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S T A T E M E N T I.

INFORMATION CONCERNING

WORLD'S TIMBER SUPPLIES.

by C. E. Lane-Poole

1918

Statement I

TIMBER SUPPLIES.

a. GENERAL REVIEW.

United States.

In a review of the world's lumber supplies published in the "Timber Trades Journal" of 14/8/20 it is stated that because of war conditions the United States and Canada are at least four years in arrear of their usual building programme, and Great Britain and the Continent are at least five years behind, apart from the very large demand for timber for reconstruction purposes.

Prior to the war the United States reached its peak of production. It was estimated that the production of timber of all kinds in the United States during 1920 would be 10,000,000,000 feet less than the highest production prior to the war, this shortage being due to vanishing resources, labour shortage, railway embargoes and lack of tonnage to foreign markets.

From the final report of the Reconstruction Committee of the Ministry for Reconstruction (England) it is learned in regard to the United States of America, that, according to a report made for the American Government in 1910, the annual cut removes three times as much timber as the annual growth can replace, while forest fires further hasten the depletion of the forests.

The home consumption of the United States is the largest in the world and has overtaken the production. The net exports of timber have in consequence been greatly reduced. That this reduction commenced before the war is evident from the fact that, whereas in 1910 the exports of timber from the United States amounted to 3,580,000,000 feet board measure, in 1913 it had fallen 3,000,000,000 feet.

Though the American forests still contain larger reserves of timber than those of any other country with the

possible exception of Russia, it is evident that after a limited number of years we can no longer count on supplies from that source. Their growing consumption and the measures they are taking to bring the annual cut into conformity with the annual growth will soon reduce their exports to nil.

From the report dated the 1st June, 1920, by the Forest Service, U.S.A. Department of Agriculture, in regard to timber depletion, prices, exports and concentration of ownership, it is learned that during the four years preceding the war imports of lumber and logs ranged from 1,100,000,000 to 1,300,000,000 board feet (superficial feet), or about one-third of the volume of exports during the same period. Beginning with 1917 there was a marked increase in wood imports. In 1918 imports exceeded exports by 100,000,000 superficial feet, and in 1919 the excess of imports was probably much greater.

In addition to 1,370,000 cords of pulp wood from Canada, in 1918 the United States imported 156,000 tons of paper, chiefly from the same source.

Canada's exports aggregating about 1,000,000,000 superficial feet of saw logs and manufactured lumber into the United States, and about 1,000,000,000 shingles annually, compete directly with similar products produced in the United States. There is, in fact, approximately the same flow of lumber across the boundary in each direction, determined by the favourable location of consuming regions in one country with respect to lumber producing centres in the other.

Imports of pulp wood, pulp and manufactured paper in 1918 to the United States practically all came from Canada, and these furnished about two-thirds of the newsprint paper consumed in the United States, a proportion which will steadily increase unless the foreign trade policy adopted by Canada prevents that course.

The United States also obtains cabinet woods such as mahogany and cigar-box cedar, and other valuable woods which cannot be obtained in the United States, its annual imports of cedar amounting to about 20,000,000 superficial feet, and of mahogany 50,000,000 superficial feet.

Scandinavia. The high prices ruling during the war led to anticipation fellings and increasedthe shipment for the time being; but in Norway, and it is believed, also in Sweden, the annual cut has been in excess of the annual growth.

Russia. Russia has probably the largest forest resources in the world, although the exact position in that regard is somewhat obscure. The area of land classed as forest in Russia and Siberia is enormous. By far the greater part belongs to the State. Much of the so-called forest, however is without commercial value. Of the 1,000,000 square miles of forest belonging to the State less than two-thirds of the area is true forest. The total area of true forest in Russia, Siberia and Finland is estimated at 896,000 square miles. These forests vary greatly in the amount of timber they carry and in the rate of growth. The forests of Central Russia appear to be generally of poor quality, and railway construction on a large scale would be necessary to make the timber in Siberia available for export.

<u>The permanency of the supply must depend on the introduction of systematic management.</u>

It must also be remembered that the development of the Russian Empire is certain to be accompanied by an increased home consumption which may gradually curtail and even exhaust the reserves available for export.

France,
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abroad certain classes of wood.

In the course of an article printed in the "Times Trades Supplement" Mr. A.H. Unwin, late Senior Conservator of Forests, Nigeria, states as follows:-

"All timber comes from two sources - (a) forests or trees which have grown up unaided or unplanted by man, or (b) trees or forests which have been planted, sown, or attended by the present or the previous two generations of men. Up to the present the most timber has been obtained from the former source.

"Under the original or virgin forests timber is cut from trees which have been growing for at least 500 years. In so far as such forests are not replanted, or trees do not grow again in that locality, man has used the "capital growing stand" of the forest which cannot be replaced under a minimum period of 40 or 100 years..... We are living on the world's "wood capital". As the most accessible forests have been utilised already any further supplies of timber will be obtained at greater cost than heretofore."

