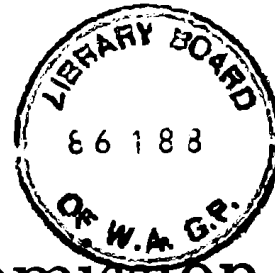


1938
WESTERN AUSTRALIA.



Honorary Royal Commission on Light Lands and Poison- Infested Lands

REPORT

TO

HIS EXCELLENCY SIR JAMES MITCHELL,
K.C.M.G.,

Lieutenant-Governor in and over the State of Western Australia
and its Dependencies

in the Commonwealth of Australia,

In pursuance of the terms of the Commission, dated
the fourteenth day of April, 1938.

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WESTERN Australia
Report to His
Excellency Sir James
Mitchell, K.C.M.G.,
lieutenant-governor
... in pursuance of...

SLIB-21038651
BRN: 103400-1

ROYAL COMMISSION.

WESTERN AUSTRALIA, } By His Excellency Sir James Mitchell, K.C.M.G., Lieutenant-Governor in and over the State of
TO WIT. } Western Australia and its Dependencies in the Commonwealth of Australia.
JAMES MITCHELL,
Lieutenant-Governor.
[L.S.]

GEORGE THE SIXTH, by the Grace of God of Great Britain and Ireland and the British Dominions beyond the Seas King,
Defender of the Faith, Emperor of India, Greeting :

To the Honourable Charles George Latham, M.L.A. : the Honourable Percy Douglas Ferguson, M.L.A., and Emil Nulsen,
Esquire, M.L.A. : William Patrick, Esquire, M.L.A., and Frederick James Withers, Esquire, M.L.A. :

1. THE said Lieutenant-Governor, acting with the advice and consent of the Executive Council, do hereby appoint you Charles George Latham, Percy Douglas Ferguson, Emil Nulsen, William Patrick, and Frederick James Withers to be an honorary Royal Commission, without payment of remuneration, to do the following things, namely :—

1. Inquire into, consider, and report generally upon—

- (a) the areas and localities of the light lands and the poison-infested lands within the State of Western Australia, whether such lands are alienated or unalienated lands of the Crown ;
- (b) the nature and extent of the disposal of the said lands, whether by the Crown or by any Crown instrumentality or by any company, society, association, body, or person other than the Crown during the last preceding fifty years, including the terms, conditions, and prices which obtained in, and the methods of such disposal of the said lands ;
- (c) the nature and extent of the occupation and use of the said lands during the said period ;
- (d) the nature and extent of the production of wealth from the said lands during the said period ;
- (e) the comparison between the prices, terms, and conditions charged and imposed by the Crown, and the prices, terms and conditions charged and imposed by other bodies or persons in connection with the disposal of the said lands, which have been disposed of by the Crown or by other bodies or persons aforesaid during the said period ;
- (f) the comparison between the prices, terms, and conditions at the present time fixed and prescribed by the Crown in relation to the disposal of the said lands, and the prices, terms, and conditions at the present time fixed and prescribed by other bodies and persons as aforesaid in relation to the disposal of the said lands ;
- (g) the manner in which, the extent to which, and the purposes for which, such of the said lands as are occupied at the present time are being used ;
- (h) the cost at the present time of working the said lands necessary to yield a profit by such working ; and
- (i) such other matters relating to the said lands as are incidental or related to any of the matters in this paragraph hereinbefore mentioned.

2. Inquire into, consider, and report upon—

- (a) the nature, extent, and methods of encouragement and assistance which should be afforded by the Crown, by financial institutions or by companies, societies, associations, or persons concerned or interested in the said lands for the purpose of promoting, encouraging, inducing, and assisting the greatest and best possible occupation and use of the said lands and the greatest and most profitable production of wealth from the said lands ;
- (b) the manner in which and the methods by which an equitable relationship between the prices, terms, and conditions fixed and imposed by the Crown, and the prices, terms, and conditions fixed and imposed by other bodies and persons aforesaid in connection with the disposal of the said lands may be established and maintained ; and—
- (c) such other matters relating to the said lands as are incidental or related to any of the matters in this paragraph hereinbefore mentioned.

3. To consider and make any recommendations which in the opinion of the Commission are justified or warranted by any of the inquiries and investigations made under paragraphs 1 and 2 hereof.

And I hereby appoint you the said Charles George Latham to be Chairman of the said Commission.

And I declare that you shall by virtue of this Commission be a Royal Commission within the Royal Commissioners' Powers Act, 1902, as reprinted in the Appendix to the Sessional Volume of the Statutes for the year 1928, and that you shall have the powers of a Royal Commission or the Chairman thereof under that Act.

And I hereby request you, as soon as reasonably may be, to report to me in writing the result of this your Commission.

Given under my hand and the Public Seal of the said State, at Perth, this 14th day of April, 1938.

By His Excellency's Command,

(Sgd.) J. WILLCOCK,
Premier.

GOD SAVE THE KING !!!



ASLIB21038651B

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Honorary Royal Commission on Light Lands and Poison-Infested Lands.

To His Excellency The Honourable Sir James Mitchell, K.C.M.G., Lieutenant-Governor in and over the State of Western Australia and its Dependencies in the Commonwealth of Australia :

May it Please Your Excellency--

In accordance with the terms of the Commission, dated the 14th day of April, 1938, empowering the Commissioners to :—

1. Inquire into, consider, and report generally upon :—
 - (a) the areas and localities of the light lands and the poison-infested lands within the State of Western Australia, whether such lands are alienated or unalienated lands of the Crown ;
 - (b) the nature and extent of the disposal of the said lands, whether by the Crown or by any Crown instrumentality or by any company, society, association, body, or person other than the Crown during the last preceding fifty years, including the terms, conditions, and prices which obtained in, and the methods of such disposal of the said lands ;
 - (c) the nature and extent of the occupation and use of the said lands during the said period ;
 - (d) the nature and extent of the production of wealth from the said lands during the said period ;
 - (e) the comparison between the prices, terms, and conditions charged and imposed by the Crown, and the prices, terms and conditions charged and imposed by other bodies or persons in connection with the disposal of the said lands, which have been disposed of by the Crown or by other bodies or persons aforesaid during the said period ;
 - (f) the comparison between the prices, terms, and conditions at the present time fixed and prescribed by the Crown in relation to the disposal of the said lands, and the prices, terms, and conditions at the present time fixed and prescribed by other bodies and persons as aforesaid in relation to the disposal of the said lands ;
 - (g) the manner in which, the extent to which, and the purposes for which, such of the said lands as are occupied at the present time are being used.
 - (h) the cost at the present time of working the said lands necessary to yield a profit by such working ; and
 - (i) such other matters relating to the said lands as are incidental or related to any of the matters in this paragraph hereinbefore mentioned.
 2. Inquire into, consider, and report upon—
 - (a) the nature, extent, and methods of encouragement and assistance which should be afforded by the Crown, by financial institutions or by companies, societies, associations, or persons concerned or interested in the said lands for the purpose of promoting, encouraging, inducing, and assisting the greatest and best possible occupation and use of the said lands and the greatest and most profitable production of wealth from the said lands ;
 - (b) the manner in which and the methods by which an equitable relationship between the prices, terms, and conditions fixed and imposed by the Crown, and the prices, terms and conditions fixed and imposed by other bodies and persons aforesaid in connection with the disposal of the said lands may be established and maintained ; and
 - (c) such other matters relating to the said lands as are incidental or related to any of the matters in this paragraph hereinbefore mentioned.
 3. To consider and make any recommendations which in the opinion of the Commission are justified or warranted by any of the inquiries and investigations made under paragraphs 1 and 2 hereof.
- We have the honour to submit the following report.

SITTINGS OF THE COMMISSION.

Your Commissioners commenced its sittings on the 9th day of May, 1938, and continued until the 21st day of July, 1938, during which time evidence was taken from 126 witnesses.

Your Commissioners took evidence at Perth and also at the following country centres :—Salmon Gums, Esperance, Speddingup, Dalyup River, Albany, Moora, Dandarragan, Miling, Wongan Hills, Cadoux, Kojonup, Katanning, Gnowangerup, Narrogin, Quairading, Aldersyde, Merredin, Northam, Morawa, Northampton, Nanson, Yuna, and Three Springs.

Large areas of light and poison lands were inspected by your Commissioners and many thousands of miles were travelled during the course of the inquiry.

EVIDENCE.

Applications were received by your Commissioners from a large number of persons who desired to give evidence, and every facility was tendered the witnesses to enable them to attend the Commission and submit their evidence.

Your Commissioners were unable, however, to accede to every request, but every statement of evidence forwarded by interested people received consideration and was examined by your Commissioners.

The evidence tendered by witnesses generally was of a helpful nature and every witness was closely examined.

In many cases your Commissioners visited the farms of those who had communicated with the Commission and after an inspection of the properties evidence was taken on the spot.

The Research Stations at Wongan Hills and Salmon Gums were inspected by your Commissioners and much useful evidence was tendered by the respective Managers.

Evidence was taken from the following witnesses at the centres set out hereunder :

PERTH.

Government Officials—

S. L. Kessell, Conservator of Forests.
J. P. Camm, Surveyor General.
G. L. Needham, Under Secretary for Lands.
I. Thomas, Superintendent, Wheat Farming.
F. J. McAdam, Officer in Charge, Applications, Inspections and Information, Lands Department.
Dr. L. J. R. Teakle, Plant Nutrition Officer, Agricultural Department.
G. R. Meadly, Acting Government Botanist.
H. A. J. Pittman, Plant Pathologist, Agricultural Department.
A. McKenzie-Clarke, Chief Veterinary Officer.
F. L. Shier, Agricultural Adviser in Fat Lambs.
Dr. T. C. Dunne, Agricultural Adviser, Agricultural Department.
A. D. Helms, Research Officer, Forestry Department.
G. K. Baron-Hay, Superintendent of Dairying, Agricultural Department.
C. P. Murray, Sheep Adviser to Agricultural Bank.
W. Wardle, Chief Valuer, Agricultural Bank.
H. McCallum, Sheep and Wool Expert, Agricultural Department.
J. A. Hall, Acting Surveyor General.
G. H. Burville, Agricultural Adviser, Agricultural Department.
M. Sloss, Clerk Assistant to Surveyor General.

Farmers—

P. J. Lynch, Three Springs. G. H. Purser, Piawaning.

Other Witnesses—

F. K. Pitt, Licensed Surveyor. W. C. Johnson, Land Superintendent and Accountant, Midland Railway Co.

ALBANY.

Member of Parliament—

L. L. Hill, Member, Legislative Assembly.

Farmers—

K. R. Williamson. R. B. Wilkinson. G. J. Norman.

Other Witnesses—

D. R. Stewart, Business Manager and Orchard Superintendent. A. C. Vaughan, Retired Civil Servant.
McA. Henning, Solicitor and Farmer. R. B. Hill, Manager, Butter Factory.
W. J. L. Anderson, Manager, Freezing Works.

ESPERANCE.

Government Official—

H. McKenzie, Manager, Agricultural Bank, Salmon Gums.

Road Board—

T. M. Chadwick, Secretary, Esperance Road Board.

Farmers—

B. L. Spedding Smith. Thomas Thick. E. R. W. Light.
F. Gilmore

Other Witness—

E. J. McCarthy, Agent, Esperance.

SALMON GUMS.

Government Official—

J. M. Moulton, Manager, State Farm, Salmon Gums.

Farmers—

R. Sime. W. G. Berry. P. E. Dolling.
L. D. Machen. B. A. W. Shell.

Other Witness—

R. Kerr, Storekeeper and Postmaster, Salmon Gums.

MOORA.

Road Board—

E. A. P. Timmus, Secretary, Moora Road Board.

Farmers—

E. Pollock.

A. L. Bolton.

DANDARRAGAN.

Farmers—

C. J. Roberts.

W. J. Cooke.

F. A. Green.

MILING.

Farmers—

A. H. Richardson.

R. H. Seymour.

F. H. Shepherd.

WONGAN HILLS.

Government Official—

A. R. Venton, Manager, State Farm.

Road Board—

J. H. Ackland, Chairman, Wongan Hills Road Board.

Farmers—

E. T. Shields.
J. S. Jones.

H. A. Scotney.
A. Spark.

L. Martin.

KOJONUP.

Government Official—

J. E. H. Robinson, Agricultural Bank Inspector, Kojonup.

Road Board—

L. V. N. MacBride, Secretary, Kojonup Road Board.

Farmers—

R. Benn.

H. A. McKenney.

A. B. Bennecke.

KATANNING.

Government Officials—

A. S. Wild, Agricultural Adviser, Katanning.

A. M. Martin, Branch Manager, Agricultural Bank, Katanning.

Road Board—

C. A. Caldwell.
J. F. Haddleton.

Farmers—

P. H. Johnston.
D. R. Moore.
A. E. Tuffley.

S. Kemble.
W. H. Campbell.
C. R. Harris.

W. H. Buchholz.

GNOWANGERUP.

Road Board—

F. J. Grocock, Chairman, Gnowangerup Road Board.

Farmers—

J. Griffiths.
A. Johnston

J. A. Moir.
R. W. T. Wellstead.

S. W. Stewart.

NARROGIN.

Government Official—

T. S. Parry, District Surveyor, Narrogin.

Farmers—

R. A. S. Perkins.
E. Loynel.

T. H. James.

H. T. Berryman.

QUAIRADING.

Road Board—

H. M. Growden, Chairman, Quairading Road Board.

Farmers—

J. P. Waters.

C. W. Heal.

ALDESYDE.

Farmers—

R. Falls

C. H. Austin.

A. P. Young.

MERREDIN.

Farmer—
H. H. Harling.

NORTHAM.

Government Officials—
J. Hicks, Acting District Surveyor, Northam.
E. Sugden, Agricultural Bank Inspector, Northam.
C. D. McKenna, Agricultural Bank Inspector, Northam.

MORAWA.

Farmers—
B. Weston. J. A. Tyler. J. C. Moir.
L. Ludgate. G. Lanagan.

