broad stinkweed
Common woodruff

Rough halganian
Austral hounds tongue
Sweet hounds tongue
Paterons's Curse
Hairy forget me not

Scarlet mint bush
Rough mint bush
Bugle

Grey germandera
Stiff westringia
Slender westringia
Deadnettle

African boxthorn
Black nightshade
Kangaroo apple
Oonadroo
Tree tobacco

Spurious mullein
Great mullein

Mimulus repens
 " gracilis
 Asperula conferta var
 wimmerana
 Galium gandichandii

Creeping monkey flower
 Slender monkey flower

Rough bedstraw

CAMPANULACEAE

Wahlenbergia gracilentia
 " quadrifida
 " bicolor
 " consimilia
 " gymnoclada
 Lobelia gibbosa
 Partia erecta
 Isotoma fluviatilis

Blue bell

Tall lobelia
 Poison partia
 Swamp isotime

GOODENIACEAE

Velleria paradoxa
 Goodenia amplexans
 " lanata
 " geniculata
 " pinnatifida
 " pusilliflora
 " robusta
 " varia
 " glauca
 Selliera radicans
 Dampiera stricta
 " rosmarinifolia
 " lanceolata

Spur velleria
 Clasping Goodenia
 Trailing goodenia
 Bent goodenia
 Cut leaf goodenia
 Small flower goodenia
 Woolly goodenia
 Sticky goodenia
 Swamp weed
 Swamp weed
 Blue dampiera
 Rosmary dampier
 Grooved dampiera

BRUNONIACEAE

Brunonia australis

Blue pincushion

STYLIDIACEAE

Stylidium graminifolium
 " calcaratum
 " despectum
 " perpusilla
 Levenhookia bubia
 " sonderi

Grass trigger plant
 Spurred trigger plant
 Small trigger plant
 Slender trigger plant
 Hair stylewort
 Slender stylewort

COMPOSITAE

Olearia floribunda
 " lepidophylla
 " ramulosa
 " decurrens
 " ciliata
 + Aster subulatus
 Vittadima triloba
 Calotis scabiosifolia
 Lagenophora stipitata
 Brachycome ciliaris var
 brachyglossa
 lineariloisa
 pachyptera
 " goniocarpa
 " dissectifolia
 " basaltica var
 gracilis
 " leptocarpa
 " perpusilla

Heath daisy bush
 Club moss daisy bush
 Twiggy daisy bush
 Clammy daisy bush
 Blue daisy bush
 Shrub aster
 New Holland daisy
 Rough burr daisy
 Blue bottle daisy

Hard head daisy

Basalt daisy

Rayless daisy

<i>Cotrula australis</i>	Common cotula
<i>Centipeda cunninghamii</i>	Common sneezweed
<i>Iscaetopsis graminifolia</i>	Grass cushion
<i>Myriocephalus rhizocephalus</i>	Woolly heads
<i>Angianthus strictus</i>	Stiff cup flower
" <i>tenellus</i>	
<i>Angianthus preissianus</i>	Common cup flower
<i>Calocephalus drummondii</i>	Dwarf beauty heads
" <i>citreus</i>	Lemon beauty heads
<i>Gnaphalodes uliginosum</i>	Flannel cudweed
<i>Craspedia uniflora</i>	Billy buttons
<i>Cassinia complanata</i>	Smooth cassinia
<i>Humea pholidota</i>	Scaly humea
<i>Toxanthus muelleri</i>	Common bow flower
" <i>perpusillus</i>	Tiny bow flower
<i>Quinetia urvellei</i>	Quinetia
<i>Inula graveolens</i>	Stink wort
<i>Rutidosia multiflorus</i>	Small wrinklwort
<i>Millotia tenuifolia</i>	Soft millotia
<i>Ixiolaena leptolepis</i>	Stalked ixiolaena
<i>Podosperma angustifolia</i>	Sticky long heads
<i>Podolepis acuminata</i>	Showy podolepis
<i>Leptorraynchus waitzia</i>	Button immortelle
" <i>squamatus</i>	Scaly podolepis
<i>Helichrysum apiculatum</i>	Common everlasting
" <i>baxteri</i>	White everlasting
" <i>blandowskianum</i>	Woolly everlasting
" <i>leucopsidium</i>	Satin everlasting
" <i>obtusifolium</i>	Blunt everlasting
" <i>scorpiodes</i>	Curling everlasting
" <i>semipapossu</i>	Clustered everlasting
" <i>retusum</i>	Rough everlasting
" <i>obcordatum</i>	Grey everlasting
<i>Helipterum pygmaeum</i>	Pigmy sunray
" <i>demissum</i>	Tiny sunray
" <i>corymbiflorum</i>	Paper sunray
" <i>australes</i>	Common sunray
" <i>laeve</i>	Smooth sunray
<i>Gnaphalium japonicum</i>	Common cudweed
" <i>involucratum</i>	
" <i>luteocallum</i>	Jersey cudweed
" <i>candidissum</i>	White cudweed
+ " <i>indutum</i>	Tiny cudweed
<i>Stuartina muelleri</i>	
<i>Erechites arguta</i>	Spoon cudweed
" <i>quadridentata</i>	Rough fireweed
<i>Senecio brachyglossus</i>	Cotton fireweed
" <i>magnificus</i>	Slender groundsel
" <i>lautus</i>	Showy groundsel
+ <i>Cirsium vulgare</i>	Variable groundsel
+ <i>Artotheca calendula</i>	
+ <i>Centaurea melitensis</i>	Malta thistle
+ <i>Microseris scapigera</i>	Yam
+ <i>Hypochaeris glabra</i>	Smooth cat's ear
+ <i>Sonchus asper</i>	Rough thistle
" <i>oleraceus</i>	Sow thistle
+ <i>Anthemis nobilis</i>	Common chamomile
+ <i>Cymbonotus lawsonianus</i>	Bear's ear

- BEARDED DRAGON (*Amphibolurus Barbartus*) Common.
Common Goana (*Varanus Varius*) Not commonly found.
Ground Goana (*Varanus Gouldii*) Rare.
BOB-TAILED LIZARD (*Trachysaurus Rugosus*) Common.
BLUE TONGUE LIZARD (*Tiliqua Scincoides*) Very Rare - Desert only.
* Western BLUE-TONGUE LIZARD (*Tiliqua Occipitalis*) Very Rare - Desert only.
COOPER TAILED SKINK (*Sphenomorphus Taeniolata*) Common in the Southern part of the list area.
METALIC SKINK (*Leiopisma Metallicum*) Fairly Common.
GUICHENOT'S SKINK (*Leiopisma Guichenoti*) Rare.
GARDEN SKINK (*Ablepharus Lineo-ocellatus*) Rare.
TRILOBED BLIND SNAKE (*Typhlops Bituberculatus*) Very Rare.
SCALY BLIND SNAKE (*Typhlops Australis*) Rare.
COMMON BROWN SNAKE (*Demansia Textilis*) Not common in the Desert.
BLACK-NEAPED SNAKE (*Denisonia Gouldii*) Rare - Desert area only.
* DESERT SNAKE (*Denisonia Suta*) Rare - Desert area.
* DESERT SNAKE (*Denisonia Curta*) Very Rare - Desert only.

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The letter M indicates that the bird is migratory or nomadic.

1. EMU - *Dromaius novae-hollandiae*
7. MALLEE-FOWL - *Leipoa ocellata*. The Kiata area is of great importance in the plan to preserve this remarkable bird and in conjunction with the three other reserves where the Mallee Fowl occurs the birds future is reasonably secure.
9. STUBBLE-QUAIL - *Coturnix pectoralis* - M
14. PAINTED QUAIL - *Turnix varia* - M
18. LITTLE QUAIL - *Turnix velox* - M
30. PEACEFUL DOVE - *Geopelia placida*
34. COMMON BRONZEWING - *Phaps chalcoptera*
35. BRUSH BRONZEWING - *Phaps elegans*
43. CRESTED PIGEON - *Ocyphaps lophotes*
55. BLACK-TAILED NATIVE HEN - *Tribonyx ventralis* - M
61. LITTLE GREBE - *Podiceps ruficollis* - M
96. BLACK CORMORANT - *Phalacrocorax carbo* - M
97. LITTLE BLACK CORMORANT - *Phalacrocorax ater* - M
100. LITTLE PIED CORMORANT - *Phalacrocorax melanoleucus* - M
133. AUSTRALIAN SPUR-WINGED PLOVER - *Lobibyx novae-hollandiae*
135. BANDED PLOVER - *Zonifer tricolor*
144. BLACK-FRONTED DOTTEREL - *Charadrius melanops*
174. SOUTHERN STONE-CURLEW - *Burhinus magnirostris*
179. AUSTRALIAN WHITE IBIS - *Threskiornis molucca* - M
180. STRAW-NECKED HERON - *Notophox novae-hollandiae*
188. WHITE-FACED HERON - *Notophox pacifica* - M
189. WHITE-NECKED HERON - *Nycticorax caledonicus*
192. NANKEEN NIGHT HERON - *Nycticorax minutus*
195. LITTLE BITTERN - *Ixobrychus jubata* - M
202. MANED GOOSE - *Chenonetta jubata* - M
207. CHESTNUT-BREASTED SHELDUCK - *Casarca tadornoides* - M
208. GREY DUCK - *Anas superciliosa* - M
211. GREY TEAL - *Querquedula gibberifrons* - M
213. PINK-EARED DUCK - *Malacorhynchus membranaceus* - M
218. SPOTTED HARRIER - *Circus assimilis* - M
219. SWAMP-HARRIER - *Circus approximans* - M
221. AUSTRALIAN GOSHAWK - *Astur fasciatus*
222. COLLARED SPARROWHAWK - *Accipiter cirrocephalus*