"Europe, including Russian supplies, was not self-supporting before the war..... and even with the most complete development of the Swedish and Russian resources it is doubtful whether it will have sufficient timber for all its requirements".

"Most of the smaller timber exporting countries of the world will, with increased development of internal trade, have little exportable surplus of timber. The Phillipine Islands constitute one of the few remaining resources of the Far East".

"On the continent of Africa there are timber stands of great magnitude and these forests will provide one of the few great reserves of timber in the future. Much, however, of the timber in Central Africa is quite inaccessible at the present time so far as the world's chief markets are concerned.

"From the Central American countries a certain amount of timber is exported, chiefly cedar, mahogany and hardwood; but as 85% of all timber used is obtained from the coniferous forests of the temperate zones, these exports do not materially affect the world's economy.

"In South America it is probable that even those countries which are at present importers of timber would be in a position to export if the whole of their forest resources were opened up. Columbia, Ecuador, Venezuela and Guinea are exporting countries as well as Brazil, which is estimated to have at least 640,000,000 acres of untouched forests containing approximately

"320,000,000,000 cubic feet of timber of various kinds. The Brazilian forests undoubtedly constitute one of the largest reserves of timber in the world and will have to be utilised; but many of these forests are situated on the banks of rivers 3,000 miles away from the ocean".

Summing up the world's timber position Mr. Unwin declares that there are two reserves in Central Africa and South America, a smaller reserve in Canada, and still smaller reserves in the Asiatic Islands, the Phillipines, Borneo and Papua.

From the Year Book of the Netherlands East Indies information has been gleaned regarding the forest resources of those fertile islands.

In Java the timbers are classed as Teak and Wild Timbers. The teak forests grow in the lower hill region of Central and East Java in a climate marked by a pronounced dry monsoon. At the end of 1918 the teak woods covered an area of 730,000 hectares, equal to about 1,805,000 acres (1 hectare equals 2.471 acres), of which 36% was organised into forest districts. As forest areas become cleared any lands not required for extending the land ~~under~~ population are at once replanted. Various methods of reforestation have been adopted, that generally practised at the present time being the combination of forestry and agriculture, the natives being allowed to plant farm crops between the rows of teak trees.

During the years 1912-1918 about 17,000 acres were replanted with teak annually.

Exports of teak wood ~~only~~ fell during the war period dwindling from 38,277 cubic metres, equal to about 1,351,745 cubic feet, in 1912 to 1,185 cubic metres, equal to 41,850 cubic feet, in 1918.

Knowledge regarding the practical value of the various kinds of wild timbers in Java is still very incomplete. The great value of these forests to Java lies

not so much in the value of the wood as in the hydrologic influence which they possess. The influence of the forests is of the greatest importance in a country like Java, since they prevent the water from flowing ~~off~~ too rapidly in the rainy season, while in the dry season the springs continue to provide water for the crops on the plains. It is probable also that the forests exert an influence on the climate.

Of the total area of Java, which is about 32½ million acres, about 10% consisted of forest reserves at the end of 1918. These reserves, however, include the bare mountain slopes, the reforestation of which is thought necessary. The unreserved forests and other lands are destined for the gradual extension of agriculture. In the "outlying positions", as they are called, of the Netherlands East Indies vast tracts of forest are still to be found. Real iron-wood occurs in almost pure stands in South East Borneo and in South Sumatra. In several places are forests consisting almost entirely of teak trees or camphor trees; other areas again contain a mixture of various kinds of trees.

Information regarding the Malay Peninsula is to be found in the Malayan Science Bulletin No. 1 of April, 1921. According to that authority the consumption of wood during 1919 in the Federated Malay States was 3,100,778 tons, of which only 211,964 tons is represented by timber other than firewood.

The total outturn of timber and fuel from the forests of the Federated Malay States for the year 1920 was 1,008,552 tons, of which timber (exclusive of poles, fuel and charcoal) accounted for 128,884 tons as compared with 1916 when the total outturn of timber and fuel amounted to 942,250 tons, timber representing 95457 tons. This timber was all used locally.

~~The World Generally~~.

The area of productive forest in the Federated Malay States is set down as 13,500 square miles or 8,640,000 acres. The forest capital of the country is being used up more than twice as fast as it is being produced.

In the Straits Settlement the total consumption of timber and firewood is estimated at 1,500,000 tons per annum. The remaining productive forests in the Colony are said to cover only 166 square miles and most of the wood used must be imported. During 1918 most of the timber imported came from Sumatra and other parts of the Netherlands East Indies, Siam, and the unfederated Malay States.

In the latter the total consumption of wood is said to be in excess of 1,000,000 ~~acres~~ tons per annum while the area of productive forest remaining amounts to 7,500 square miles.