NORTHAMPTON.

Road Board—
C. T. Lauder, Chairman, Northampton Road Board.

Farmers—
A. H. Drage. P. Carson. R. W. Patrick.
G. Clifton. R. A. Williams. A. Rob.

NANSON.

Road Board—
E. A. Green, Chairman, Upper Chapman Road Board.

Farmers—
A. Lauder. W. F. Forbes. S. R. Exten.

YUNA.

Farmers—
R. M. Donald. W. H. S. Roskems. W. Ronan.
J. J. Malder. A. H. McClintock. P. W. Williamson.

THREE SPRINGS.

Road Board—
C. F. Thomas, jun., Chairman, Three Springs Road Board.
G. H. Bickford, Secretary, Three Springs Road Board.

Farmer—
A. F. King. E. V. Franklin.

ACKNOWLEDGMENT.

Your Commissioners have been greatly assisted in their investigation by the officers of various Government Departments, Branch Managers and Field Officers of the Agricultural Bank, the Presidents of the Primary Producers' Association and Wheat and Wool Growers' Union, the Chairman and Members of the Albany Land Committee, and by the Chairmen and Members of Road Boards in the Districts visited. The evidence tendered to your Commissioners by farmers and other witnesses throughout the State was of considerable value, and especially do your Commissioners wish to thank the Local Authorities for the assistance they rendered in the way of transport, etc., which permitted the inspections of the various Districts in the limited time at the Commission's disposal.

GENERAL REPORT.

Your Commissioners have interpreted the terms of reference very generously. Although in the first instance they were wide enough to cover almost all the land which has remained unalienated, that is, within the accepted agricultural areas, for the purpose of determining the possibilities and the problems of this land and also to obtain information on which to base this report, we have confined our investigations to a limit of 25 miles on either side of existing railways. This, we believe, should suffice.

The definition placed on light lands is one on which there may be varying opinions, but again we have liberally accepted the term known as "light land" and have made it include scrub plain such as is generally found in all parts of the adopted area, and land that carries a fair amount of white gum, casuarina, mallee, jam, scrub, etc., which is more particularly situated within the 10in. to 15in. rainfall belt. We have also included the red gum country, where such timber is growing on sandy soil varying from 5 feet to 20 feet in depth. There is also the heavy timber country surrounding the Albany district which is not included in any State Forest.

For the purpose of this report, portion of the area dealing with poison lands has been determined as the area which lies on the west side of the Great Southern Railway, not exceeding 25 miles West, and as far North as Moora, and in which area poison plants thrive.

West of Cranbrook, and right through to the Eastern Goldfields Line, keeping to the west side of the Great Southern, there is a large strip of country carrying a growth of York Road and other poison, which in some places is extremely heavy and in other places is found more sparsely scattered. It is not to be inferred that this is the only place where poison plants, indigenous to the country, are to be found, for in almost all of the light lands numerous toxic plants are more or less prevalent.

The Midland Railway Company is the only land owner having for disposal any extensive areas of agricultural land. According to the evidence of Mr. W. C. Johnson, who is Land Superintendent and Accountant for the company, there are 703,000 acres of unalienated land, of which approximately 80 per cent. to 90 per cent. is light and poison land, which may be presumed to be priced at roughly 6s. 6d. per acre to as low as 3s. 6d. per acre.

From the company's original concession of 3,319,000 acres various locations totalling 460,000 acres have been alienated. No detailed classification of the land was available until after the year 1915, and meanwhile a considerable area had been sold. Since that year the sales of what may be termed light land aggregate approximately 830,000 acres, roughly two-thirds of the total sales effected during that period.

The average price obtained for the 830,000 acres of the lighter land (actually three grades of land) previously referred to was about 6s. per acre.

The company pays both Federal and State Land Tax and also road board rates. Therefore, it must be in the interests of the company to dispose of this land as quickly as possible, as your Commissioners understand that the land is held as security for the bondholders of the company.

There is a large area of unalienated Crown land adjacent to the Midland Railway, principally along the western side, and if this land were extensively selected it would mean a very great increase in freights on that line.

Your Commissioners suggest that the company reduce the price of its light land generally to a figure comparable with that of your Commissioners' recommendation respecting the light land held by the Crown.

It is difficult to lay down any policy which could be applied in a general way to all the land that has been investigated, and the whole of the future land settlement of this State must be bound up in two things, firstly, marketing, and secondly increase of population.

There is no doubt that the people who are on the land to-day should have every opportunity of using any markets that may be available for their products without increasing their difficulty by attempting to settle more land at the present time. The problem of to-day is to keep on their holdings those who are engaged in wheat and wool production and to find profitable markets for them. This may, in the near future, take all the ingenuity and finance that can be brought to bear for the purpose.

Taking the figures supplied in the *West Australian* of the 1st September 1938, wheat is quoted at 2s. 2½d. per bushel compared with 4s. 1½d. on the corresponding day of last year. Wool was quoted on the same date at £15 5s. per bale, against £21 last year. So it would be inadvisable to recommend opening up extensive areas for settlement at the present time, since future wheat and wool prices are so difficult to forecast. This does not mean that matters should remain as they are, but preparation should be made so that any advantage could be taken of the markets, if, and when, they become more stable. Thus in setting out the possibilities of the land that has been the subject of this inquiry, your Commissioners have always had these points before them and the conclusions arrived at are based not only on the possibility of future markets but also on an increase of population.

No extensive land settlement should take place until the international outlook is brighter or until the British market can take more of our export commodities at a price which will cover more than the cost of production and marketing. The present

price for wheat is below cost of production based on the State average.

At the present time there is still some need for increasing the output from the farms already occupied, and if at all possible new markets should be exploited for side lines which the wheat lands are capable of producing. We believe those markets should be available to the men who are already on the land.

Besides the exportable commodities referred to, namely wool and wheat, there are still further opportunities for the increase of export lambs and also the export of pork, which should be organised so as to maintain supplies. The producers of pigs can secure a market in the United Kingdom for their output and the State should attempt to set up a standard for pig breeding which will permit the export of this commodity, while every effort should be made to maintain supplies. We should accept the advice relating to export lambs and pork tendered by Dr. John Hammond who recently paid a visit to this State.

Besides the question of marketing and population, very serious consideration has been given by the Commission in the direction of obtaining information for the more successful means of bringing the lands which have been the subject of this inquiry to profitable use and at a price which may make them attractive and remunerative.

For a number of years settlement has been allowed to drift many miles from existing railways and roads, and after establishment an agitation has immediately been started for expensive transport facilities to enable the produce from these areas to be marketed.

During your Commissioners' investigation it was found that within 25 miles of existing railways an area estimated at over 12,000,000 acres of land is awaiting use for which all the necessary facilities such as railways, roads, and in some cases water supplies, are already within reasonable distance.

The price of land seems to have more of a psychological effect than a real effect in attracting settlers to the land. In most of the evidence submitted the witnesses suggested that the land should be given away because it had no value until a considerable amount of money had been expended. While your Commissioners do not agree with any suggestion of giving away Crown lands, they believe that the best way to have the land utilised would be to make it as cheap as possible. Parliament has already authorised the sale of this class of land at 1s. an acre, but from the evidence tendered very little has been sold at as low a figure as this.

The survey fees, too, have some influence as far as the selectors are concerned and we believe a mistake has been made in the past in loading the lighter lands of the State with the cost of surveys in the heavier country. Further reference to this will be made later on in the report.

One of the problems confronting the development of the light land areas is soil erosion caused by wind.

Your Commissioners are satisfied that fallowing constitutes a danger, but, where necessary, it should be carried out during the wet period and the land left lying in its rough state until the first rain. The stubble should not be burnt, and where necessary

to destroy the regrowth of scrub the land should be ploughed in the second year while it is wet. Subsequent ploughing should take place after the first rain when oats, barley or rye could be grown for green feed.

Experiments are now being made on the Wongan Hills Research Station to ascertain whether there is any difference in yield from crops sown on fallow and those sown on freshly ploughed land. Your Commissioners believe that the result of that investigation will justify the sowing of crops on land ploughed immediately after the first rain as is done in the Eastern States.

In all new surveys in the light land areas not less than three-chain roads should be provided; one chain on either side should be reserved as a wind-break and the centre chain declared a road.

Your Commissioners are of the opinion that no greater area than 200 acres should be cleared on a face and there should be left suitable strips of scrub country which will be useful for shelter for stock and provide breaks to prevent soil erosion. A recommendation on these lines will be put up by your Commissioners further on in this report.

A large area of light lands exists in the Midlands and Northern portion of the State and it is eminently suited to the growing of lupins. It has been established that country that has grown lupins for one or more years shows a distinct improvement in fertility and this, no doubt, is one of the best means to adopt for improving this type of soil.

Until the advent of lupins much of this area was considered of little value except for summer picking, and numerous instances of exceptionally heavy stock carrying capacity have come under your Commissioners' notice as a result of the cultivation of the blue lupin.

Your Commissioners recommend that before sowing any legumes bacterial culture should be obtained for the purpose of treating the seed.

During the Commissioners' extensive tours of the known agricultural areas they have come to the conclusion that it would be impossible to lay down a policy, or even any kind of a plan, which could have a general application say from Esperance in the South to Northampton in the North, and so for that purpose we have deemed it advisable to divide this area into seven parts and deal with each respectively on its merits.

For the purpose of setting out the plan for the future, we suggest that the South-West Division of this State be divided into the following land districts:—

- Land District No. 1—Esperance.
- Land District No. 2—Albany, divided into subdivisions "A" and "B."
- Land District No. 3—Great Southern, divided into subdivisions "A" and "B."
- Land District No. 4—Eastern, divided into subdivisions "A" and "B."
- Land District No. 5—Midlands, divided into subdivisions "A" and "B."
- Land District No. 6—Northern.
- Land District No. 7—South-West.

A plan of the Land Districts proposed by your Commissioners with the subdivisions marked thereon will be found on opposite page.

LAND DISTRICT No. 1—ESPERANCE.

The total area of land in this district is 2,240,000 acres. Within 25 miles of the existing railway there is an area of 1,800,000 acres of unalienated light land and 40,400 acres of alienated light land.

From the amount of work done by existing settlers, your Commissioners are fully convinced that there are great possibilities. This district comes within a rainfall belt of from 28in. at Esperance to nearly 17in. on the northern limits at Seaddan. The rainfall may be classed as reliable because records disclose that there never has been any year which would cause concern during the growing period, and more particularly a great advantage is the number of months—eleven—during which the rain falls.

The properties inspected show that subterranean and other clovers and most of the grasses that it is possible to grow on the light country can be well established. It will be seen that there are very few districts in this State that can offer the same reliability as the country known as the Esperance Plains, with the exception perhaps of Albany.

One of the main problems to be dealt with would be the securing of markets for the stock raised. At the present time adequate markets are available on the Eastern Goldfields and nearer home at Norseman where there is a substantial population engaged in mining.

Water is easily procurable, and in some places where required may be used for irrigation purposes.

The advantage of the plains is that both high and low country is available for growing fodder crops in the summer and winter months. Shelter can be provided very easily, and where fauna is introduced it grows very rapidly, gums and pines attaining a height of 40 feet in 15 years.

It can safely be claimed that the experimental stage has been passed. Improved conditions of land settlement can be dated from the introduction of pastures in this locality at the time when the Esperance Pine Forests Limited decided to extend its operations to pasture production, and on the main road between Seaddan and Esperance a plot of about 20 acres of established pastures remains to illustrate what can be done. This plot was not top-dressed for a period of four years until last year when a dressing of 100 lbs. was applied. When your Commissioners visited the block a very good cover of pasture was still in existence although it had been heavily stocked. Your Commissioners recommend that this area of land should be reserved as an experimental plot and placed under the control of a reliable settler in the district, under the supervision of one of the Agricultural Department's officers.

If settlement takes place in this locality it will be necessary to provide some means for the disposal of stock in excess of the requirements already mentioned, by conveying to Albany by road—and probably this would be the better way—or by suitable fast train service to Fremantle. This, of course, refers only to fat lambs suitable for export.

Your Commissioners were informed that the freight charged at the present time was 4s. per head, and the time taken was three days.

With the area available and with intensive settlement, there is no doubt in the minds of your Commissioners that the district would, in the future, be capable of producing sufficient lambs to justify the establishment of freezing works at Esperance, of somewhere about the same capacity as those now existing at Albany, and worked conjointly. With these a butter factory could be incorporated.

Cattle seem to do wonderfully well and no doubt dairying could be made a profitable sideline, and if the output were large enough a butter factory would be established. With dairying, pig raising should also be profitable and it may be one of the places in the State where pork, suitable for export, could be produced. A plentiful water supply at Esperance, together with the harbour facilities that exist there, would make export from that port quite an easy matter.

There may be doubt in the minds of some people as to the advisability of increasing land settlement in this area, because of the difficulties experienced in past years, but your Commissioners who have had an opportunity of watching its progress are convinced that there is quite a future ahead of the district, because earlier difficulties have been minimised and the importance of Esperance as a sheep raising proposition is now realised.

Your Commissioners who had an opportunity of visiting this district 10 years ago were impressed with the class of sheep that have since been raised, from the point of view of frame and wool production. Evidence supplied to your Commissioners justifies them in pointing out how free from sheep diseases the district is. An abundance of what is commonly known as Shepherd's Lucerne in the mallee district rather indicates that there is also a good possibility of breeding crossbred ewes, from which supplies could be drawn by the farmers on the treeless plains further south, and used for mothers of export lambs.

Some of the farms visited clearly indicate that sufficient fertiliser is not being used to get the best returns, as this light country requires an annual dressing of anything from 150 lbs. to 2 cwt. of super per annum; but we feel it would be safe to say that up to two sheep to the acre are being carried on the farms already established.

Perhaps the best recommendation that could be made is that a road should be put through to connect up with the Great Southern Railway, and should be laid down with a possibility in the future of providing a main road from Esperance to Albany.

It will be difficult to suggest the exact area that could be regarded as a home maintenance area, because, like all country of this type it is not possible to get uniformity.