LIST OF THE FAUNA OF THE LITTLE DESERTM A M M A L S

AUSTRALIAN SPINY ANTEATERS - (*Tacayglossus Aculeatus*) Common.
FAT-TAILED POUCHED MOUSE - (*Sminthopsis Crassicaudata*) Common.
YELLOW FOOTED POUCHED MOUSE - (*Antechinus Flavipes*) Recorded from the Little Desert south of Kiata, and may possibly exist in the Desert South of Kaniva. Desert only. Rare.
RED TAILED BUSH RAT - (*Phascogale*) (*Phascogale Calura*) said to have been found in the Little Desert many years ago, but recent attempts to find it have failed.
PYGMY, OR FEATHERTAILED GLIDER - (*Acrobates Pygmaes*) Recorded from all parts of the Little Desert - appears to be more common on the Southern part of the Desert. Not commonly seen - a nocturnal species - Desert only.
* SOUTH-WESTERN PYGMY POSSUM - (*Dormouse*) (*Cercatetus Concinnus*) This beautiful little possum is occasionally found in disused birds nests, particularly in the banksik stands. Nocturnal - Fairly common, though not often seen. Desert only.
SUGAR GLIDER (*Petaurus Breviceps*) Found in the gum (*Eucalyptus*) trees in the Little Desert - particularly in the Southern part. Desert only.
BRUSH-TAILED POSSUM (*Trichosurus Vulpecula*) Very Common.
RED-NECKED WALLABY (*Wallabia Rufogrisea*) Found in the Little Desert south of Kaniva, but is not common. Desert only.
GREAT GREY KANGAROO (*Macropus Major*) This species is found from time to time in the list area, but is not common. Desert only.
BLACKED FACED KANGAROO (*Macropus Major Melanops*) The Little Desert area between Kaniva and Goroke and is one of the few spots in Victoria that this species can be found. Fairly common in this area - Desert only.
* MITCHELLS HOPPING MOUSE (*Notomys Mitchelli*) Thought to have been extinct in Victoria in 1918, but was rediscovered south of Kiata in 1955. Since then a few colonies have been found in various parts of the Little Desert. Desert only.

B A T S

As these mammals cover such a wide range whilst feeding it is impossible to confine species to various parts of the Country, so all the species recorded from the Western Wimmera will be listed and these species at times may be found over the Little Desert area.

LESSER LONG EARED BAT (*Nyctophilus Geoffroy*) - Not Common.
LITTLE BROWN BAT (*Vespadelus Pumilus*) Rare.
GOULDS WATTLED BAT (*Chalinolobus Gouldi*) Fairly Common.
CHOCOLATE WATTLED BAT (*Chalinolobus Morio*) Fairly Common.
EASTERN LITTLE MASTIFF BAT (*Micronomus Norfolkensis*) Rare.
WHITE STRIPED MASTIFF BAT (*Austronomus Australis*) Rare.
WESTERN MASTIFF BAT (*Micronomus Planiceps*) Rare.

R E P T I L E S

VELVET GECKOE (*Oedura Marmorata*) Very Rare - Desert only.
DELLA GECKOE (*Peropus Variiegatus*) Fairly common.
SCALY FOOT LIZARD (*Pygopus Lepidopodus*) Rare - Desert only.
MIMICKING SNAKE-LIZARD (*Delma Fraseri*) Common.
PRETTY SNAKE-LIZARD (*Aprasia Pulchella*) Very Rare - Desert only.
PAINTED DRAGON (*Amphibolurus Pictus*) Common in the list area - Desert only.
TREE DRAGON (*Amphibolurus Muricatus*) Very Rare - Desert only.

BEARDED DRAGON (*Amphibolurus Barbartus*) Common.
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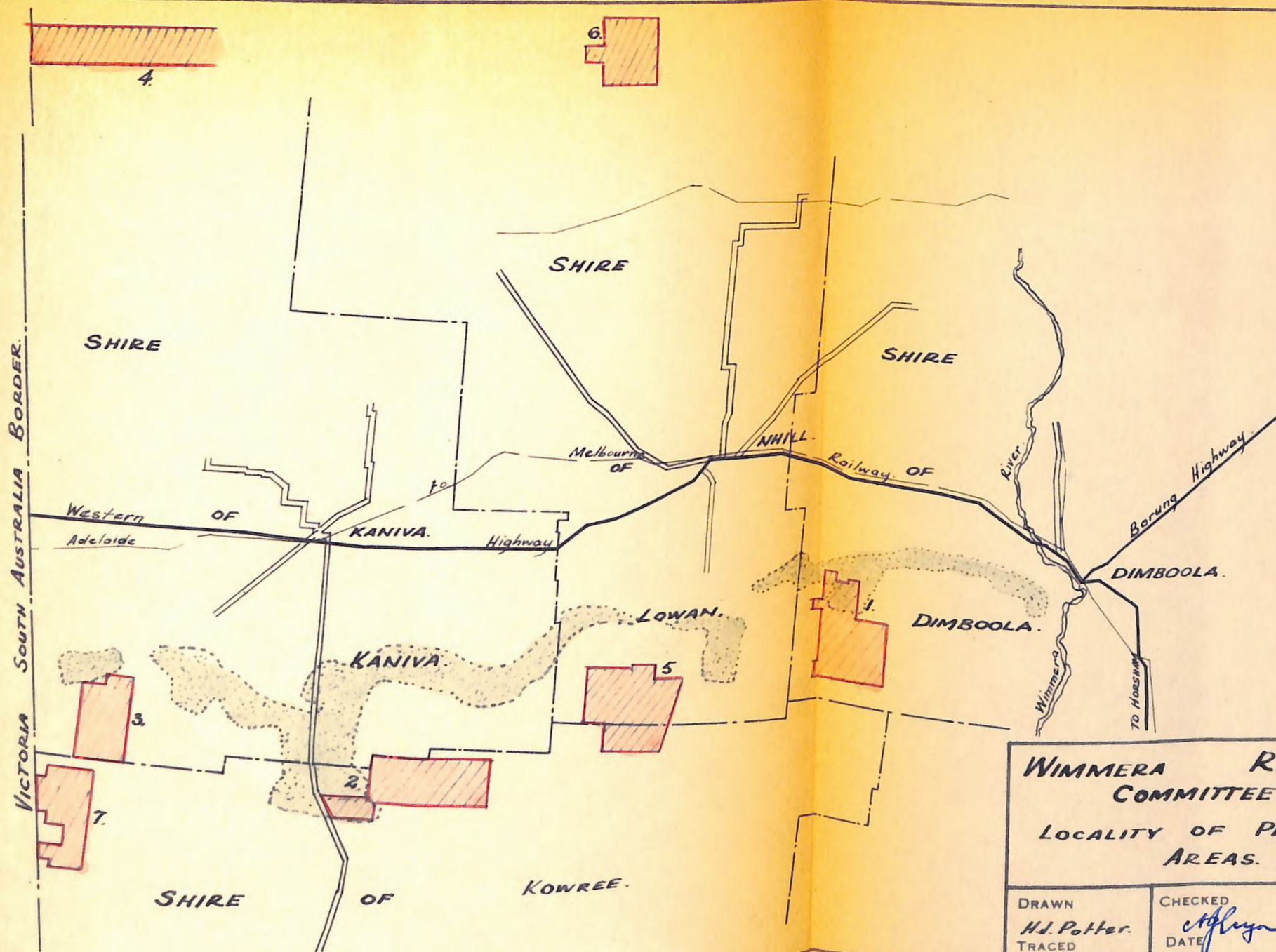
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144. BLACK-FRONTED DOTTEREL - *Charadrius melanops*
174. SOUTHERN STONE-CURLEW - *Burhinus magnirostris*
179. AUSTRALIAN WHITE IBIS - *Threskiornis molucca* - M
180. STRAW-NECKED IBIS - *Threskiornis* - M
188. WHITE-FACED HERON - *Notophox novae-hollandiae*
189. WHITE-NECKED HERON - *Notophox pacifica* - M
192. NANKEEN NIGHT HERON - *Nycticorax caledonicus*
195. LITTLE BITTERN - *Ixobrychus minutus*
202. MANED GOOSE - *Chenonetta Jubata* - M
207. CHESTNUT-BREADED SHELDUCK - *Casarca tadornoides* - M
208. GREY DUCK - *Anas superciliosa* - M
211. GREY TEAL - *Querquedula gibberifrons* - M
213. PINK-EARED DUCK - *Malacorhynchus membranaceus* - M
218. SPOTTED HARRIER - *Circus assimilis* - M
219. SWAMP-HARRIER - *Circus approximans* - M
221. AUSTRALIAN GOSHAWK - *Astur fasciatus*
222. COLLARED SPARROWHAWK - *Accipiter cirrocephalus*

224. WEDGE-TAILED EAGLE - *Uroaetus audax*
 225. AUSTRALIAN LITTLE EAGLE - *Hieraaetus morphnoides*
 228. WHISTLING EAGLE - *Haliastur sphenurus*
 232. AUSTRALIAN BLACK-SHOULDERED KITE - *Elanus axillaris* - M
 235. LITTLE FALCON - *Falco longipennis*
 237. PEREGRINE FALCON - *Falco peregrinus*
 239. BROWN HAWK - *Falco berigora*
 240. HAWKEEN KESTREL - *Falco cenchroides*
 242. BOOBOOK OWL - *Ninox novae-seelandiae*
 246. WINKING OWL - *Ninox connivens*
 249. BARN-OWL - *Tyto Alba*
 254. RAINBOW LORIKEET - *Trichoglossus moluccanus* - M
 258. MUSK-LORIKEET - *Glossopsitta concinna* - M
 259. PURPLE-CROWNED LORIKEET - *Glossopsitta porphyrocephala* - M
 260. LITTLE LORIKEET - *Glossopsitta pusilla* - M
 264. RED-TAILED BLACK COCKATOO - *Calyptorhynchus banksi*
 267. YELLOW-TAILED BLACK COCKATOO - *Calyptorhynchus funereus*
 269. WHITE COCKATOO - *Kakatoe galerita*
 272. CORELLA - *Kakatoe tenuirostris*
 273. GALAH - *Kakatoe roseicapilla*
 274. COCKATIEL - *Leptolophus hollandicus* - M
 282. CRIMSON ROSELLA - *Platycercus elegans*
 288. EASTERN ROSELLA - *Platycercus eximius*
 291. RINGNECK PARROT - *Barnardius barnardi*
 295. RED-BACKED PARROT - *Psephotus haematonotus*
 297. BLUE BONNET - *Psephotus haematogaster*
 306. BLUE-WINGED PARROT - *Neophema chrysastoma* - M
 309. SWIFT PARROT - *Lathamus discolor* - M
 310. BUDGERYGAH - *Melopsittacus undulatus* - M
 313. TAWNY FROGMOUTH - *Podargus strigoides*
 317. OWLET-NIGHTJAR - *Aegotheles cristata*
 322. LAUGHING KOOKABURRA - *Dacelo gigas*
 326. SACRED KINGFISHER - *Halcyon sanctus* - M
 329. RAINBOW-BIRD, (AUSTRALIAN BEE-EATER) - *Merops ornatus* - M
 331. SPOTTED NIGHTJAR - *Eurostopodus guttatus*
 334. SPINE-TAILED SWIFT - *Hirundapus caudacutus* - M
 335. FORK-TAILED SWIFT - *Micropus pacificus* - M
 337. PALLID CUCKOO - *Cuculus pallidus* - M
 338. FAN-TAILED CUCKOO - *Cacomantis pyrrhophanus prionuris* - M
 only very rarely visits this area.
 339. BRUSH CUCKOO - *Cacomantis variolosus* - M
 342. HORSFIELD BRONZE-CUCKOO - *Chalcites basalis* - M
 344. GOLDEN BRONZE-CUCKOO - *Chalcites placosus* - M
 357. WELCOME SWALLOW - *Hirundo neoxena* - M
 358. WHITE-BACKED SWALLOW - *Cheramoeca leucosterna* - M
 359. AUSTRALIAN TREE-MARTIN - *Hylochelidon nigricans* - M
 360. FAIRY MARTIN - *Hyochelidon ariel* - M
 361. GREY FANTAIL - *Rhipidura fuliginosa*
 364. WILLIE WAGTAIL - *Rhipidura leucophrys*
 366. SATINFLYCATCHER - *Myiagra cyanoleuca* - M only very rarely
 visits this area
 369. RESTLESS FLYCATCHER - *Seisura inquieta*
 377. AUSTRALIAN BROWN FLYCATCHER - *Micoeca fascians*
 380. SCARLET ROBIN - *Petroica multicolor* - M
 381. RED-CAPPED ROBIN - *Petroica goodenovii*
 382. FLAME ROBIN - *Petroica phoenicea* - M
 383. PINK ROBIN - *Petroica rodinogaster* - M only very rarely
 visits this area
 384. ROSE ROBIN - *Petroica rosea* - M only very rarely visits
 this area
 385. HOODED ROBIN - *Melanodryas cucullata*
 392. SOUTHERN YELLOW ROBIN - *Eopsaltria australis*
 398. GOLDEN WHISTLER - *Pachycephala pectoralis*
 401. RUFOUS WHISTLER - *Pachycephala rufiventris*
 403. GILBERT WHISTLER - *Pachycephala inornata*
 408. GREY SHRIKE-THRUSH - *Colluricincla harmonica*
 415. MAGPIE-LARK - *Grallina cyanoleuca*
 416. EASTERN SHRIKE-TIT - *Falcunculus frontatus*
 419. CRESTED BELLBIRD - *Oreoica gutturalis*

424. BLACK-FACED CUCKOO-SHRIKE - *Coracina novae-hollandiae* - M
 427. LITTLE CUCKOO-SHRIKE - *Coracina robusta* - M only very rarely visits this area.
 430. WHITE-WINGED TRILLER - *Lalage tricolor* - M
 441. SOUTHERN SCRUB-ROBIN - *Drymodes brunneopygia*
 443. GREY-CROWNED BABBLER - *Pomatostomus temporalis*, owing to the destruction of its habitat throughout Victoria this bird is becoming uncommon.
 445. WHITE-BROWED BABBLER - *Pomatostomus superciliosus*
 448. WHITE-FRONTED CHAT - *Epthianura albifrons*
 465. BROWN WEEBILL - *Smicrornis brevirostris*
 470. STRAITED THORNBILL - *Acanthiza lineata*
 471. LITTLE THORNBILL - *Acanthiza nana*
 478. RED-TAILED THORNBILL - *Acanthiza pusilla hamiltoni*
 481. CHESTNUT-TAILED THORNBILL - *Acanthiza urophgialis*
 483. DARK THORNBILL - *Acanthiza iredalei hedleyi* - the Dwarf Scrub of the Little Desert is the only place in Victoria where this bird can be found.
 484. BUFF-TAILED THORNBILL - *Acanthiza reguloides*
 486. YELLOW-TAILED THORNBILL - *Acanthiza chrysorrhoa*
 497. REDTHROAT - *Pyrrholaemus brunneus*
 499. SHY GROUND-WREN - *Hylacola cauta*
 502. RUFOUS FIELD-WREN - *Calamanthus campestris* - The Dwarf Scrub of the Little Desert is the remaining stronghold of this bird in Victoria.
 508. BROWN SONGLARK - *Cinclorhamphus cruralis* - M
 509. RUFOUS SONGLARK - *Cinclorhamphus mathewsi* - M
 522. LITTLE GRASSBIRD - *Megalurus gramineus* - M
 524. AUSTRALIAN REED-WARBLER - *Acrocephalus Australis* - M
 529. SUPERB BLUE WREN - *Malurus cyaneus*
 537. PURPLE-BACKED WREN - *Malurus assimilis*
 544. MASKED WOOD-SWALLOW - *Artamus personatus* - M
 545. WHITE-BROWED WOOD-SWALLOW - *Artamus superciliosus* - M
 547. DUSKY WOOD-SWALLOW - *Artamus cyanopterus*
 552. BLACK-CAPPED SITTELLA - *Neositta Pileata*
 555. BROWN TREE-CREEPER - *Climacteris picumnus*
 558. WHITE-THROATED TREE-CREEPER - *Climacteris leucophaea*
 564. MISTLETOE-BIRD - *Dicaeum Hirundinaceum*
 566. YELLOW-TAILED PARDALOTE - *Pardalotus xanthopygus*
 567. STRAITED PARDALOTE - *Pardalotus striatus*
 574. GREY-BREASTED SILVEREYE - *Zosterops lateralis* - M
 578. WHITE-NAPED HONEYEATER - *Melithreptus lunatus*
 580. BLACK-CHINNED HONEYEATER - *Melithreptus gularis*
 583. BROWN-HEADED HONEYEATER - *Myzomela nigra* - M - only very rarely moves as far south at the Little Desert
 589. BLACK HONEYEATER - *Acanthorhynchus tenuirostris*
 591. EASTERN SPINEBILL - *Gliciphila melanops*
 593. TAWNY-CROWNED HONEYEATER - *Gliciphila albifrons*
 594. WHITE-FRONTED HONEYEATER - *Grantiella picta* - only very rarely visits this area.
 598. PAINTED HONEYEATER - *Meliphaga virescens*
 608. SINGING HONEYEATER - *Meliphaga chrysops*
 614. YELLOW-FACED HONEYEATER - *Meliphaga leucotis*
 617. WHITE-EARED HONEYEATER - *Meliphaga*
 619. YELLOW-TUFTED HONEYEATER - *Meliphaga cratitia*
 620. PURPLE-GAPED HONEYEATER - *Meliphaga ornata*
 622. YELLOW-PLUMED HONEYEATER - *Meliphaga penicillata*
 625. WHITE-FLUMED HONEYEATER - *Meliornis novae-hollandiae*
 631. YELLOW-WINGED HONEYEATER - *Melanocephala*
 634. NOISY MINER - *Myzantha obscura*
 636. DUSKY MINER - *Myzantha obscura*
 637. LITTLE WATTLE-BIRD - *Anthochaera chrysoptera*
 638. RED WATTLE-BIRD - *Anthochaera carunculata*