In making a recommendation for the settlement of the Esperance Plains your Commissioners cannot forget that in the settlement of all types of land the personal equation must always be taken into consideration and should apply generally. Where one man may make a success on light land another man may also make a failure on a first class land proposition and, therefore, it would be unreasonable to expect your Commissioners to state that every man who took a farm in this locality would make a success of it.

Your Commissioners, however, are of the opinion that the problems in this district with its treeless plain are easily capable of solution.

Your Commissioners believe that the minimum area granted to any one farmer should be 500 acres, and the maximum 2,000 acres. Although these areas are being recommended as a minimum and a maximum, the extent should be governed by the amount of finance a person would have available to develop the property.

LAND DISTRICT No. 2—ALBANY.

At Albany large areas of undeveloped land exist within a distance of 50 miles of the port, having an assured rainfall of 40in. to 45in. well distributed throughout the year. The total area of this district is 3,700,000 acres, of which there are 478,000 acres of unalienated light land and 160,000 acres of alienated light land within 25 miles of existing railways.

The main types of country are as follows:—

1. Treeless wet flats, bottle brush and kangaroo grass.
2. Sheoak undulating country, sound where it has a clay subsoil, but more difficult to treat where it is sandy.
3. Coastal hills of sand, limesands, limestone and granite.
4. Ironstone ridges and plateaux, timbered or under low scrub.
5. Mixed timber and scrub with yate flats.
6. The Kalgan Plains, a few miles north of the Porongorups, is a true plain country, but gets into a lower rainfall area.
7. Peppermint country on limestone. Some fairly large areas exist in the vicinity of Denmark.
8. An extensive area of mixed timber country lies west of the Great Southern Railway from Mount Barker to Kendenup.

Considerable areas are low lying, but effective drainage has proved that production can extend throughout the year, in comparison with the previous production over only five or six months, and the higher forms of plant life introduce themselves as air starvation and acidity disappear.

Your Commissioners inspected some of the farms that were settled in 1932, which are now being used principally for dairying, and which may be regarded as the picked country left in this area. Two of the properties inspected, however, may be regarded as typical of the country still left unselected. Property A was established in 1931 and consisted of 423 acres, of which 323 acres are second class and 100 acres third class. At present there are 96 acres under pasture, and there are 17 milking cows on the property. Butter fat production commenced in 1935, when 537 lbs. was produced. Since then the production has been: 1936, 1,057 lbs.; 1937, 3,095 lbs.; and for four months of 1938, 632 lbs. This year's figures do not include the flush period.

Property B, also established in 1931, contains 405 acres, of which 310 acres are second class and 95 acres third class. There are 110 acres under pasture. No butter fat was produced previous to 1936,

when the quantity was 406 lbs. In 1937 the production was 2,016 lbs., and for four months of 1938 690 lbs., and again this year's figures do not include the flush period.

Your Commissioners also inspected the dairy farm of Mr. A. V. Vaughan, who holds a property of 94 acres situated on the extreme boundary of the Albany municipality. It consists of 43 acres of treeless or bottle brush land and 51 acres of sheoak land. Forty acres of bottle brush have been improved and laid down to pasture, a few acres only being used for cultivation, and 30 acres of sheoak country have been partly cleared and laid down to pasture.

The sheoak country was bought unimproved for £2 an acre. The first three acres put down, which were pulled and cultivated, cost £10 per acre; the last 20 acres were cut down and sown at a cost of £2 10s. per acre.

All pastures are top-dressed annually with 1 cwt. of manure per acre. Basic phosphate is used on the low lands and superphosphate on the high country.

These two types of land were considered useless, and any success obtained is due to patience and perseverance and to having high and low land. This means producing a certain amount of green feed all the year round, which is a most valuable asset in the production of milk and butter fat.

In 1926 Mr. Vaughan started a dairy farm for the supply of whole milk, for which purpose it is still being used. A herd of 32 milking cows, 8 heifers and 2 bulls is being run on the property. An average of 20 milking cows are milked daily on the home farm, dry cows and heifers being turned out on a property on the Kalgan River, but as cows dry off they are replaced.

The official figures of the Albany Grade Herd Testing Association will give a fair idea of the results obtained:—

Herd Average for Year ended 31st March, 1938.

No. of cows tested	30
Milk, lbs.	4,709
Test	4.61
Butter fat	217.31

Produced.

Milk.	Butter fat.
141,276 lbs.	6,579.22

A test for the highest cow was 10,125 lbs. of milk and 419.14 of butter fat.

Mr. Vaughan informed your Commissioners that the production of butter fat per acre of land, mainly laid down to pasture, gave a return of 73 lbs. of butter fat per acre. Fat at 1s. 3d. per lb. shows a gross return of £4 11s. 3d. per acre plus 1d. per gallon for skim milk.

From the figures supplied by Mr. R. B. Hill, the manager of the Albany Butter Factory, your Commissioners have come to the conclusion that the remaining land might still be profitably used for dairying or export lamb raising. Further, the figures show what may be accomplished on poor second and third class land.

There is a very large area of treeless plain extending northward and eastward from the Porongorups, but apparently very little is known as to the possibility of this country which is now lying idle. The

only settlement is in the valleys where the York gum and yate predominate. Mr. Surveyor Parry indicated to your Commissioners that the soil in certain parts of this plain is shallow and rests on a soapstone sub-soil which does not allow any getaway for the water in the wet seasons. A failure might be caused, unless it is possible to drain this type of country.

Your Commissioners had an opportunity of inspecting Mr. Henning's property which is situated on the Mount Barker road about seven miles from Albany. On this holding, which might be described as one of the poorest in the district, drooping flowered clover was observed growing on ironstone ridges with very little soil. It seems to your Commissioners that success here is more a question of fertiliser and careful management than anything else.

Although some seasons may have a heavy rainfall they are generally satisfactory and most of the known clovers seem to thrive where there is a heavy rainfall. There may, however, be some difficulty in growing other fodder plants for a balanced ration, but this can only be determined by experiment, and your Commissioners believe that it would be worth while to obtain, say, 100 acres on the Kalgan Plain and have the work done by an approved settler near this locality to test out how best it is possible to utilise the land.

Your Commissioners had the advantage of being escorted on their inspection through the district by a very live committee composed of the business men of Albany who have taken a very keen interest in the development of that district, and no doubt they would be prepared to assist in any experimental work which may be carried out.

Complaints were made regarding the freight on fertiliser, but your Commissioners are of the opinion that if this district could justify the establishment of fertiliser works by an increased demand for manure, no doubt works would be established at the port.

Inspection was also made by your Commissioners of the areas on the west side of Albany where, in places, as many as three sheep to the acre were being carried. This land was brought into production and made capable of carrying the three sheep to the acre, for £2 per acre.

On Mr. K. R. Williamson's property east of Narrikup a great deal of work has been done by draining swamps and developing pastures. A considerable area of new country has been put under cultivation. This is of a sandy nature and subterranean clover and bent grass have been sown for pasture purposes. Mr. Williamson stated in evidence to your Commissioners that the cost of clearing land of this type and bringing it under pasture would be as follows:—

Chopping down timber under 18 inches in diameter, sap ringing and barking to the ground, all timber left standing and blackboys chopped level with the ground	£1 0 0 per acre
This is left standing 12 months to dry.	

Cost of burning up all timber on the ground, blackboys, stumps and thinning out all standing timber	£1 0 0 per acre
	£2 0 0 per acre

Pasturing costs:—	
Scarifying	10 0 per acre
Clover seed 5 lbs. per acre at 1s. per lb.	5 0 per acre
Super ½ bag per acre at 7s. per bag	3 6 per acre
Cost of topdressing	0 9 per acre
Making a total of	19 3 per acre

This shows that the original cost of clearing and pasturing up to the first year's seeding is approximately £3 per acre, but could be reduced by 10s. per acre if more timber were left standing and the scrub eradicated by machinery.

This land could be made reproductive in two years and established in three years as follows:—

Clearing and burning up, 18 months, the seeding and manuring taking place in May and June and sown with 5 lbs. of clover and bent grass seed per acre. This is a heavy dressing but should give a good stand of pasture for the first season which may be fed off when seeded, by cattle for preference.

On the germination of the seed left, which is the second season, the pasture will stand any kind of grazing, and sheep are preferred.

The carrying capacity of this land is three sheep to the acre, and as the pasture ages, so will the carrying capacity increase to a certain extent.

It is necessary to renovate lightly by cultivation the pastures every three years at a cost of 2s. 6d. per acre, and top-dressing every season will cost according to the quantity of super used.

Mr. Williamson's statements were based on a half bag of super to the acre per season, but experiments have shown that it will yield a greater profit if up to two bags are used in two applications.

The Department of Agriculture should be asked to watch the progress of the development of the type of country where Mr. Williamson is carrying out new work.

Mr. Williamson, in common with nearly all the other witnesses, claimed that in order to expedite production on the lighter type of country it is necessary to establish legumes. Generally in the southern part of the State this can best be done by sowing some of the clovers. In some places early variety of subterranean clover, in others mid-season, and in other places drooping flowered clover is recommended. Lupins have been tried out in much of the southern country but with not a very great deal of success.

Albany is the only district, outside Fremantle, that has established facilities for exporting meat. In 1936, 13,000 lambs produced in the district and 19,000 produced outside the district were treated. Last year, 24,000 produced in the district and 7,000 produced outside the area were treated. The increase in the Albany zone was 85 per cent.

Mr. W. J. L. Anderson, the manager of the Albany Freezing Works, stated in evidence that some of the best lambs came from the district surrounding Albany, but this land will be much more expensive to bring into production than the treeless plain, and in all probability it will take from two to three years longer to develop a given area. Mr. Anderson further informed the Commission that there was not

much wastage in a lamb if it was killed 24 hours after leaving its mother, and he considered trucking lambs for 150 miles made little or no difference to them. The estimated cost of road transport of lambs for 180 miles is 1s. 9d. per head and the limit to which lambs could be conveyed by road he considered to be 360 miles. These figures are quoted by your Commissioners to justify investigations as to the possibility of transferring lambs from the Esperance District to the treatment works at Albany.

To encourage the occupation of undeveloped areas, it is essential that a scientific knowledge of them be obtained and made readily accessible to the prospective settler. There is every possibility of attracting capital from outside Western Australia as the prospective settler in the assured rainfall areas of the Eastern States, owing to high land values there, is faced with a capital cost so high as to be prohibitive in many cases to the acquisition of land. If light land with an assured rainfall is made available in Western Australia at a low price, and its capabilities are made known in the Eastern States, there is no doubt that settlers from the neighbouring States will find their way to Western Australia.

With regard to overseas markets, the national geographic position of Western Australia is worthy of consideration, and in the Southern areas, No. 1 and No. 2 Land Districts, apart from the fact that the climate is such that export lambs can be brought to maturity at least a month before those of the Eastern States, these two districts are almost a fortnight nearer the London market. This means that Western Australian new season's lambs can reach London six weeks before the bulk of the export from other parts of Australia, with the result that better prices are obtained than when the market is fully supplied.

Albany already has freezing works, and being but a few miles off the main trade route between Australia and London, no difficulty should be experienced in inducing fast refrigerator ships carrying chilled beef to call at that port, and perhaps Esperance as well, without serious loss of time.

Dr. John Hammond, the Nutrition Expert from Cambridge University, stressed the point that to produce prime beef for overseas markets it was essential that there should be no set-back in the growth of the animal, and for that reason, instancing the long dry summer in Western Australia, he made a statement to the effect that this State was not suited to the production of chilled beef; but as Dr. Hammond made this statement on information given him regarding climatic conditions in most of the districts and, as with other visiting experts his itinerary did not include the districts in the higher rainfall areas of Nos. 1 and 2 Land Districts, his remarks against the possibility of producing good quality "chiller" cattle cannot generally be accepted. His remarks, in fact, draw attention to the very suitable climatic conditions in those areas.

The light lands adjacent to the port of Albany and to the West of the Great Southern Railway line have an average rainfall of 30 to 40 inches per annum which is spread over 10 months of the year, while the light lands adjacent to the port of Esperance have an average rainfall of 28 inches per annum spread over eleven months of the year, thus providing an almost continuous growing period.

There is a lengthy period of warm growing weather before the cold spell begins in mid June. There are only about two months of really cold weather, mid June to mid August, followed by two months of growing weather, mid August to mid October. Therefore, if these areas were brought into pasture they would be ideal for stock of all kinds as the long growing period provides green feed practically all the year round and improves the carrying capacity enormously compared with heavier lands in drier areas.

The greatest problem that the chilled beef trade in Australia has had to face has been the loss of bloom due to the long duration of storage during the voyage to the London markets. It has been shown that for the 12 months ended August, 1936, the average duration of holding Queensland chilled beef on ship-board was in excess of 56 days. It is obvious, therefore, that even when the greatest care has been exercised in the preparation of the beef, in its storage and in its transport overseas, considerable loss of bloom must inevitably ensue in a large proportion of Queensland cargoes while voyage periods of this average obtain.

The tremendous natural advantage possessed by the ports of Western Australia, which are only 28 days from London, is apparent. With a voyage period of approximately half that of Queensland, the problem of loss of bloom with the attendant loss of value does not exist. Probably no part of the world, with the exception of South America, is so conveniently situated for the export of chilled beef to England as are the ports of Albany and Esperance, and a voyage of 28 days compares very favourably with the voyage period of 22 days from the Argentine. Your Commissioners are of the opinion that a full investigation should be made of the possibilities of establishing a chilled beef trade in the light land areas of these districts.

LAND DISTRICT No 3—THE GREAT SOUTHERN.

The estimated total area of this Land District is 10,800,000 acres. Within 25 miles of existing railways there is an estimated area of 1,191,000 acres of unalienated light and poison lands and an estimated area of 703,000 acres of alienated light and poison lands.