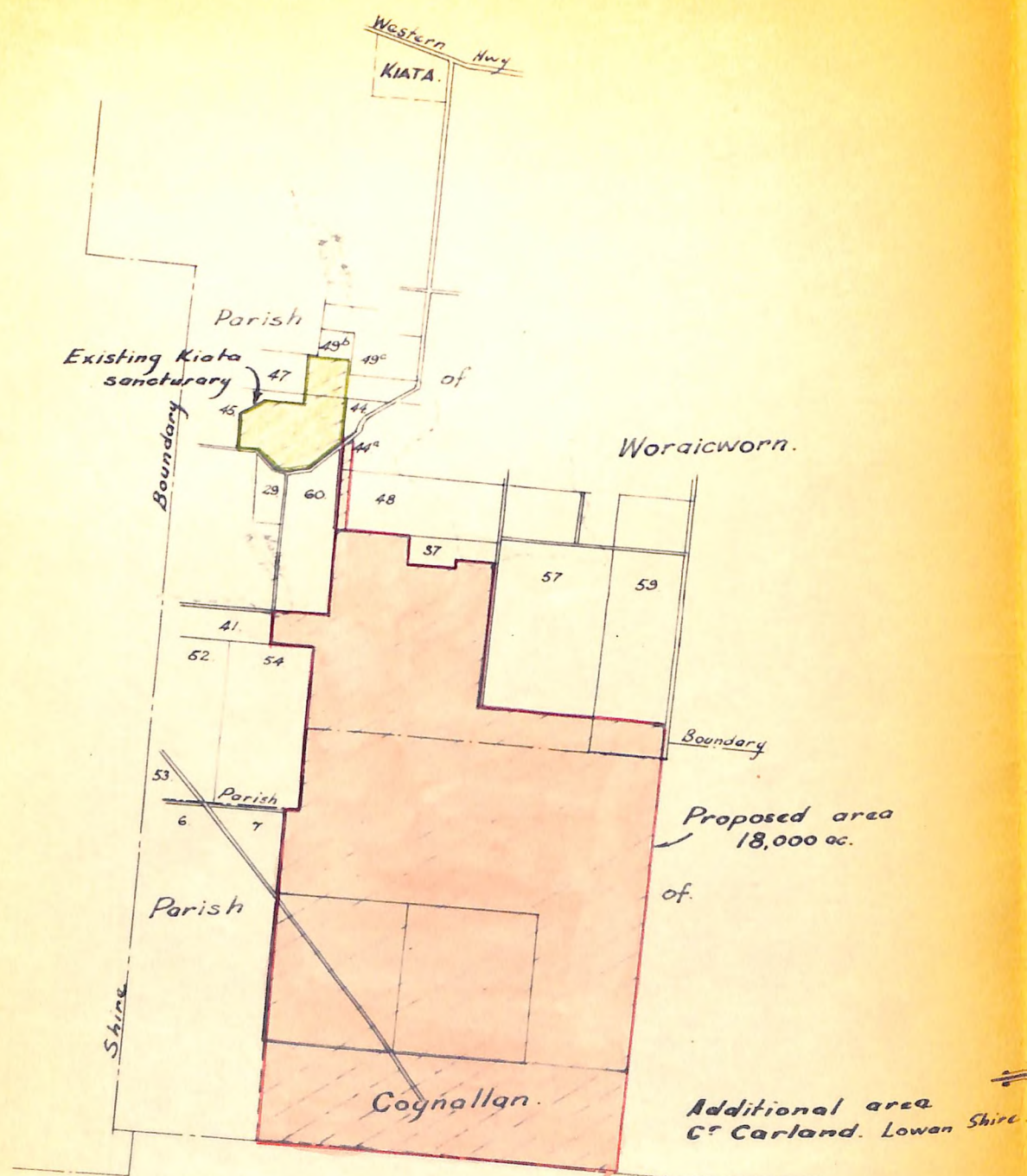
- 640. SPINY-CHEEKED HONEYEATER - *Acanthagenys rufogularis*
- 641. BLUE-FACED HONEYEATER - *Antomyzon cyanotis*
- 646. LITTLE FRIAR-BIRD - *Philemon citreogularis*
- 647. AUSTRALIAN PIPIT - *Anthus Australian*
- 652. DIAMOND-FIRETAIL - *Zonaeginthus guttatus*
- 653. ZEBRA FINCH - *Taeniopygia castanotis*
- 662. RED-BROWED FINCH - *Aegintha temporalis*
- 690. AUSTRALIAN RAVEN - *Corvus coronoides*
- 693. WHITE-WINGED CHOUGH - *Corcorax melanorhampus*
- 695. BLACK-WINGED CURRAWONG - *Strepera melanoptera*
- 697. GREY CURRAWONG - *Sterpera versicolor*
- 702. GREY BUTCHER-BIRD - *Cracticus torquatus*
- 705. BLACK-BACKED MAGPIE - *Gymnorhina tibicen*
- 707. WHITE-BACKED MAGPIE - *Gymnorhina hypoleuca*.

In the "Big Desert" a number of other birds can be found and the main species are Mulga Parrot, Regent Parrot, Pink Cockatoo, Chestnut Quail Thrush, Black Backed Wren, Mallee Emu Wren, Striated Grass Wren, and Yellow Throated Miner.

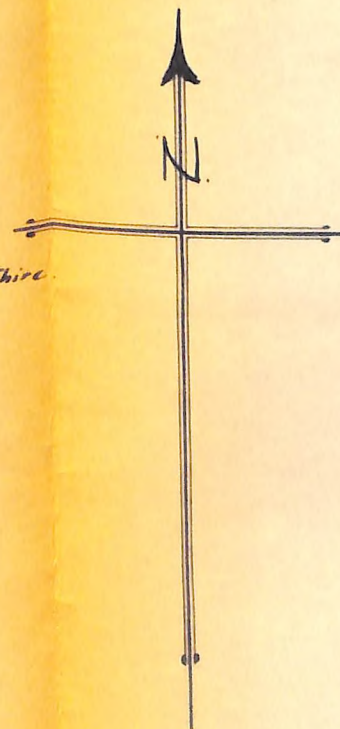


WIMMERA REGIONAL
COMMITTEE.
LOCALITY OF PROPOSED
AREAS.