The rainfall varies from 26 inches to 15 inches, but extending Eastward it diminishes rapidly. In subdivision "B" recent experiments have proved that subterranean clover can be grown under normal conditions, but in some years the season may be too dry. In the extreme Eastern portion it cannot be expected that subterranean clover can be established, although useful experiments are being made on Mr. W. H. Campbell's property at Nyabing which may justify some assistance being granted by the Department of Agriculture to further this experimental work which should be supervised by one of the Department's officers.

The general production is confined almost entirely to cereals, either of wheat or oats, and the lighter country at present under cultivation is growing wheat for which averages up to 12 bushels per acre are claimed, but your Commissioners are of the opinion that this area is capable of producing a payable crop of wheat or oats for sale only once in

every four or five years. In the intervening period, oats and barley may be grown for sheep feed, and apparently Californian barley is considered to be the best because of its dual purpose, that is, green feed for the sheep in the years required, and if not required for feed then it has an export value.

Most of the farmers stated in evidence to your Commissioners that the best way of increasing the fertility of the light land during the intervening period between the cropping years was to grow green feed and feed off with sheep so as gradually to build up the soil, bringing it to its maximum production in an estimated period of 25 to 30 years.

The farmers already farming light land in this area are generally having a very lean period due firstly to the low prices from the years 1930 to 1936 inclusive, and not being able to get heavy returns that are possible on the heavier types of country. Witnesses in their evidence stated that it was possible to make a living from 1,500 acres by first sowing the land with wheat and then sowing pastures by way of cereals on which to feed their stock.

The light land itself has very little feeding value from natural herbage even with top-dressing, and it was stated that it was uneconomical to apply fertiliser without planting some cereal or pasture. Your Commissioners consider that experiments should be continued in this area to see if it is not possible to produce something in the way of other pastures.

The country in subdivision "B" is more or less affected by poison but not in such large quantities as in subdivision A. It is considered by your Commissioners that the area required here would have to be larger than what would be required in districts further South, and it is estimated that the home maintenance area would need to be from 1,500 to 5,000 acres. Again it is a question of the personal element of the man and the amount of capital available for development purposes.

In subdivision "A" West of the railway, particularly the Southern end, a very heavy growth of York Road poison is included among other varieties.

The type of country upon which poison grows is evidently quite a good class of soil, but cannot be considered equal to first class land and the cost of eradication of poison makes it quite unattractive. The probability of the increased fertility is due to the fact that most of our toxic plants are legumes and in consequence a fair amount of nitrogen is fixed in the soil before cultivation takes place.

The evidence tendered to your Commissioners was to the effect that it took 30 years to eradicate the poison from these holdings. After the clearing has taken place and the land has been ploughed every year, it is necessary to go through the holdings for the purpose of dealing by hand with the growth of seedlings. In some instances, it has cost up to £2 per acre to eradicate the plants and even now it cannot be claimed that the land is poison free.

Mr. R. Benn, who has been farming his land at Boscabel for 29 years, might be regarded as an authority in this district. Your Commissioners inspected Mr. Benn's property which consists of 5,600 acres, and in addition, he leases 1,400 acres from the Agricultural Bank. The property is situated 15½ miles from the railway and the price averages in the

vicinity of 5s. per acre. It is timbered with white gum, jam and jarrah, carrying York Road, narrow leaf, box, bullock and prickly poison, and in certain areas heart leaf poison. Of the first 200 sheep put on the property 100 were lost through poison.

Of the 5,600 acres, 2,500 acres are cleared. There are 2,500 sheep grazing on the property and usually 300 acres are under oats and wheat. The proceeds keep 16 people (three families). Subterranean clover has been grown with a fair amount of success, but it is only permanent when fed to big stock, as the sheep eat it out, and most probably this would be caused by over stocking. About 800 acres are top-dressed alternately every three years with 90 lbs. of fertiliser.

The average wheat yield is four bags per acre, 18 to 20 bushels of oats and 25 cwt. of hay per acre, most of which is fed back to the stock on the farm.

In his evidence before the Commission Mr. Benn stated that 2,500 acres of poison land would be required to establish a farm. After selection, the procedure would be to cut down all the small timber up to 18 inches, ring-bark the remainder, and then run a fire through and burn all the timber. The poison should be ploughed and not grubbed, and it would be necessary to plough to a depth of three inches to get the poison out. An area of 400 acres should be immediately cropped with oats. The same 400 acres would be cropped in the following year after the poison had been grubbed, the cost of this grubbing being 6s. per acre.

A dam of 1,000 cubic yards would then need to be excavated at 1s. per cubic yard and 400 store sheep then purchased and turned on to the land for fattening.

It would take 10 years to clear the whole 2,500 acres and thoroughly establish a farm, and the capital required would be from £500 to £600 for the first four years; in other words, a sum of about £2,500 would be needed to bring the property up to such a state that a man could earn a living from it.

The average rainfall is 21½ inches, the wool clip about 8¾ lbs. and the percentage of lambs 85. Lupins have been tried with success, but were cleaned out by the sheep while they were in the green stage. Plots of grasses sown by the Agricultural Department have also grown well, but have been cleaned out by the sheep.

The districts in this "A" subdivision of Land District No. 3 produce some of the finest wool grown in this State, but it is doubtful to your Commissioners whether it is a business proposition to farm this type of land, taking into consideration the heavy capital cost of eradicating poison and clearing, when results could be obtained at less expense from more inferior types of land.

In the Boscabel area, land was priced at from 9s. to 13s. per acre, but some of it was subsequently reduced to 1s. per acre. Although this class of land is recognised by most people as poison land and is available at 1s. per acre, there seems to be very little of it that has been sold at that price.

No doubt in years that have passed, great losses have been sustained through loss of stock by poison, and in this type of country every consideration should be given to the settler who attempts to make a

living from it. Suggestions will be submitted by your Commissioners in the recommendations and findings that may to some extent probably relieve the minds of the settlers attempting to carve out a farm.

The North-Western portion of this subdivision, together with the Southern portion, seems to contain some of the ideal export lamb country. In this type of land indications show rapid developments to pasture, and a statement made to your Commissioners by Messrs. A. Thorn and L. Davies of York, who hold an area of land West of the Great Southern Railway, illustrates the heavy carrying capacity of the land, and this was confirmed by inspections made by your Commissioners. The carrying capacity is two to three sheep per acre exclusive of lambs for the period they are with their mothers. Border Leicester and English Romney Marsh crosses are regarded as the most suitable types. The land referred to is that area West of the Great Southern, not included in either a State Forest or the Water Shed of the Mundaring Weir, and can be brought into production from about £2 to £3 per acre. In the Southern part of the subdivision the Romney Marsh-Merino Cross produces the best mother for export lambs.

Development in these areas should be closely watched by the Agricultural Department, and, as the export lamb trade develops, there should be no difficulty in determining the minimum and maximum areas which should be made available.

Some instances of the difficulties of obtaining land were submitted to your Commissioners by witnesses who had experienced opposition from the Forests Department, but this was not substantiated by the evidence submitted by the Conservator of Forests who stated that no hindrance took place in any area that was more suitable for farming than for forestry purposes, and which was not reserved as a State Forest.

Witnesses from the Bowelling area submitted evidence to your Commissioners which indicates that in years past large areas of land were selected just for the purpose of grazing stock and were completely eaten out in two or three years, and then a further area would be required for the purpose of continuing the supply of feed for the stock normally carried. More recent developments indicated that by the sowing of pasture the same number of sheep can now be carried on 300 to 400 acres where previously up to 5,000 acres were required, thus proving the rapid development of pasture production in this part of the State.

In the evidence submitted to your Commissioners by Mr. E. Loyne, of Bowelling, he stated that he was now able to produce more wealth from a small portion of his holding than on the thousands of acres he held previously. He pointed out that drainage was required, which would permit of 40 additional farmers being established on small areas in this valley. This matter should be referred to the department concerned for its advice. Your Commissioners think that from 400 to 1,000 acres in this locality would suffice to provide a home maintenance area, but would require a fair amount of capital to develop the land to its full carrying capacity.

On the evidence submitted, land in the Bowelling country may be regarded as a first-class dairying proposition.

Mr. T. H. James, who is a dairyman and sheep grazier at James Crossing, Bowelling, stated in his evidence that on his property of 7,700 acres he had 70 head of cattle and 800 sheep on 500 acres of cleared land. This evidently is quite good dairying country, because Mr. James considers that the cows were three times as profitable to him as his sheep were, and he runs the whole of his 70 head of cattle on from 100 to 150 acres all the year round. This could not be regarded as coming within the scope of our inquiry, except that the evidence submitted stated that it was poison infested, bearing out that which has previously been stated that the poison lands are of greater fertility than some of the lands not growing the poison plants.

LAND DISTRICT No. 4—EASTERN.

The estimated total area of this land district is 18,380,000 acres, of which, within 25 miles of existing railways, the estimated area of unalienated light and poison lands is 4,610,000 acres, while the estimated area of alienated light and poison lands is 3,775,000 acres.

Evidence submitted from witnesses in this land district indicated a similarity between this country and the country further north in subdivision "B" of No. 5 Land District, and so for the purpose of this report will be taken as similar.

The country in its natural state has a very low feed value and none of this land has been selected for the purpose of grazing on natural scrub.

While the recorded averages at Wongan Hills appear to be high, this cannot be accepted as the average wheat yield in this type of country, commonly known as the Wheat Belt. The evidence tendered shows that the average would be much below the State average, and would be in the vicinity of from six to seven bushels per acre. This cannot be regarded as a profitable crop, taking into consideration the heavy dressing of fertiliser required and the very little value obtained from the pastures grown in between the cropping periods. Most of the farmers operating on this class of land consider a period of five years should elapse between the growing of cereal crops, and in the intervening period, crops of barley, oats or rye should be used for green feed. It is stated that this is the best and quickest method of building up the fertility of the soil.

In some instances witnesses said that the land could be brought into full production over a period of from five to ten years, while others stated it would take from 20 to 30 years before it could be regarded as a profitable investment. The latter contention is endorsed by your Commissioners. There is no doubt in the minds of your Commissioners that this land, by proper farming methods, can be brought into production, but it could best be used as an adjunct for farmers with good country. There is a consensus of opinion as to what would constitute a reasonable working distance, without providing a separate farming unit, but the maximum distance might be taken as five miles.

Evidence submitted to your Commissioners indicated that there are three types of country found in this area which are absolutely of no value, that is, ironstone gravel ridges with laterite coming to the surface; wodgil, which grows on ironstone ridges and also in sand; and the pear and banksia, which grow on deep sand. As most of the poison grows more or less on the ironstone gravel ridges, it has had to be eradicated by hand, and after having been carefully watched for regrowth for some years the areas have been reserved for shelter blocks and consequently have no productive value.

Many of the selections which have been held for some years have not been worked but have been left in their virgin state. It is claimed by many of the settlers that the price charged for this type of land is too high. As much as 6s. and 8s. per acre is demanded by the Lands Department and this is borne out by an examination of the Lands Department file of Mr. Alexander Gordon (Lands and Surveys 5145/27). Mr. Gordon, whose property is situated in subdivision "B" of No. 4 Land District, recently made an application for a reduction in the price of his land. On the 28th June, 1938, Inspector C. W. Edwick reclassified this block (see page 43 of this file) and reported that out of 817 acres there were 777 acres of 3rd class banksia and pear country, and in every instance where your Commissioners examined this type of land, it was found to be a deep sandy useless substance with a subsoil of anything from 20 to 30 feet. Despite the fact that the adjoining land is priced at 2s. per acre, the Acting Surveyor General has fixed the extraordinary price of 6s. per acre on this 3rd class property (see page 45 of the file).

Your Commissioners cannot understand why Mr. Gordon's block has had such a high price placed upon it, and taking into consideration the poorness of the soil recommend that the matter be again reviewed by the Acting Surveyor General with a view to fixing a more equitable price.

Some of the witnesses from this Land District who gave evidence stated that they selected some of this country (which your Commissioners have described as useless pear and banksia country) for the purpose of destroying the vermin harbouring there, and complained that the prices charged for the land by the Lands Department were unfair, because outside of the destruction of vermin there was very little value in the land, and that neither the Lands Department nor the respective road boards would do anything to destroy the vermin that this country was harbouring.

Your Commissioners also desire to point out that there is a danger from clearing this inferior type of sandy country because of its being subject to soil erosion, but as most of these areas are included in the properties of more successful farmers, they, no doubt, will be able to keep under control the vermin about which they complain. In the circumstances, your Commissioners believe that where this land has been selected a minimum price should be charged.

Soil erosion has become a problem in this district where light land is cropped. The Chairman of the Quairading Road Board (Mr. Growden) stated in evidence that since he has been connected with the board the road running north and south from Yoting has been lifted three times and has sometimes been covered to a depth of two feet, while the fences have at times been covered to the top of the posts which are about 4 feet 2 inches high. As a remedy for this

evil Mr. Growden contended that road boards should have power to force farmers not to fallow within at least two chains of their boundary, and that where land had not been alienated or cleared it should be left in its virgin state within two chains of the boundary.

The rainfall in the No. 4 Land District averages about 10 inches in the growing season. Lupins apparently do not do well in this area, but oats and barley are grown extensively as a stock feed.

In the evidence tendered to your Commissioners at Aldersyde it was stated that the average yield was about 10 bushels and the land is worked on a three-year rotation—the first year fallow, then crop, burn the stubble the next year and fallow in the following year.

Not much feed is obtained from the land in the early stages, but later on there is quite a lot of cape-weed. It is not of as good a value as is some feed, but it is one of the main early feeds. Barley, oats, rye and rape are being sown as feed and are turning out very well. This gives the land a spell from wheat, and when a switch back is made to wheat, the crops benefit on account of the spell during which the other crops have been grown.

The average wool clip is in the vicinity of 9 lbs. and the lambing about 80 per cent.

Mr. C. H. Austin, a farmer of Aldersyde, stated in evidence that he held 2,000 acres of land of which 1,600 acres comprised light land, and that to date his light land farming had been profitable. Mr. Austin is running one sheep to four acres on his property and they are doing well. The majority of the flock are merino ewes which are crossed with Dorset Horns and produce good lambs. Mr. Austin also stated that given a price for wheat of not less than 3s. 8d. a bushel he could successfully develop an exclusively light land farm.

Along with practically every other witness examined by your Commissioners, Mr. Austin stated that the land is valueless until it is broken up. The land held by Mr. Austin is typical of the surrounding country.

The impression gained by your Commissioners in this locality was that light land gave an early and a late feed, and that for the production of fat lambs in this district it was advisable to have an area of light land from which to get early feed for the stock during the time they are waiting to go on to the heavy country. The hardest time for the sheep is the autumn and early winter, but by sowing oats and rape on the light land it can be fed off early and until other feed is available.

The lamb mortality on the heavy country in the absence of early rain is heavy; consequently there is an immense value in having light land to provide early feed, especially as it can be easily worked with the first showers. It was stated to your Commissioners that the land in its virgin state would not carry one sheep to 50 acres.

Mr. H. H. Harling, a farmer of Merredin and Belka, represented the Merredin Road Board and submitted a statement prepared by that board. A complaint was made regarding survey fees charged by the Lands Department and a case was instanced where, although the survey fees had already been paid on a 2,000 acre block near Muntadgin, recent

applicants were advised that, when making their application, they must pay another survey fee amounting to £40.

It was also suggested to your Commissioners that in future where any light land is taken up, five chains of that land adjoining any road should be left uncleared and should be included in the road under the jurisdiction of the Road Board.

Mr. Harling stated that his committee considered that where one chain of light land adjoining a road had been left uncleared it was not sufficient, and that larger strips of selected land should be left uncleared. In the opinion of his board soil erosion in the districts around Merredin was a serious problem.

At Northam, an Inspector of the Agricultural Bank giving evidence before the Commission stated that at Dangin 40 acres of lupins had been established in banksia and pear country, which is the lowest grade of all sand plain. The returns from sheep fattened on that area were greater than from any other section of the farm. The lupins, however, eventually entirely disappeared, and the seeds taken away to two other farms did not germinate. He also stated that sand plain should only be cropped every five years, but the white gum country, which has more humus, could be cropped every three years.

The witness quoted a farmer at Dangin who borrowed money to clear his farm and got into debt with the I.A.B. He had between 600 and 700 acres of the worst white gum country in the district. From the proceeds of his land he paid off his debt, and in addition, sent two children to the University. He is now in a position to disprove anything that might be said about the impossibility of successfully working light lands.

From Kokardine to Ballidu in the "A" subdivision there is a fairly extensive area of light land, and the condition of the farmers in those light land districts has greatly improved during the last two years because there have been more suitable climatic conditions. This suggests to your Commissioners that light land requires less rainfall to give better results for cereal growing. In 1937 the rainfall was between 9 and 10 inches and that produced an average yield of 12 to 15 bushels per acre.

At Moonijin, W. Emmet and Sons hold 21,000 acres. Records state that their average yield for the five years previous to 1936 was 15 bushels. Their country is mostly good tussocky and tamma scrub.

One witness stated that he would not attempt to take up an exclusively light land farm; if first class land were not available he would try to get a farm comprising 60 per cent. good and 40 per cent. light land. This witness contended that crops on the light land of the No. 4 Land District should be sown earlier than those on forest country with a view to obtaining a sufficient growth while the soil was warm. All light land crops are almost stationary in their growth from July till late in August.

The country north of Cadoux has a big percentage of wodgil which may be of too great an extent to warrant development, and a reclassification should be made with a view to cutting out the worst wodgil infested areas. Your Commissioners are of the opinion that wodgil infested land is valueless and the returns from the cropping of this land would not be

sufficient to pay for its development especially as there is enough good country in the locality without resorting to the use of wodgil land.

The farming methods adopted by settlers in the No. 5 Land District have a general application to this area, and while the yield may not be regarded quite as favourable as those quoted, the methods of cultivation are almost identical. A great deal of the light land in this area generally has been selected by farmers who hold land of a better class, but there are also many successful farmers who are working entirely light land propositions, but a great area of land still remains undeveloped. Some of it is held by Agricultural Bank clients whose financial position does not enable them to do any work whatever on their light land areas.

Water is not easy to obtain in the light lands of "B" subdivision of this district, and a great deal of money has been spent in trying to locate suitable stock water. Your Commissioners consider that it might be possible to organise a party of men qualified to determine the best localities in which to obtain water. The testing could be done with a suitable plant. In the eastern portions of this land district some evidence submitted to your Commissioners pointed to the fact that water was easily obtainable in light country.

LAND DISTRICT No. 5—MIDLANDS.

The total area of the No. 5 Land District is estimated at 10,000,000 acres, of which there is an estimated area of 1,693,000 acres of unalienated light and poison lands and 1,116,000 acres of alienated light and poison lands within 25 miles of existing railways.

The "B" subdivision seems to contain probably some of the best light land in the State. More particularly does this apply to the country surrounding Wongan Hills, Ballidu and Miling, where quite good averages have been obtained. The average on the State Farm for wheat production is over 14 bushels of wheat and nine bushels of oats over a period of 13 years. From statistical returns obtained from the Wongan Hills Research Station it appears that the greatest value from this light land is in the production of cereals. Its carrying capacity is extremely low, and sheep raising in this area can only be regarded as a sideline to cereal production.

As this is an Agricultural Research Farm, it might be correct to regard it as experimental for the production of cereals rather than providing pastures for sheep.

Your Commissioners are of the opinion that in this area the light land in its virgin state has no value and the native vegetation is useless for sheep, and the land when cleared will grow nothing until superphosphate is applied. The manager of the Research Station stated in evidence to your Commissioners that lupins could be successfully grown in this type of country and he would, if working his own farm, run a system of rotation whereby one crop of wheat and two or three crops of lupins would be grown on

suitable land. The growing of lupins would serve a dual purpose, namely, in building up the soil and providing good fodder for the sheep.

Crop yields from the State Farm indicate that farming can be carried on profitably on that type of land. The last two years, in which the rainfall has been low, would probably favour this type of country.

The evidence of Mr. H. A. Scotney, a farmer of Kondut, bore out the testimony of the manager of the Wongan Hills State Farm, and since the experience of both has been almost identical, Mr. Scotney may be regarded as a successful farmer on this type of country. Mr. Scotney has just over 3,000 acres, of which 85 per cent. is light land. The average rainfall is approximately 13½ inches, most of it falling in the growing period. The best of the land is tamma and tussock country which represents about 50 per cent. of the total area, while the balance comprises wodgil and other types down to the yellow sandy pear country, which is classed as the poorest of the lot.

An area of 2,500 acres has been cleared with a tractor and a sander, the land being ploughed straightaway and left lying idle for about nine months. No land was fallowed in the first year, but 500 acres were fallowed during that winter, and 570 acres were cropped for an average yield of 19 bushels. In the second year, a straw fire was put through to destroy the regrowth, and this ground was again seeded with wheat for a return of 16 lbs. short of 21 bushels to the acre. During the third year, after the burn, a spring tooth cultivator was used, and the ground being very friable a good seed bed was secured. It was drilled with 45 lbs. of pickled and graded seed wheat and 112 lbs. of superphosphate. The return for this year was four bags to the acre and was the third consecutive crop. The first 500 acres were fallowed in 1927, and the last time a crop was taken off was in 1934. The three-year rotation was then used and the area was seeded with wheat and oats. The wheat returned 5½ bags to the acre and the oats cut 2 tons of hay to the acre. Mr. Scotney is of the opinion that a six-year rotation would be of more value than a three-year rotation.

Supplies of good fresh stock water are available in this locality at an average depth of 60 feet. On the tamma country the depth of soil to the subsoil ranges from 4 inches to 2 feet, or an average depth of 18 inches. The subsoil consists of gravel changing deeper down to ironstone conglomerate or laterite.

Mr. Scotney also stated that he can carry one sheep to every acre of wheat stubble.

Your Commissioners, bearing in mind the personal equation, and how an individual handles his finances, consider that the lowest amount of capital a man would need to farm 2,000 acres of average light land, as found in subdivision "B" and also subdivision "A" of No. 4 Land District, providing for 1,000 acres to be productive in two years and the balance in three years, and basing the calculations on the ability of the farmer to secure his plant on three-year terms, is as follows:—

Commence, January, 1939.

	£
Jan.—2,000 acres survey fees	36
Timber, iron, 5,000-gallon tank and assisting labour, shed 60 x 30 to be used as temporary dwelling and permanent super and machinery shed	150
Secondhand truck, 30-40 cwt.	150
Carried forward	£336

	£
Brought forward	£336
Feb.—1/3rd price of crude oil tractor, iron wheels	200
1,000 acres rolling where necessary, burning whole at 2s. 6d.	125
May—1/3rd price disc cultivator plough	30
Crude oil, oil and grease, 1,000 acres fallowing at 6d.	25
Oct.—1,000 acres rolling where necessary	100
Dec.—12 months living expenses £150, petrol £30, unforeseen £20	200
Feb., 1940—1,000 acres ploughing back, crude oil, etc.	25
1/3rd payment on tractor with interest (2nd payment)	220
1/3rd payment on drill	40
50 tons super at £4 delivered farm	200
1,000 bushels graded and pickled seed at 4s.	200
March—Burning up rolled country (assisting wages)	25
April—1,000 acres drilling, crude oil, etc., at 4d. acre	17
5 weeks' wages assist drilling at £3	15
Second 1/3rd payment on plough with interest	34
June—1,000 acres fallowing, crude oil, etc., at 6d.	25
Nov.—1/3rd payment on harvester	80
Bale bags if bulk bin available	10
Wages two men harvesting and carting 10 weeks at £6	60
Dec.—Year's living expenses £150, petrol £45, unspecified £35	230
	£2,197
Oct., 1941—1,000 acres crop at 10 bushels	10,000
Less seed requirements	1,000
	9,000 at 3s.
	£1,350 crop returns.

In making this estimate it will be seen that the settler will have to be prepared to work long hours, denying himself everything apart from necessities, until his farm is improved and producing. The personal equation is all important, and while many men could do the job on less capital than is indicated, taking the average man into consideration, your Commissioners are of the opinion that the aforementioned capital would be necessary.

Your Commissioners also heard evidence from Mr. E. T. Shields, the General Manager of the Glenvar Pastoral Company, Wongan Hills. The country held by this company is typical of that throughout the light land district about Wongan Hills and is principally tussocky sand plain and tamma, with a few patches of mallee on the tops of the hills, and large scattered patches of poison, consisting mainly of York Road and Champion Bay. The soil itself varies from deep yellow to better loam, with a clay gravel subsoil. The country is useless in its natural state for carrying stock on account of poison, and there being no nutriment in the natural vegetation.

However, Mr. Shields considers that the light land has an advantage over forest country in that it is more rapidly and more cheaply cleared, and will grow a crop in a dry year—a crop that will fail in heavier country. Water can usually be found throughout this land at a reasonable depth.

As in all districts, this type of country also has its disadvantages. Apart from the initial clearing, the land takes many years to free from scrub and

poison growth. The constant sucker cutting, poison grubbing, and collecting of mallee roots, besides difficulties caused by regrowth, add considerably to the cost of clearing. The soil is also particularly favourable to such weeds as wild radish, double gee, sorrell and paddy melon, and the deep loose soil makes some of these weeds very hard to eradicate. This applies generally to light land.

The Manager further stated that during the first year's operations—

- No. 1.—500 acres of new ground were fallowed while the ground was wet,
 No. 2.—250 acres of new ground were fallowed late when the ground was dry,
 No. 3.—150 acres of new burnt ground were sown-seeded in when the ground was wet,

with the following result—

- No. 1.—Yielded approximately 13½ bushels per acre,
 No. 2.—Yielded approximately 6 bushels per acre,
 No. 3.—Yielded approximately 18 bushels per acre.

The next year the same land was cultivated after burning as much straw as possible following the March rains, and seeded later, with the undermentioned results—

- Nos. 1 and 3 yielded approximately 9 bushels per acre,
 No. 2 yielded approximately 5 bushels per acre.

An area of 850 acres of new ground on which the scrub had been burnt before fallowing yielded 16 bushels per acre, although the rust was bad. On 250 acres of new land, which was partly burnt and ploughed in, seven or eight bushels were harvested. Since then all crops have been put in on fallow.

Mr. Shields stated to your Commissioners that from the experience gained from the working of his property, fallow, to be any good on light land, must be done while the ground is wet, especially with new land. Seeding new ground is successful on newly burnt country if the year is suitable, otherwise it is not, and it is risky to do too much of this. Mr. Shields suggested, and your Commissioners agree with him, that experiments with the ploughing after first rain and then seeding on old land should be carried out on State Experimental Farms owing to the rising popularity and the possibilities of this method. If proved successful, it has many advantages, such as preventing soil erosion caused by fallow, and obviating land lying under fallow which could be used to carry stock.

Yields from the crops grown on fallow over a ten-year period are as follows:—

Season	2,000 acres cropped	averaged	15 bushels per acre.
1928-29	2,000	"	10
1929-30	2,000	"	10
1930-31	3,000	"	14½
1931-32	1,000	"	16½
1932-33	1,300	"	10½
1933-34	700	"	13½
1934-35	800	"	14½
1935-36	800	"	18½
1936-37	1,000	"	13½
1937-38	1,380	"	18½
10 years	14,180	"	15.1

The rainfall in this area averages 15 inches.

From the evidence tendered and the observations made by your Commissioners during their inspection of this "B" subdivision, they are of the opinion that 1,500 acres should be the minimum area, and 5,000 acres the maximum area to be granted to any one settler. The best results would be to spell the land for at least four years between crops. Oats can be grown, but, on the whole, the light land does not

grow heavy hay crops. Crops of oats and barley should be fed back to sheep to improve the carrying capacity and fertility of the land.

Your Commissioners consider that the method of working the class of land in this "B" subdivision of No. 5 Land District could be applied to the "A" subdivision of the No. 4 Land District, as the land is somewhat similar, although the average is said to be much below the recorded average in the Wongan Hills district.

"A" Subdivision.