DRAWN H.J. Potter. TRACED	CHECKED <i>ctflyn</i> DATE	REF No 1.
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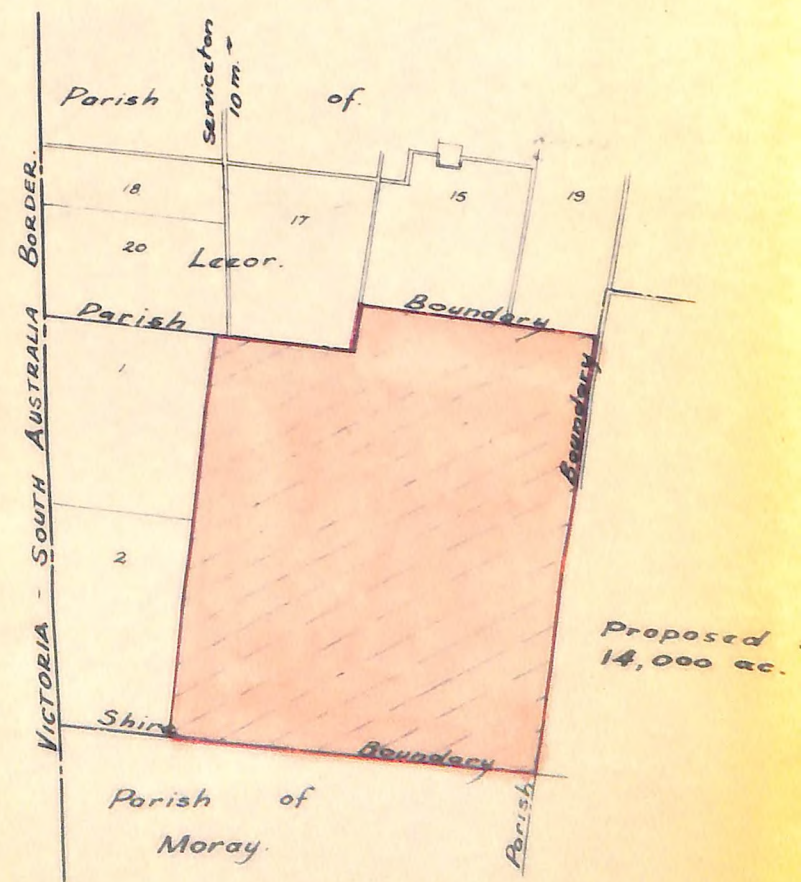
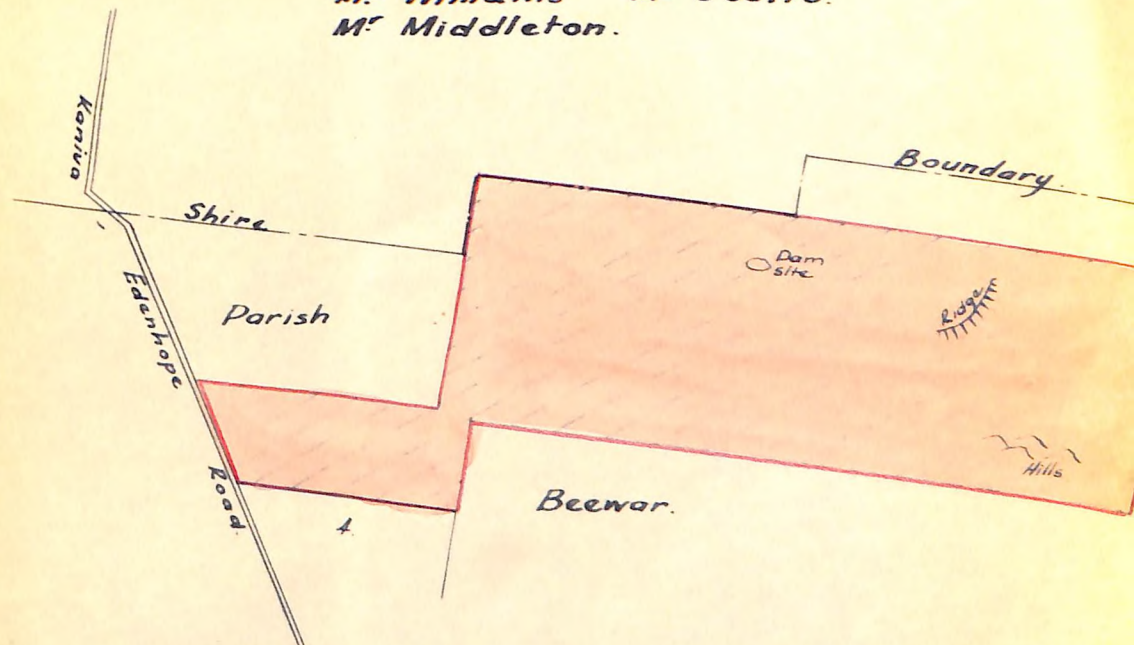


SHIRE OF DIMBOOLA
PROPOSAL N^o 1.
M^r Middleton
M^r Hatley.



SHIRE OF KOWREE PROPOSAL N^o 2.

Broughton Water Hole and Middle
M^r Hicks C^r Crouch.
M^r Williams M^r Coultts.
M^r Middleton.



SHIRE OF KANIVA PROPOSAL N^o 3.

C^r Wallis Kaniva Shire.
M^r C. WALLIS.

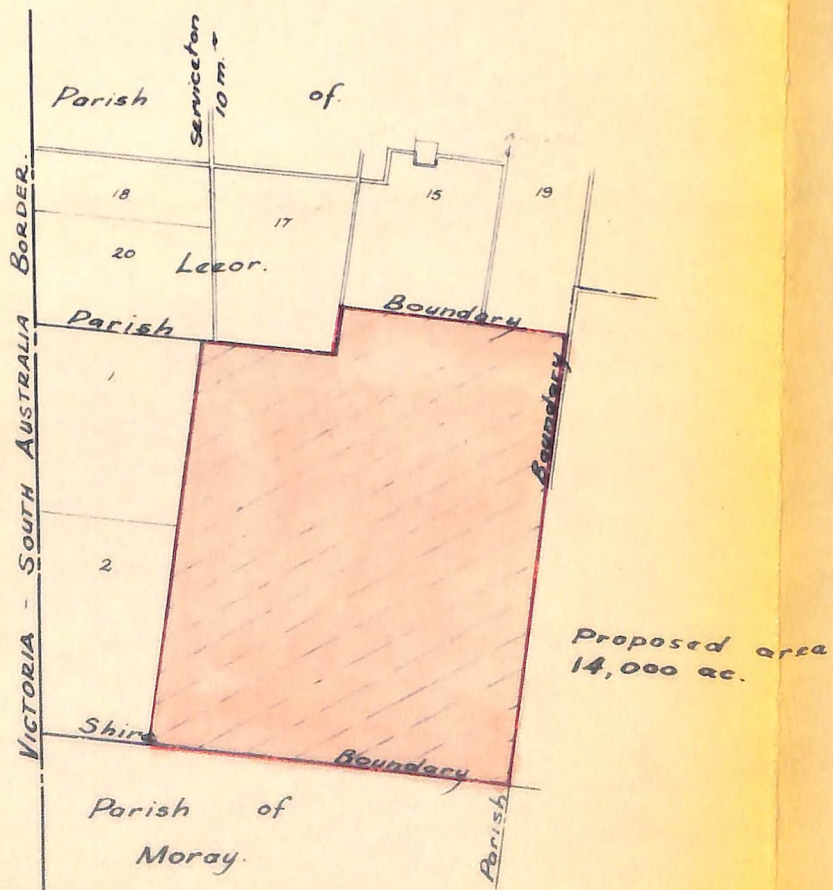
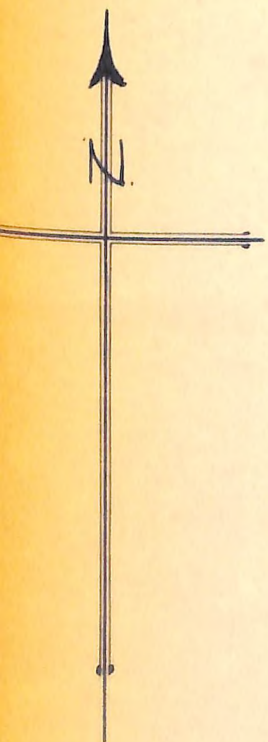
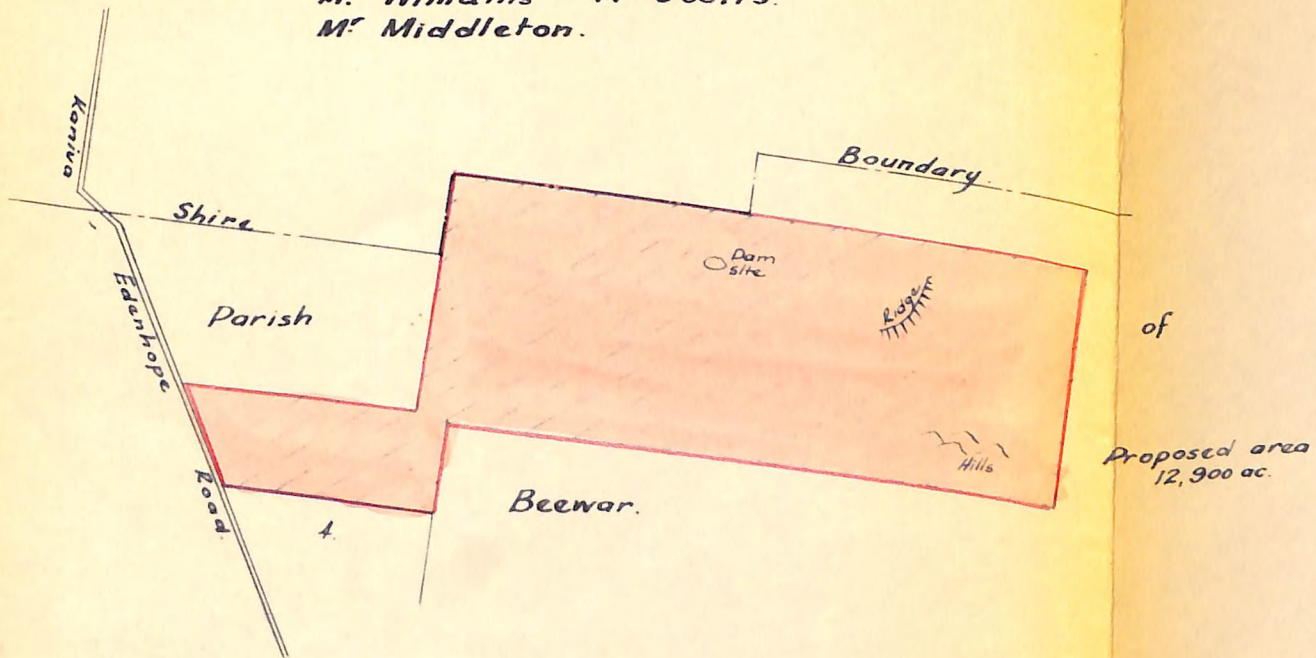
SHIRE OF KOWREE PROPOSAL N° 2.