The country in the "A" subdivision of this area constitutes a problem, consisting largely of large areas of sand plain country with a deep sandy soil of very low fertility. Probably this coastal plain offers the least inducement to profitable exploitation. In the summer time it may be found to be of some value to adjoining holders who desire to pick for their stock from the edible shrubs growing upon the plain, while in dry years portions of this land might produce something in the way of feed for grazing purposes, although there are only isolated instances of successful occupation.

The solid clay plains of the Dandarragan area offer prospects of successful settlement, but the distance from a railway militates against this. It was reported to your Commissioners that a clay plain existed north of Dandarragan for which no classification has been made, and as pasture and other experiments are being carried out by some of the settlers in this locality, it would be worth while ascertaining the value of the land from a cropping or pastoral point of view.

There is also an area of country which commences in the vicinity of Gingin and passing through Dandarragan, extending right through beyond Northampton which might be regarded as the lupin belt of the State.

At Yatheroo Station your Commissioners inspected a large area of this type of country, sown with lupins which had made a wonderful growth. On this property, on an area which had been set down in pasture, following a crop of lupins, an excellent growth of rye was observed, and pastures which were fattening a large number of stock for the Metropolitan Market, demonstrated to your Commissioners the improvement in the fertility of the soil after lupins had been established.

Mr. F. A. Green, grazier of Dandarragan, stated in evidence that the carrying capacity of the light land in this locality would be five sheep to two acres and that the land could be profitably developed, apart from buildings, for less than £1 per acre. Water would not be a difficulty as there is water right through the light lands. Poison is scattered throughout, but could be eradicated by disc ploughing two or three times and the remaining plants eradicated by hand. It would cost up to 12s. per acre to eradicate the poison, though this could not be done in the one operation.

Mr. Green has lived a lifetime in the district, and from his observations he stated that this clay plain will grow wheat and oats but could be more profitably used for mixed farming because the distance from a railway, 25 to 40 miles, militated against the growing of cereal crops. Mr. Green further stated that the

average wheat yield would be in the vicinity of 18 to 25 bushels an acre and up to 35 bushels of oats. It is lupin country with an average annual rainfall of about 24 inches, most of which falls in the growing period.

Your Commissioners examined another settler, Mr. W. J. Cook, of Dandarragan, who stated that there were 8,000 acres of light land on his property. In parts it represented the average type of land in the district and in other parts it was better than the average. Until the advent of lupins the area was considered of no value except for the stock to run over to get summer pickings. A section of about 100 acres was developed and Mr. Cook stated that it was the best fattening proposition he had seen. After cattle had been grazed for a considerable period, 600 sheep were put on the 100 acres and left there till the rainy season. They were given no other feed and came off fat. Lupins do not do so well on the land which has a clay subsoil but grow much better on deep sandy loam.

The general consensus of opinion was that the land between Dandarragan and the Midland Railway was not an attractive proposition if heavier land were not available to farm with it. The fertility of the soil is low with too great a depth to the subsoil, and your Commissioners are of the opinion that it would mainly be of use as an adjunct to a settler with better land.

There is a large area of unalienated light land between Three Springs and the coast. In its virgin state after it has been burned it will carry a sheep to 20 acres for three or four months in the year in every two out of five years. Poison is generally scattered over the area and water is not easy to obtain. It was the opinion of all witnesses who tendered evidence regarding this area that this type of land should not be sold at more than 1s. per acre.

Complaints were also made regarding the fencing conditions imposed on the special leases of 10,000 acres, by which a lessee has to erect a sheep-proof fence within two years. It was pointed out to your Commissioners that in working a property of this area under conditional purchase the holder would not be compelled to do that amount of fencing in five years.

It was stated that the growing season on this light country was only four months, but it was suitable for wheat growing. Pastures had not been tried to any great extent, but it would certainly be possible to grow oats, barley or rye and establish the country for grazing.

Mr. A. F. King, a farmer at Three Springs, stated in evidence that he was holding 10,000 acres of conditional purchase land, all being light country. The property is situated near the coast and is 45 miles from the railway. The rainfall has averaged 33 inches over the last 10 years. Mr. King had been experimenting here for 10 years. The land is of a sandy nature with a depth of 5 or 6 inches to a clay subsoil. Water is easily obtained, supplies being available at 10 feet. Mr. King stated that during the last 10 years there has been an improvement in the fertility of the soil on the area under cultivation. Quite a lot of cattle are being fattened on 200 acres. The wool clip from the merinos on the property has averaged 11 lbs. and the lambing 100 per cent. Clover has

done well, but the isolation militates against the working of the property from a cereal point of view, although, no doubt, stock could be raised quite successfully. Mr. King stated that he would be prepared to carry out experimental work under supervision for the payment of his out-of-pocket expenses, and your Commissioners are of the opinion that experimental work should be carried out in this area.

The minimum area which should be granted to any one man in this locality is, in the opinion of your Commissioners, 2,000 acres, and the maximum area 5,000 acres, with a maximum price of 1s. per acre plus survey fees.

This No. 5 Land District has probably a more varied class of light and poison land than perhaps any district investigated by your Commissioners. In "B" subdivision between the Midland Railway and the Wongan Hills-Mullewa Railway the land is eminently suited to the growing of cereal crops, especially in the tamma and tussocky country, and to the running of sheep as a sideline, it being considered by your Commissioners that one sheep can be carried to every acre of cropped land.

Your Commissioners inspected many light land propositions in this area and a great many of the settlers are successfully developing their properties. It would be of interest, perhaps, to mention one property which your Commissioners inspected to the north of Miling, where two brothers cleared and cropped 2,000 acres in 11 months. The scrub was ploughed in and the seed planted on the rough cultivation, and when your Commissioners visited the property the wheat crop showed quite a healthy growth.

Your Commissioners consider that none of the light and poison lands in any of this "B" subdivision of No. 5 Land District should be sold at more than 1s. per acre, nor should any prospective settler be granted less than 2,000 acres or more than 5,000 acres.

Mr. P. J. Lynch stated in evidence to your Commissioners that he is the holder of about 10,000 acres of land which he purchased from the Midland Company. Mr. Lynch stated that he is paying 6s. 6d. per acre for his land, and on the remaining amount of purchase money interest at 4 per cent., except when instalments are in arrears, when an increase of from 3 to 3½ per cent. penalty interest is added to the amount in arrears. This statement is not borne out by the evidence of Mr. W. C. Johnson who represented the Midland Company and stated that the penalty rate was 1 per cent.

Your commissioners inspected Mr. Lynch's land, examined classification plans drawn up by qualified men, and consider that the highest value that should be placed upon it is 3s. per acre; and when it carries 4 per cent. interest for all unpaid moneys it might be regarded as expensive land when comparing it with land of the same quality sold by the Crown.

There appears to be a disagreement between Mr. Lynch and the Midland Railway Company on the question of the poison growing on the land, a fact that was unknown to the purchaser when he bought the land. Mr. Lynch stated that he has suffered heavy stock losses from poison and should have been advised of the poison growing on the property when he purchased it. With this latter contention your Commissioners agree. An inspection of the classi-

fication plans belonging to the company shows that the company was aware that poison did exist when it sold the land, but that it did not advise Mr. Lynch.

Mr. Johnson stated that the company did not sell its land on classification and therefore it was not bound to disclose to the purchaser that poison existed.

Your Commissioners consider that it may be necessary to introduce legislation to compel a vendor to disclose any latent defects, of which he has knowledge, in the land he is selling, and also to supply a classification plan to the purchaser.

LAND DISTRICT No. 6—NORTHERN.

The total area of the No. 6 Land District is 7,100,000 acres. Within 25 miles of existing railways there are 2,236,300 acres of unalienated light and poison lands and 1,120,000 acres of alienated light and poison lands.

Your Commissioners were impressed with the areas in the western portion of this Land District. On the evidence supplied to your Commissioners that a considerable area typical of that already selected to the west of Northampton remains unalienated north and west, it might be advisable to have an inspection made to determine the extent of this area. On the west side an inspection was made of some of the farms and particularly on Mr. A. H. Drage's property where very useful work was being successfully carried out.

Mr. Drage holds a large area of light land some 12 miles west of Northampton and is paying an average price of 3s. an acre for the land. Practically the whole of it is poison country but there could be no complaint regarding the soil. Mr. Drage considered its value to be the lowest price at which it could be secured, namely 1s. per acre. In its virgin state it is valueless, and although there is plenty of stock water on the property a number of bores had to be put down and quite a lot of money expended before it was obtained. The land has been held for six years and, although the production per bushel of wheat to the acre has not increased, the fertility of the soil from the standpoint of its stock-carrying capacity has undoubtedly increased with development. While Mr. Drage estimates that the carrying capacity might be two sheep to the acre, the cost and the time taken to eradicate York Road poison, which grows profusely in this type of country, were not forgotten by your Commissioners. Mr. Drage stated that in his opinion the maximum output had been reached with wheat and oats, but with the laying down of pastures, lupins and subterranean clover it would undoubtedly develop into a good grazing proposition. Your Commissioners agree with this opinion.

After cropping natural grasses, cape weed, moolamoola, and other feeds appear. Mr. Drage has sown subterranean clover with his wheat and oats crop, and although it is doing wonderfully well at the present time it remains to be proved whether this will make a lasting pasture. At the time of inspection it appeared to your Commissioners that subterranean clover might be successfully grown.

Mr. Drage suggests the throwing open of this land at 1s. per acre or else, if possible, making it available on a freehold basis immediately upon selection, in-

stead of requiring the selector to wait for 25 years. The Act, however, already permits of the freeholding of any land after the improvement conditions have been complied with and a rebate is made to any person paying off the remaining amount owing on the property. The witness was of the opinion that the issue of a Crown grant would enable settlers to secure financial assistance from outside sources, but your Commissioners cannot agree that the issue of a Crown grant will give any more protection than a Crown lease, excepting that the amount owing on the land will have been paid, and as far as improvements are concerned two or three years' neglect would mean that the land would again be in the same state as it was when settlement first took place.

The rainfall in this particular portion of the district averages 21 inches and most of it falls during the growing period. It was estimated that it would take £2 an acre to develop the country into a sheep-raising proposition and it would be necessary to grow a certain quantity of cereals to bring the land into condition for pastures and to keep the poison back. It would be entirely impossible to utilise the ground for grazing purposes without cultivation.

Vermin is perhaps more numerous here than in most other parts. A good deal of destruction by emus has taken place, and with settlement on a more extensive scale there will be an influx of this type of vermin. The depredations of foxes are also severe.

It was stated to your Commissioners that if the price of this land were reduced to the minimum of 1s. several farmers who had no outlook for their sons at present would be prepared to make available a few hundred pounds or so for plant to assist these young men.

Another witness stated to your Commissioners that he was paying 4s. 9d. per acre for his light land, which was infested with York Road poison, and that the price charged was far too much. The land was fallowed and cropped every second year with a bushel of wheat and 75 lbs. of super to the acre. The average return was 12 to 15 bushels. The witness stated that the Crown land adjoining his property had been vacant for 26 years and he was of the opinion that it was a business proposition to make advances on this type of block to approved farmers; firstly, there should be a residential qualification, and secondly, the intending settler should be approved by a local land board. This witness added that he considered a man could successfully develop light land exclusively if he worked it on a proper system, growing oats and lupins, and on 2,000 acres he should, in time, be able to carry 1,000 sheep.

Another witness stated that he is holding 1,700 acres, the price of which is 2s. per acre. Of the area, 1,500 acres are cleared and the average crop yields have been 10 bushels. This witness expressed the opinion that fertility of the soil increases with development, but the cereal production does not increase. On this property, which is situated 14 miles west from Northampton, subterranean clover was planted on sandy loam and has done remarkably well. It was top-dressed in the second year and made a good stand. Lupins have also done better here on the lighter type of soil than on the heavier country. The witness was of the opinion that the light land would build up to 50 per cent. of the carrying capacity of the jam country.

Water is easily obtainable in the gulleys and it is the policy in this portion of the district to grow belts of timber to counteract soil erosion.

Another witness stated that he held 15,000 acres at Hutt, which is situated north of Northampton. Of this, 6,700 acres comprise light country. The average annual rainfall is about 18 inches. This settler stated that the fertility of his light land has definitely increased with the growth of pastures, while the heavier country has retrogressed and weeds and take-all have got hold of it. He stated that the three most successful men in his district are light land farmers. If he were starting again he would take up light land in preference to heavy country. Water is within easy reach, good stock supplies being secured at depths of 27 to 35 feet. Lupins grow very well on the light country but it takes about three years before any natural feed appears, and then it comprises mainly cape weed and milk thistle. Another feature of the sand plain is that seeded early after the first rain the crop will withstand a check without suffering a great deal.

The country on the east side does not offer the same inducement but still has quite good possibilities, and farmers in this area are growing lupins with a more or less degree of success. Your Commissioners believe that this portion of the Land District is best suited for a crop of wheat or oats for harvesting every four or five years, and during the intervening periods crops of lupins and/or oats or barley for green feed. The heavier country at Yuna is suffering badly owing to the low rainfall for the year, and it appeared to your Commissioners that in all probability the light land, year in and year out, would be almost equal in production to the heavier red soil so common throughout this district.

A witness in this locality stated that if our light land and sand plain are to be opened up, legislation should be passed to set aside certain areas for windbreaks. If a man were to take up 5,000 acres of either type of country he should be given that area and an additional area reserved for a windbreak. He should not be permitted to clear within a quarter of a mile of his fence, and that would provide, with a similar reservation on the other side of the fence, a windbreak of half a mile. He also should be encouraged to leave strips of scrub on his holding. The scrub is not edible enough for stock to eat it out. This witness also stated to your Commissioners that it would cost £2 per acre with the expenditure spread over 20 years to develop 5,000 acres of light land. A minimum rate should be charged, and he expected to obtain a return of 15 bushels of wheat and 21 bushels of oats. The country would not be cropped after the first crop but should be turned into pasture and then would carry a sheep to the acre of cleared land. Lupins and subterranean clover are sown and in the witness's opinion the carrying capacity would never be greater than a sheep to the acre.

A. Lauder, a farmer of Nanson, stated in evidence that he held 3,750 acres situated midway between Northampton and the Upper Chapman Railway. The holding included 2,000 acres of light land infested with poison. The average rainfall is 18 inches. In the witness's opinion the land should be priced at 1s. per acre and residential and improvement conditions fixed to ensure development. There is no difficulty in getting water in this area, as wells at depths varying

to 25 feet provide good fresh or stock water. York Road poison is particularly dense on the hilly country and is difficult to eradicate. To eradicate it costs about £2 an acre. The hills, which are of indifferent soil, are cleared for pasture, while on the flats where the poison grows the country is good. This witness stated that his neighbour had been farming an exclusively light land property for 35 years and his returns would be anything up to 12 bushels to the acre. The lowest return he has received has been about 9 bushels.

Sheep do well on this sand plain country. It costs about 30s. an acre to bring it into full production with pastures and at that stage would carry two sheep to the acre of cultivated land which your Commissioners consider is optimistic.

A witness from the Yuna district stated that lupins are far better than oats for building up the fertility of the soil and that the residual effect of the super also helps. On 100 acres of typical sandplain this witness had a dense growth of lupins from three to nine inches high. There are many thousands of acres of the same class of sandplain available to the north of this holding.

John Joseph Malden, a farmer of Yuna, stated in evidence that he held 2,000 acres of land at Yuna of which 1,200 acres are light land. The average rainfall for the last 25 years has been from 12 to 15 inches. He has 400 acres under lupins and although the land is deficient in phosphates and nitrogen he was of the opinion, and your Commissioners agree, that the lupins will remove some of this deficiency. The soil where the lupins grow so well is 12 to 16 feet deep on ironstone gravel. With the lupins, 1,600 sheep can be carried for five months and can be carried all the year round with 250 acres of stubble.

The improved fertility of the soil would represent 10 or 11 bushels to the acre and after a crop of lupins 21 bushels has been averaged. Lupins cannot be kept going for more than two or three years without ploughing and a wheat crop is necessary about every four years. After the land has been ploughed for the wheat crop the lupins re-establish themselves.

A witness from Wandanna stated to your Commissioners that he held 2,300 acres of light land to the east of Yuna. The average annual rainfall is 11 inches. An average of four bags has been obtained, but in some seasons only 2½ bags have been harvested on account of the emus. The carrying capacity of the land after first year's clearing would be very low, taking nine years before it would carry one sheep to five acres. The rainfall during the growing period for the last six years has been five or six inches. Japanese millet and Wimmera rye grass have been tried unsuccessfully. Attempts to obtain water have been unsuccessful. On account of the shortage of water, the number of stock carried is much below that of the adjoining districts.

The eastern area, known as the Balla and Dartmoor Districts, is within what is termed the sub-artesian basin and water is obtained at a considerable depth. Farmers find that it is too expensive to attempt to bore for water with the limited knowledge they possess and your Commissioners suggest that bores

be provided in this locality, placed in such a position so they could supply four farms. The cost of putting down these bores could be charged against the land and would obviate unnecessary expenditure on the part of the farmers. Your Commissioners find that men have put down bores of 100 to 150 feet and have had to abandon them because of unsuitable plant and insufficient capital.

This suggestion is put forward and recommended by your Commissioners only if it is not the intention of the Government to proceed with the provision of other water supplies for this agricultural area.

The last two or three years indicate the suitability of the seasons for substantially increased yields from this type of country. Within 60 or 70 miles of the coast your Commissioners observed satisfactory growths of subterranean clover, but these could not be regarded as an indication of the possibility of clover-growing further east, but with lupins, oats and barley a sufficient quantity of feed could be produced to run two sheep to three acres or one sheep to the acre for every acre of cultivated ground.

In the south-eastern portion of this Land District, and more particularly on the country east of Gutha, the settlers are going through a difficult period. When your Commissioners visited the district the country was absolutely barren, indicating that there had been some very lean years. Therefore, it is necessary for the farmer to have a big area of this land and it should be made available as cheaply as possible. Crops seeded in May were still not germinated, but with the good rains that have since fallen the probability is that some growth might now be made.

Your Commissioners visited the farm of Mr. L. Ludgate which is situated east of Gutha. Mr. Ludgate has an area of 3,767 acres, 360 acres of which are first class, 2,280 acres second class, and 1,020 acres stony hills that are quite useless. The witness stated that he had written several times to the Lands Department requesting to be supplied with information about the prices of the various soil areas on his property. He has not been able to get the information, but the block is priced all over at 6s. 6d. per acre. The average rainfall for the past five years has been 10.51 inches, but in 1935, 1936 and 1937 the rainfall was 15.03 inches, 9.23 and 9.82 inches respectively.

The highest yield obtained on this property has been an average of 12 bushels and cost of clearing to get the land ready for the plough is about 20s. The carrying capacity is one sheep to 20 acres and since 1935 the sheep have been underfed. Lambing averages about 70 per cent. with hand feeding for long periods. There is a good well on the property but no holding ground for dams. This block is typical of the surrounding land although some is more hilly and people on heavier land have not done any better than Mr. Ludgate. The witness also complained that the price placed on his holding was too high, and your Commissioners agree with him and recommend that this holding, together with all other holdings in the locality, be reclassified with a view to the Lands Department reducing the price of the land to as low a figure as possible. This will enable Mr. Ludgate, together with other farmers, to carry on, as at the present time with the low price being received for commodities their chance of success is very remote.

Since the year 1930 29 holdings in the areas around Gutha have been abandoned. Eleven of the properties have been reselcted, but 18 are still vacant. The fences, houses and other standing improvements have, in many cases, been removed or have depreciated to a very great extent, while the scrub has regrown and much of the previously cleared land is now in its virgin state and a breeding ground for pests. Fifteen of the settlers who left the district were married with families, and at the present time the remaining settlers cannot get schooling for their children, as there are not enough in the district to warrant a school being maintained.

The Northampton area, together with the country South between Northampton and Geraldton and South of Geraldton on the western fringes, is, in the opinion of your Commissioners, destined to be a factor in the fat lamb exporting industry. The rainfall may not every year be early enough to provide green feed for ewes lambing, but usually enough pasture is provided to enable a reserve to be built up to keep the sheep in condition all the year round, and thus offer a good opportunity for producing early lambs. This country, which grows lupins extensively, provides very good summer feed, and so ensures sheep being in excellent condition all the year round. Sufficient inducement is provided by land owners already in this locality for the establishment of export lamb works at Geraldton, and these would, no doubt, encourage the utilisation of a great area of land at present unalienated.

It was the general consensus of opinion among the farmer witnesses in this No. 6 Land District that the light and poison lands should be given away and that stringent improvement conditions should be applied, making it necessary for the selector permanently to reside on his holding for a number of years.

LAND DISTRICT No. 7—SOUTH-WEST.

There are large areas of light and poison lands scattered throughout this district, but in the main it consists of heavy forest country.

For more than thirty years the land has been successfully farmed and thousands of acres have been brought under cultivation. Your Commissioners considered that it was not necessary for them to visit this area for the purpose of taking evidence from farmers and other witnesses. It has been proved beyond all doubt that all the legumes and blade grasses can be successfully established, and while the main industry for many years past has been dairying, both for whole milk and butter fat, sheep and the breeding of fat lambs for export are beginning to play a big part in the primary production of the No. 7 Land District.

At the present time, lambs are being transported by road from Boyup Brook and the surrounding districts to the freezers at Albany, but your Commissioners are of the opinion that the time is not very far distant when the production of fat lambs in the No. 7 Land District will warrant the erection of freezing works at the port of Bunbury.

Land that was regarded as useless some years ago has been brought into cultivation by the grow-

ing of subterranean and other varieties of clover, and although large areas of this light and gravelly country are now carrying stock, there still remains an extensive area of this type of country which, in the opinion of your Commissioners, can be brought into profitable use with the establishment of pastures.

To encourage the taking up of this land, which in its virgin state is of use only for pickings, and is soon

eaten out, the price per acre should be reduced and placed on a level with the prices which your Commissioners have recommended in respect of other districts.

Your Commissioners consider that 500 acres should be the minimum area allowed to any one selector in the No. 7 Land District, and that 1,500 acres should be the maximum.

FINDINGS.

Your Commissioners find that:—

1. There is an estimated area of 12,000,000 acres of unalienated light and poison lands, and 7,000,000 acres of alienated light and poison lands within a radius of 25 miles of railways that is the subject of this report and defined on the plan attached hereto.

2. Large areas of unalienated light and poison lands are situated from Esperance to Scaddan in the north, to the Duke of Orleans Bay to the east, and to Albany to the west, and between Albany and Northampton.

3. The Midland Railway Company is the only land owner having for disposal any extensive areas of agricultural land. Since the year 1915 the Midland Company has disposed of 830,000 acres of light and poison lands, and has on hand for sale 703,000 acres of which 80 per cent. to 90 per cent. is light and poison lands. The average price obtained for the land has been about 6s. per acre.

4. The price per acre charged by the Midland Railway Company for its light and poison lands is much higher than the price charged by the Government.

5. The terms and conditions at the present time fixed and prescribed by the Crown in relation to the disposal of its lands are much easier than are the terms and conditions at the present time fixed and prescribed by the Midland Railway Company.

6. A large area of these unused lands could normally be brought into profitable production but should not be brought under cultivation at the present time as the prices being obtained for primary products would not pay for the cost of development, bearing in mind the difficulties of obtaining overseas markets.

7. A similarly large area of these lands cannot economically be farmed as separate units. They should be used by a farmer only as an adjunct to his better quality holding and should be situated within easy working distance.

8. The light and poison lands at present being worked, in most cases, are cropped with wheat and/or oats every four years and grazed during the periods between cropping.

9. The cost of bringing a light and poison land holding into full production is between £2 and £3 per acre.

10. From the evidence submitted by departmental officers there does not appear to be any uniform basis upon which prices are fixed, and the prices being charged for light and poison lands are most inconsistent.

11. The prices charged by both the State and the Midland Railway Company are so high as to deter prospective selectors from acquiring such land.

12. The production on poor types of light land, in comparison with the heavier agricultural land, makes the light land unremunerative when farmed as a separate unit, loaded as it is with land rents, road boards rates, and land tax (when the land is unimproved) and discourages the utilisation of such land.

13. The cost of light land is unduly loaded by reason of the departmental practice of averaging the cost of survey for light and heavily timbered country. This practice should be discontinued and nothing more than the actual cost of survey should be charged against light land.

14. The authority given by Parliament to the Lands Department to charge a minimum of 1s. per acre for light and poison lands is infrequently exercised.

15. The general consensus of opinion among the farmer witnesses examined by your Commissioners was that light and poison lands should be given away, but stringent improvement conditions should be prescribed.

16. A block that contains more than 50 per cent. of second and third class land should be classified as a light land holding.

17. A block that has 20 per cent. or more of its total area infested with poison plants should be deemed to be a poison block.

18. It would be in the best interests of the State if a board to be known as the "District Light Land Board" were established for the purposes of—

- (a) Assessing,
- (b) fixing of prices,
- (c) fixing the amount of survey fees to be charged,
- (d) prescribing residential and improvement conditions,
- (e) enforcing the maintenance of such improvements,
- (f) hearing any appeals by the settlers,
- (g) and all other matters incidental to the settlement of light lands.

19. Light land does not offer attractive security to financial institutions. The difficulty arises mainly because of the rapid regrowth on land cleared and not worked. The property, if neglected for a few years, reverts to nature and the security deteriorates much more quickly than in the case of a heavy land proposition.

20. A considerable area of alienated light land has been held for a lengthy period without any improvements having been effected.

21. An extensive area of light land to the West of the Midland Railway Line has been made available as Special Leases under Section 116 of the Land Act for a term of 10 years. The only condition imposed is that an external fence shall be erected within a period of two years. Your Commissioners are of opinion that the enforcement of this condition, which involves considerable expense to the lessee, within so short a period, discourages the use of land for the purpose set out in Section 116.

The value placed on these leases by the Taxation Department for taxation purposes is much too high. The annual rent fixed by the Lands Department for one location investigated was £2 10s., the road board rates were 9s. 1d., and the land tax was the amazingly high figure of £7 11s. 6d. This amount of land tax is beyond all reason and was the cause of the lessee's abandoning the block.

22. In Districts 1, 2 and 3, the minimum available for selection by one man should be 500 acres and the maximum 2,000 acres. In Districts 4, 5 and 6, the minimum should be 1,000 acres and the maximum 5,000 acres. In District 7, the minimum should be 500 acres and the maximum 1,500 acres. Though your Commissioners have recommended minimum and maximum areas for the respective districts, they believe that the proposed District Light Land Board would be in the best position to determine the most suitable areas for each district, as the personal equation must be considered whenever land is being allotted.

23. The Esperance No. 1, Albany No. 2, and South-West No. 7 Districts are eminently suited for dairying and the production of sheep, fat lambs and pigs.

24. The Great Southern Land District No. 3, subdivision "A" is ideal for export lambs.

25. The Great Southern Land District No. 3, subdivision "B," the Eastern Land District No. 4, subdivisions "A" and "B," and the Midland Land District No. 5, subdivision "B," are suitable for the growing of wheat and oats and other cereals, with sheep as a sideline.

26. The Midland Land District No. 5, subdivision "A" and the Northern Land District No. 6, are suitable for sheep, wheat and other cereals, and will, in the opinion of your Commissioners, become a factor in the fat lamb export industry.

27. The selector is charged 2s. 6d. for an uncoloured copy of the surveyor's classification of his holding, with the areas of first, second and third class land omitted. This is useless to the settler and the practice should be discontinued.

28. Your Commissioners had an opportunity to inspect the Forests Department's mallet plantations and consider that the gravelly ridges on which the plantations have been established are being put to the best use.