Broughton Water Hole and Middle Dam Area.

M^r Hicks C^r Crouch.

M^r Williams M^r Coultts.

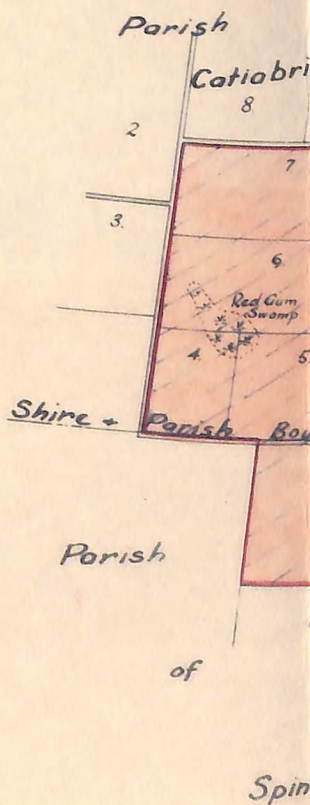
M^r Middleton.



SHIRE OF KANIVA. PROPOSAL N° 3.

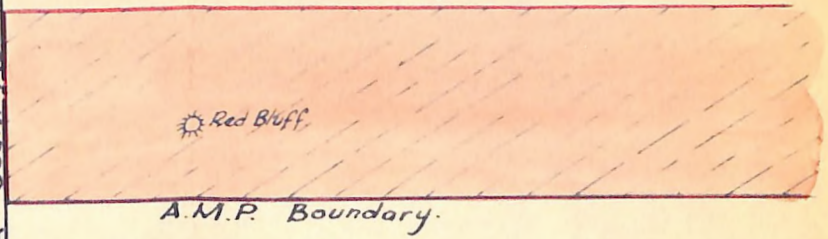
C^r Wallis Kaniva Shire.

M^r C. WALLIS.



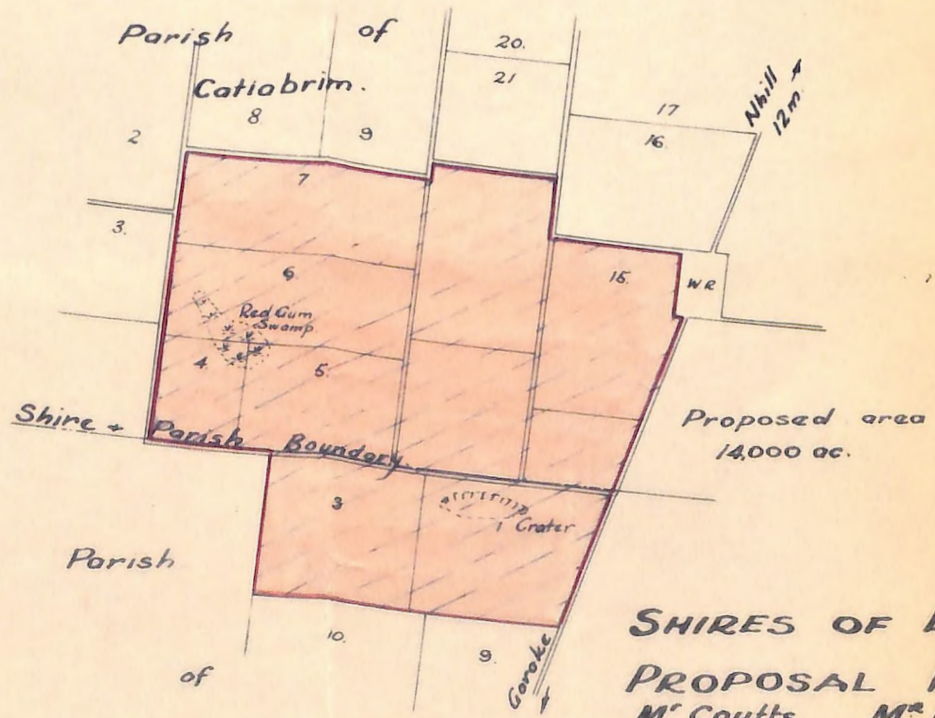
VICTORIA - SOUTH AUSTRALIA BORDER.

Proposed area
8,000 ac. approx.



SHIRE OF KANIVA
PROPOSAL N° 4.

C^r Williams. Kaniva Shire.
C^r Mitchell. Kaniva Shire.



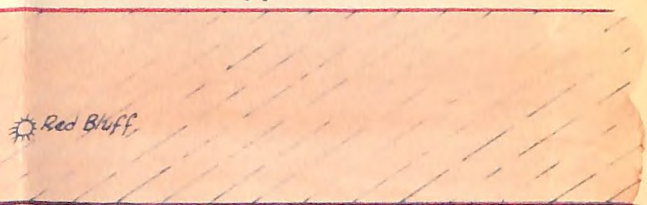
SHIRES OF LOWAN
PROPOSAL N° 5.
M^r Coutts. M^r Hately.
C^r Williams M^r Hioks
National Parks Association

Spinifex

WIMMERA		R	
Survey by	Plan by	Date	S
	Designed by	Date	
	Traced by	Date	M
	Checked by	Date	SCA

42

Proposed area
8,000 ac. approx.



A.M.P. Boundary.

SHIRE OF KANIVA PROPOSAL N° 4.

Williams. Kaniva Shire.
Mitchell. Kaniva Shire.

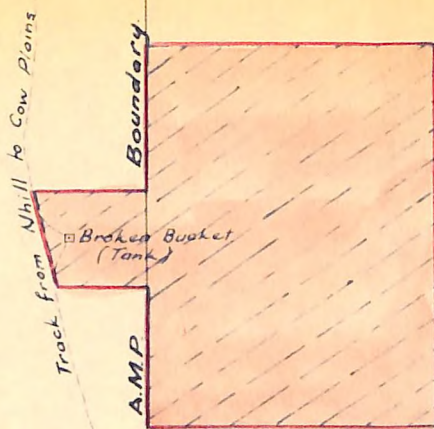


Proposed area
14,000 ac.

SHIRES OF LOWAN + KOWREE.

PROPOSAL N° 5.

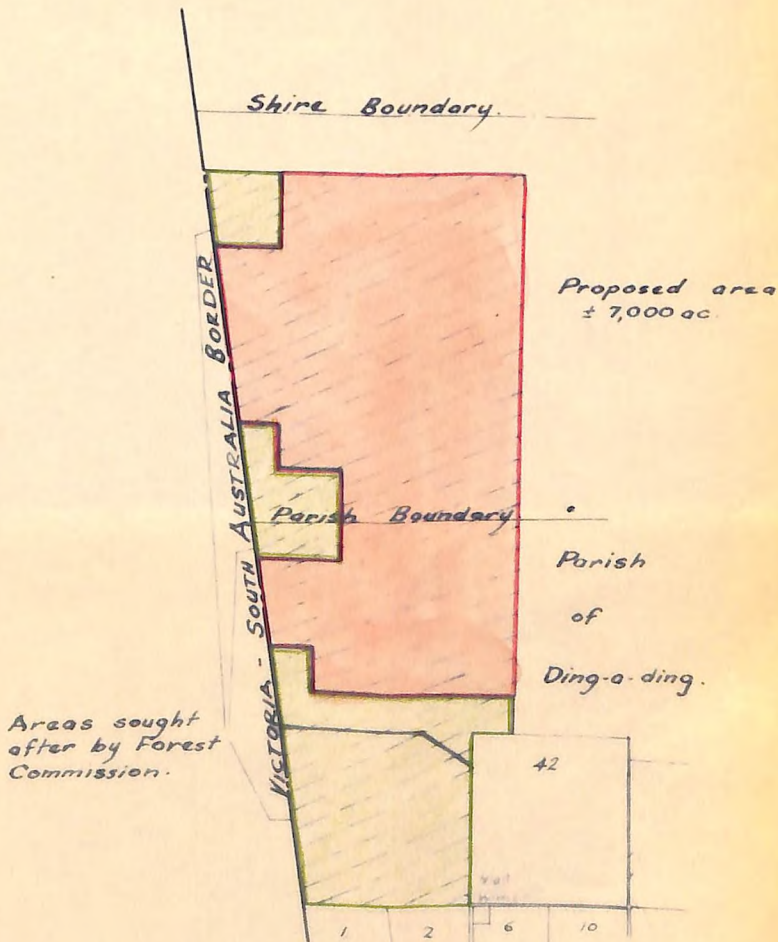
M^r Coult. M^r Hately. M^r Warner
C^r Williams M^r Hicks M^r Middleton
National Parks Association



Proposed area
11,000 ac

36th Parallel (Old wire netting fence)

SHIRE OF LOWAN. PROPOSAL N° 6. M^r Middleton.



Proposed area
± 7,000 ac.

Shire Boundary.

Parish Boundary.

Parish
of
Ding-a-ding.

Areas sought
after by Forest
Commission.

SHIRE OF KOWREE. PROPOSAL N° 7.

WIMMERA

REGIONAL

LAND

SUGGESTED

RESERVATIONS.

Meeting at Nhill 26-8-64.

2 miles = 1"

SCALES

Chapman
2/10/64

Total Sheets

Sheet No.

2.

Plan No.

Survey by	Plan by	Date
	Designed by	Date
	Traced by	Date
	Checked by	Date

VICTORIA SOUTH AUSTRALIA BORDER

SHIRE

MORAY

NATEYIP

BEEWAR

YANIPY

KANIVA

LILLIMUR

LEFOR

SHIRE

LAWLOIT

KANIVA

KANIVA

Kaniva Edenhope Road

OF

Highway

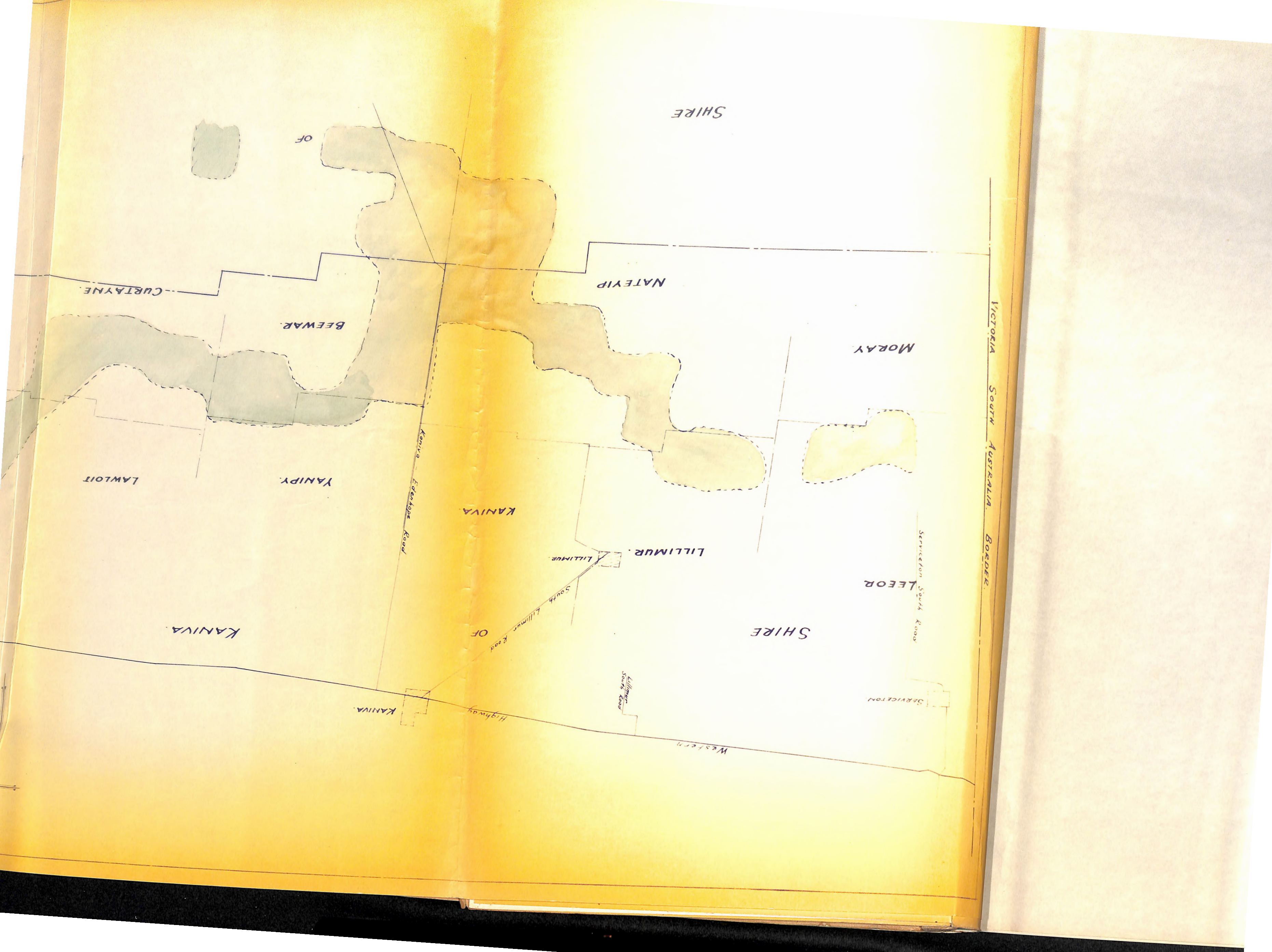
South Lillimur Road

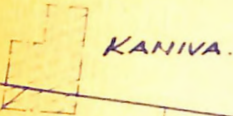
Lillimur South Road

Serviceon South Road

SERVICEON

Western





KANIVA.

KANIVA.

SHIRE OF

KINIMAKATKA.

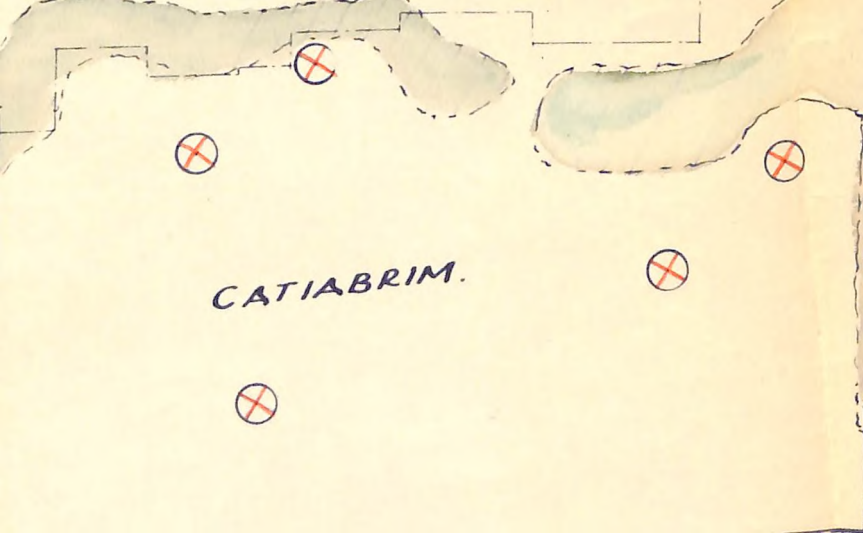
YANIPY.

LAWLOIT

CATIABRIM.

Kaniva - Edenhope Road





A hand-drawn map on aged paper. At the top, there are two landmasses. The one on the left is light grey with a dashed black outline and contains a blue circle with a red 'X'. The one on the right is light green with a dashed black outline and contains a blue circle with a red 'X'. Below these, on the left, is another blue circle with a red 'X'. On the right, there is a blue circle with a red 'X'. In the center of the page, the word 'CATIABRIM.' is written in dark blue ink. At the bottom left, there is a final blue circle with a red 'X'.