29. Light land fertility can be greatly improved, by growing leguminous plants, wherever the conditions are suitable, such as lupins in the northern part of the agricultural area and west of the Wongan Hills line; subterranean and other clovers from Northam south, especially on the west side of the Great Southern Railway, extending more or less east of the line from Pingelly southward, including Narrogin, Wagin, Katanning, east of the Porongorups to the coast, and the treeless plains at Esperance.

RECOMMENDATIONS.

ADMINISTRATION.

It is difficult to determine the policy of land settlement over such a wide area having such a diversity of interests, variation of soils and varying rain-falls, and your Commissioners recommend that the State should be divided into seven land districts for the purpose of controlling the settlement of light and poison lands.

Light and poison lands require to be occupied by the right type of farmer and the improvements should be carefully planned to create a healthy pasture-covered countryside, and to prevent soil erosion over treeless windswept areas to an extent that might easily become a problem. For the purpose stated, a Board should be set up to be known as the "District Light Land Board" with powers that are hereinafter defined. The Board should be appointed for a fixed period and the Chairman should be a permanent

Government official drawn from the Lands Department. One member should be a Government official having knowledge of the district, and the other member should be an active farmer residing in the particular district and having a knowledge of the light and poison lands within that district. The following suggestions are made relative to the appointment of the Board—

- (1) Term of appointment, 7 years.
- (2) Two members to form a quorum.
- (3) The Board to be under the control of the Minister for Lands and to submit a report to Parliament annually.
- (4) The salary of the Chairman to be commensurate with the onerous and responsible duties to be performed, and the two members to receive a fee for only those days on which they sit.

POWERS OF THE DISTRICT LIGHT LAND BOARD.

Your Commissioners believe that this Board, with members drawn from the respective districts, would be able to advise the Minister and his Departmental officers on matters pertaining to each district, a local knowledge that the Departmental officers could not possess. Your Commissioners therefore recommend that the following powers be given to the District Light Land Board—

- (a) Grant or refuse any application.
- (b) Determine whether any land should be alienated or retained by the Crown.
- (c) Impose improvement conditions suitable to the varying conditions of each district.
- (d) Fix prices of all light and poison blocks.
- (e) Determine the area to be granted to any one person in any district.
- (f) Police all blocks granted to ascertain whether improvement and residential conditions as prescribed are being carried out and maintained.
- (g) Plan for the selector the clearing of his selection to avoid soil erosion.
- (h) Determine whether forfeiture is to be put into effect if prescribed conditions are not being complied with.
- (i) Determine what survey fees are to be charged against a holding and how payments are to be made.
- (j) Determine whether the transfer of any holding should be allowed.
- (k) Review and decide all applications for re-valuation.
- (l) Refuse or grant any application for a lease of light and/or poison land.
- (m) Determine tenure and rental of any lease of light and/or poison land.
- (n) Determine all matters incidental to the settlement of all light and poison lands.

The District Light Land Board shall submit all its findings and recommendations to the Minister for Lands.

PRICE OF LAND.

1. The general consensus of opinion among the farmer witnesses who were examined by your Commissioners was that poison land in its virgin state was valueless until a considerable amount of money had been spent to bring it under cultivation, and should be given free to the selector. While your Commissioners do not approve of any suggestion to give away Crown lands, they believe that land should be made as cheap as possible, and every encouragement given to bring about the utilisation of these, at present, unoccupied lands. We recommend that the price be fixed according to classification with a maximum of 5s. per acre, and a minimum price—that which is now fixed by law—of 1s. per acre.

Your Commissioners desire to point out, however, that land of this type and near a railway would have to be of good quality to justify the price of 5s. per acre, and your Commissioners are of the opinion that the District Light Land Board would be better able to determine the value of the respective blocks.

2. Whilst the 1s. an acre policy would be easy enough to apply to future settlement, the position of those who are already paying high prices for light and poison lands must be considered. Your Commissioners recommend that a revaluation on the terms and conditions set out above should be made on the understanding that in cases where the reduced price would result in a refund being due, no refund could be made, but that a Crown Grant would be issued without further payment being made on compliance with the prescribed improvement conditions.

3. Further to assist the settler economically to bring a light and/or poison block into profitable production no rent should be charged for the first 10 years.

4. Your Commissioners examined the Lands Departmental file No. 5145/27 and found a glaring case of incorrect pricing. Mr. Gordon, whose block contains 817 acres, of which 777 acres are third class banksia and pear country, applied for a reduction in the price of his holding which was 6s. per acre. Banksia and pear country is the poorest type of land that your Commissioners have seen, and although typical land adjoining Mr. Gordon's property had been priced at 2s. per acre, the Acting Surveyor General, for some reason or other, refused to reduce the price of Mr. Gordon's property. In the opinion of your Commissioners this practically useless country is not worth more than 1s. per acre, and therefore it is recommended that the Acting Surveyor General again review the price of this block to ascertain whether he cannot fix a figure in keeping with the quality of the land.

5. During the visit of your Commissioners to the Northern District they examined the property of Mr. Leslie Ludgate of Gutha. Mr. Ludgate's property consists of 360 acres of first class land, 2,280 acres of second class and 1,020 acres of third class stony hills that are quite useless. This block, which is priced at 6s. 6d. per acre is, in the opinion of your Commissioners, over-valued as are the adjoining properties which are typical of Mr. Ludgate's holding. These settlers, with the low prices being received for commodities at the present time, are having a hard battle and your Commissioners recommend that to lighten their load a reclassification should be made of Mr. Ludgate's holding together with those of the surrounding settlers with a view to reducing the price of their land.

6. Your Commissioners have found that the authority given to the Lands Department by Parliament to charge a minimum of 1s. per acre for light and poison land is infrequently exercised. Examination of Departmental files disclosed that the prices charged for light and poison lands were in many instances much too high. It appeared to your Commissioners that there is no uniform basis on which prices are fixed. Your Commissioners therefore recommend that—

- (a) a block that contains 50 per cent. or less of first class land should be classed as a light land holding.
- (b) a block that has 20 per cent. or more of its total area infested with poison plants should be termed a poison block.
- (c) the first class land on a light land holding should not be taken into account when pricing, unless more than 5 per cent. of the total area of the block is first class.

7. Wherever possible the Lands Department policy designed to secure the highest cash collections from the sale of light and poison lands should be discontinued and a policy to encourage utilisation should be substituted.

SURVEYS.

1. Your Commissioners, after due consideration of the evidence placed before them by officers of the Lands Department, have come to the conclusion that the "actual cost of survey" as prescribed in the regulations to the "Land Act, 1933-1937," is not the actual cost of the survey. It appears to your Commissioners that the losses sustained on surveys in the heavier types of country are being offset by the profit made on the surveys of light lands.

The period required to bring a light land block into profitable production is one of long duration, and it is during this period that the settler requires every help to assist him in the economical development of his property. Your Commissioners recommend that—

- (a) the actual cost of survey only should be charged, not the prescribed cost as laid down in the Land Act.
- (b) interest on the actual cost of survey only should be charged for the first 10 years and then the cost of the survey, without interest, should be added to the price of the land.

2. A selector may procure a copy of the surveyor's classification of his holding for 2s. 6d., but copies of these classifications produced in evidence showed them to be uncoloured, with the areas of first, second and third class land omitted. Such a copy is of no use whatsoever to the selector who, in all cases, is desirous of ascertaining the acreages of the various classes of land he has purchased, and also to enable him to plan his clearing. The selector of light land, owing to its many disadvantages, is entitled to every assistance in this direction that the Lands Department can give him; therefore, your Commissioners recommend that a coloured copy of the surveyor's classification, showing the areas of first, second and third class land, and all other data supplied by the surveyor or inspector, be supplied free to every selector of light and/or poison lands.

Your Commissioners recommend that in the granting of poison lands the intending purchaser should be acquainted with all the knowledge that is possessed by the vendor of the said lands, describing the locality and the variety of the poison plants, and if demanded by the purchaser, the classification plan should be provided.

3. We find from evidence by Departmental officers and farmers that survey fees are paid more than once on the same block of land. This practice should be discontinued immediately.

CONDITIONS.

(Residential and Improvement).

1. Evidence taken from farmer witnesses in subdivision "A" of the No. 3 Land District proved to your Commissioners that it costs up to £2 per acre

totally to eradicate the poison in the areas west of the Great Southern, more particularly in the vicinity of Boscabel, which are heavily infested with poison.

To encourage the settlement of these lands so heavily infested, your Commissioners consider that the Crown Grant should issue without any payment being made for the land, provided the poison is eradicated and the land stocked within 10 years. Stringent improvement and fencing conditions should be prescribed and the Crown Grant should not be issued within 10 years unless those conditions have been fully complied with.

2. Your Commissioners found that light land does not offer an attractive security to financial institutions because of the rapid reversion to nature if the property is neglected for a few years, and in some cases your Commissioners found that the maintenance of improvements was not being insisted on. Provision should be made in the Land Act to compel not only the improvement of light land, but the maintenance of the improvements. If this were done, it might be regarded as more attractive by those people who advance money on this class of security.

Your Commissioners therefore recommend that the improvement conditions be rigidly enforced, and that after the improvements have been effected power should be given to compel holders to maintain them.

LEASES.

1. Your Commissioners found that the fencing conditions placed upon the Special Leases (granted under Section 116 of the Land Act) west of the Midland Railway, are too severe, and remembering that the lessee has no security of tenure, we are of the opinion that the extension of the leasing of this land is unlikely. We therefore recommend that leases be granted for a period of 21 years with a right of purchase by the lessee under Conditional Purchase conditions during the term of the lease, and that the time for fencing be extended from two years to five years.

2. The value placed on these leases by the Taxation Department is much too high and is causing the abandonment of a number of them. In one case investigated by your Commissioners, the annual rent to the Lands Department was £2 10s., the road board rates were 9s. 1d., and the land tax (this being an unimproved holding) was the amazingly high figure of £7 11s. 6d. Your Commissioners cannot reason why such a high value was fixed considering the lowness of the rent charged by the Lands Department and of the Road Board valuation. To obviate further abandonments through this cause we recommend that representations be made to the Taxation Department to place a fairer value upon the land for taxation purposes.

3. Your Commissioners recommend that the Land Act be amended to provide that after notification in the "Government Gazette" of any land available for selection—

- (a) the land be made available as at present.
- (b) or a lease be granted for a period of 21 years, during which period the lessee to have the right to convert to C.P. Conditions.

SOIL EROSION.

Soil erosion is a serious matter, particularly in the light land areas. We understand that a Departmental Committee is dealing with the matter. It has also been the subject of consideration by the Road Boards at their recent conference, and all that your Commissioners desire to do at present is to stress the importance of taking the most effective action possible to cope with this menace.

Your Commissioners recommend that in all new surveys in the light land areas not less than three-chain roads be provided; that the centre chain be declared a road and that the remaining chain on either side be reserved as a wind-break. No greater area than 200 acres should be cleared on a face, and suitable strips of scrub country should be left that will be useful as shelter for stock and serve as breaks to prevent soil erosion. Road boards should be given power to protect roads in areas considered to be liable to soil erosion.

2. Regulations should be promulgated to deal with soil erosion. All Crown grants issued for light and/or poison lands should provide that on non-compliance by the freeholder with such regulations, the land shall revert to the Crown.

GENERAL.

1. The eastern areas of Northern Land District No. 6 are within what is known as the sub-artesian basin and water is obtainable at a considerable depth. Farmers find that it is too expensive to bore for water. Your Commissioners recommend that bores be provided in these areas and placed in such a position that they can supply four farms. The cost of putting down the bores could be charged against the land and so the farmers would not incur unnecessary expense.

2. Your Commissioners find that it is costly to fence in large areas of light land, and to lessen the cost of production, recommend that efforts be made by the State, in co-operation with the Commonwealth, to secure cheaper supplies of rabbit and sheep netting and wire.

3. Your Commissioners are of the opinion that the Esperance District is eminently suited to the production of fat lambs, but is handicapped by its isolation. To encourage and promote the export lamb industry in this district your Commissioners recommend that a road be constructed linking Esperance with Albany. This road should be constructed with an eye to possible need in the future of a main road over which the lamb products of the Esperance plain could be conveyed by motor truck to the freezers at Albany.

4. During the visit of your Commissioners to the Esperance District they inspected a plot of about 20 acres of established pastures put down by the

Esperance Pine Forests Limited. Your Commissioners recommend that this area be reserved as an Experimental Plot, controlled by a reliable settler in the district under the supervision of an officer of the Department of Agriculture.

5. Your Commissioners are of the opinion that experiments should be carried out in every Land District, and recommend that pasture plots be established on individual farms under the supervision of officers of the Department of Agriculture.

6. Your Commissioners recommend that the Midland Railway Company be asked to consider a reduction in the price of its light lands to bring the price more into conformity with that charged by the Crown. No land should be sold by the Company unless it discloses to the intending purchaser all knowledge in its possession of any latent defects. A classification plan should be supplied when requested.

7. Your Commissioners recommend that a soil classification be made of the country north of Dandarragan, and north and west of Northampton.

8. Your Commissioners recommend that the Land Act, 1933-1937, be amended to embody the foregoing recommendations.

APPRECIATION.

Your Commissioners desire to place on record their appreciation of the services rendered by the Secretary, Mr. G. E. W. Lewis. His able assistance generously given, and courtesy, have at all times materially helped your Commissioners. We desire to tender our thanks to him for the work he performed, more particularly on account of the frequent sittings of the Commission during the week-ends, as well as at night, which enabled your Commissioners to present the report at this date.

We also desire to tender our thanks to the members of the Hansard Staff who have all been of great assistance by their close attention to their reporting work, particularly in the country where the bulk of it had to be carried out. We also desire to tender our thanks to Miss J. Thomas, of the Lands Department, for her services.

C. G. LATHAM,
Chairman.
P. D. FERGUSON.
E. NULSEN.
F. WITHERS.
W. PATRICK.

GEO. LEWIS,
Secretary.

Dated at Perth this 1st day of September, 1938.

MAP
SHOWING

THE LAND DISTRICTS OF THE SOUTH WEST DIVISION OF WESTERN AUSTRALIA

Scale of Miles
0 50 100 150 200