CATIABRIM.

NHILL

Western

Highway

SHIRE OF

DIMBOOLA

DIMBOOLA
TOWNSHIP

LOWAN.

WORAIGWORM.

WINIAM.

WATCHEGATCHECA.

COYNALLAN.

POMPONDEROO.










Parish of
Minimay.

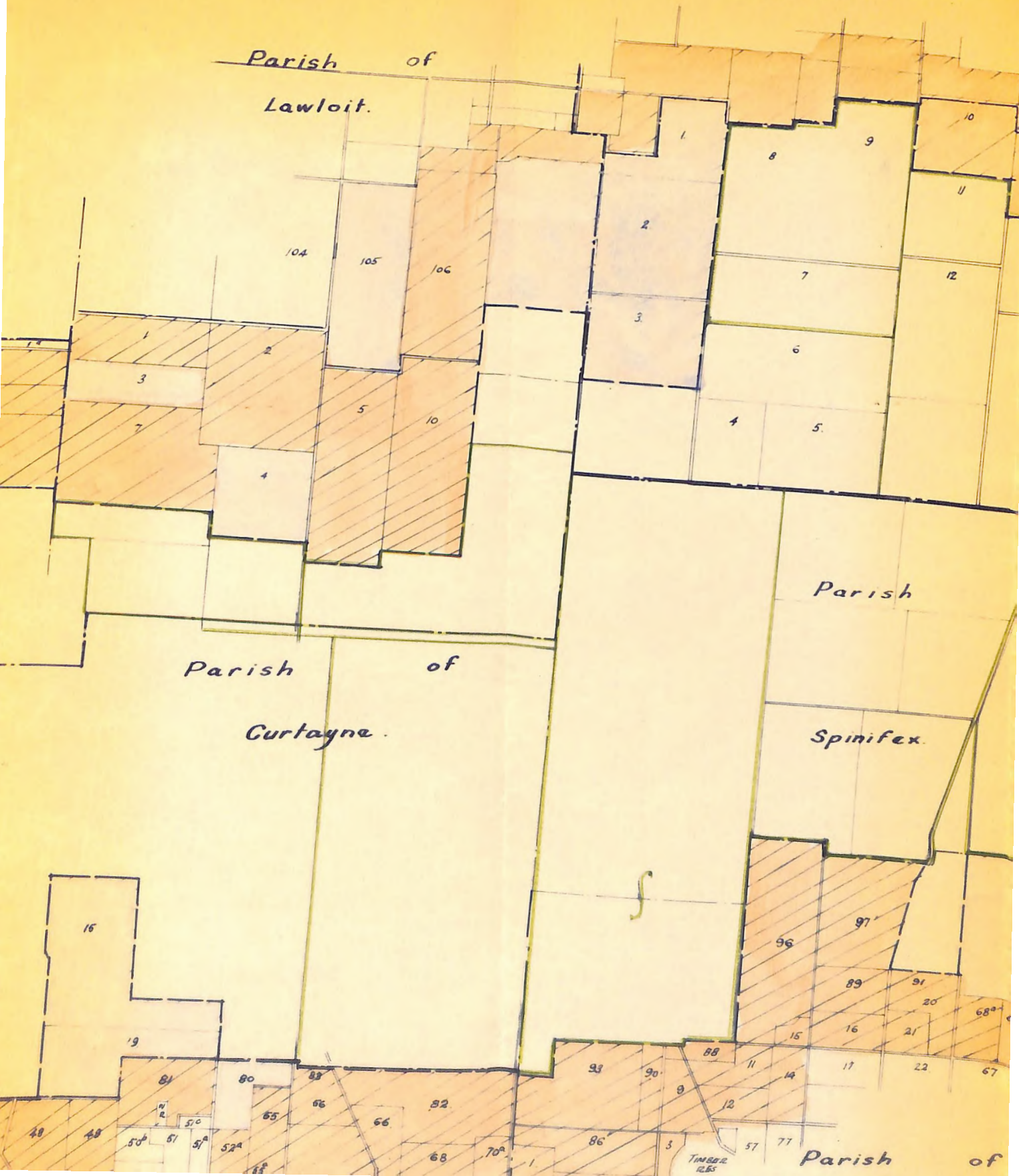
Parish of
Mortat.

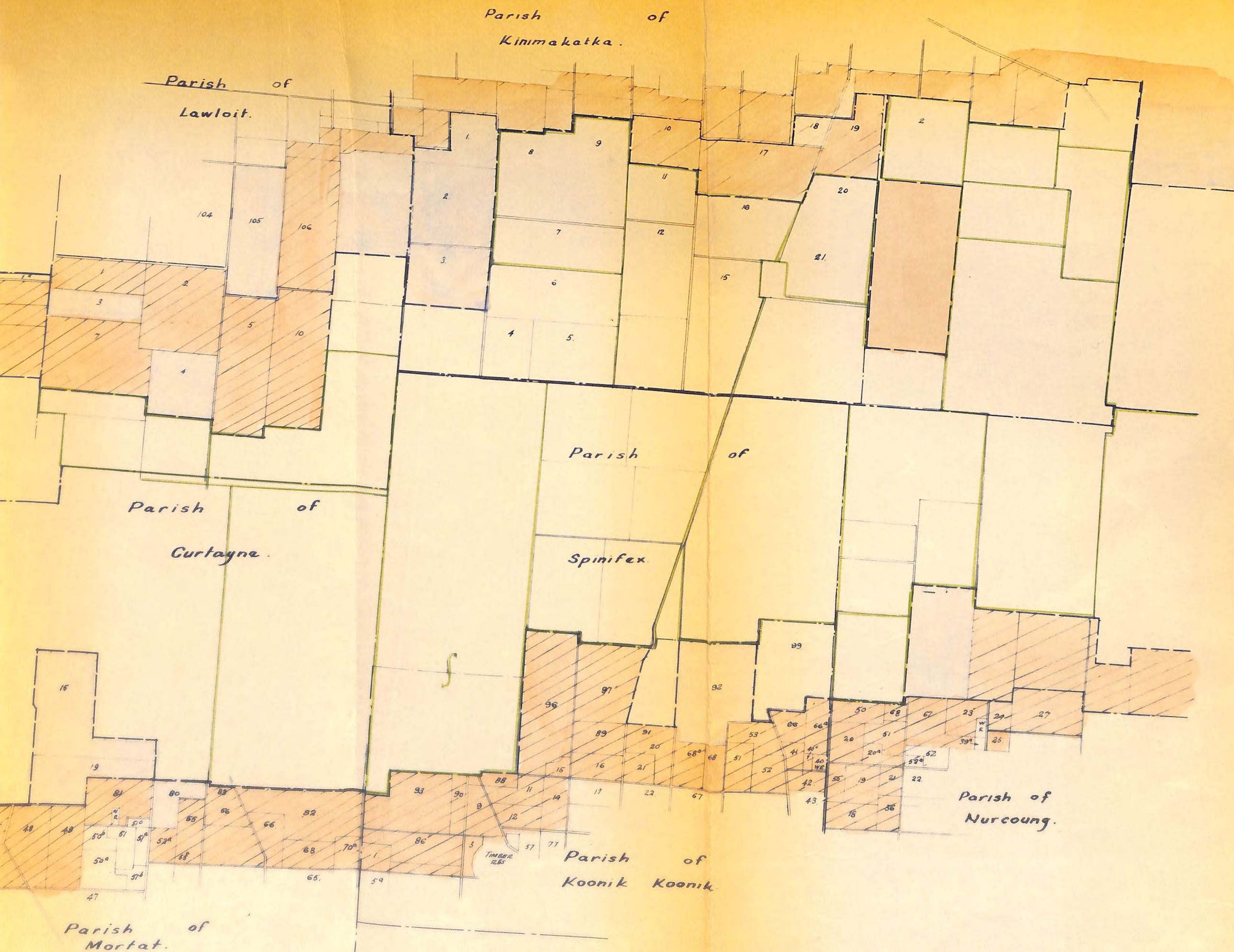
LEGEND
 Freehold land.
 Leasehold land.
 Crown Land boundary.

WIMMERA		
Survey by	Plan by	Date
	Designed by	Date
	Traced by	Date
	Checked by	Date

Parish of
Kinimakatka.

Parish of
Lawloit.





WIMMERA REGIONAL COMMITTEE.			Total Sheets
Survey by	Plan by	Date	Sheet No.
	Designed by	Date	4
	Traced by	Date	Plan No.
	Checked by	Date	
SCALES 2 miles = 1"			

24/10/64