The total consumption of wood in the Malay Peninsula is in excess of 5½ million tons per annum.

In the early days of rubber planting much of the best and most accessible forest was destroyed. It is certain that the demand for wood will increase year by year for a considerable time, which raises the question as to what may be expected in the way of future supplies. The total remaining merchantable forest in the Malay peninsula is 21166 square miles. Areas are, however, being continually alienated and the greater part of the forest is difficult of access. A wood famine is already acute in thickly populated regions and the exhaustion of the forest will proceed more rapidly with increased population and additional industrial development. The complete exhaustion of the forests within a few generations can only be avoided by the most careful management.

In his report to the Empire Forestry Conference

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held in London in 1920 Mr. G.E.S.Cubitt, Conservator of Forests, Federated Malay States and Straits Settlement, gave information confirming what has already been stated. In the course of his address to the Conference he stated - "To sum up, we can look to the Federated Malay States for no timber for use outside the Federated Malay States. The utilisation of wood of all kinds in the Malay Peninsula is, from such information as I have been able to obtain, greater per capita than in any country in the world outside the United States".

Phillipine Islands

According to the annual report of the Director of Forestry for the fiscal year ending 31-12-1920 the utilization of timber (exclusive of firewood and charcoal and dye woods) from the public forests during that year was 554,997 cubic metres, equal to 19,599,608 cubic feet, compared with 495,228 cubic metres, equal to 17,488,878 cubic feet, in 1919, and 277,171 cubic metres, equal to 9788, 238 cubic feet in 1913. During the year 1920 the total quantity of lumber and timber exported from the Phillipine Islands was 13,862,256 board feet as compared with 6,813,256 board feet during the previous year. The chief markets for these timbers during the year 1920 were the United States of America, which absorbed 7,981,376 board feet, China 3,513,264 board feet, and the United Kingdom 1,026,504 board feet. During the same year 720,376 board feet of timber were exported to Australia. There appears to be every probability that the exports to China will increase on account of the productive and actual development of that country.

While the local markets are still likely to absorb large quantities of timber the development of the lumber industry on a scale warranted by the resources of the Phillipine forests will depend very largely on the better development of the export markets which appear to have received too little

attention, local lumbermen already in the export trade having sufficient orders to fill and those engaged in the local trade being unwilling to handle the export business.

During 1920 the total lumber and timber imports to the Philippine Islands amounted to 7,838,912 board feet or more than 50% of the total exports, the United States with 5,712,976 board feet and Canada with 1,550,992 board feet being the principal suppliers. 80% to 90% of the total production of timber, in addition to imports, was absorbed within the Islands during that year.

British North Borneo

In Bulletin No. 2 (1916) by the Conservator of Forests of British North Borneo, published by the Department of Forests, Government of British North Borneo, it is stated that "the forests of British North Borneo carry heavy stands of relatively soft woods as well as hardwoods. They can compete with the other timbers on the Australian markets for the same purposes for which these timbers are used, but should bring higher prices as they excel them for interior finishing and furniture. If the requirements of the Australian market are carefully studied and if North Borneo were in a position to fill orders, it should be possible to place a considerable quantity of timber there each year.

The natural markets for Borneo hardwoods are South China, India, the Western United States and London. Softwoods should find a ready sale especially in North China and Australia.

No estimate has been found as to the total stand of timber in British North Borneo, but, in one instance following the coast line for 150 miles there are over 1,000,000 acres of forest within 20 miles of the coast on which the stand of timber will average over 1,500 cubic feet to the acre. Within this stand blocks of over 50,000 acres can be located on which the stand will be well over 2,000 cubic feet per acre. In that district alone the permanent annual possibility

~~The world generally~~

would be over 8,500,000 cubic feet of timbers which have already been well received on foreign markets. The exploitation of forests of British North Borneo has not been developed to the extent they deserve, partly because of the lack of authentic information as to their extent and value. Other factors involve transport and a greater knowledge of the timbers themselves.

In all there are estimated to be more than 2,000,000 acres of commercial forests within 20 miles of the coast. Further large tracts of virgin forest are known to occur, but of ~~which~~ these no particulars are available.

The total quantity of timber exported during the year 1912 was 1,448,639 cubic feet. In 1913 this figure rose to 1,728,049 cubic feet. During the war period shipping difficulties gradually reduced exports. 91% of the timber shipped in 1915 went to Hong Kong. Exports consisted of about 90% in the log and 10% sawn. Of the sawn timber 62% was shipped to London.

India

The total area of forests under the control of the Forests Department in India in 1919-20 was 250,949 square miles, being 23.2% of the total area of India. In addition, corporate bodies are estimated to own 8,000 square miles of forests, and private individuals 77,000 square miles, the total area of forests for India being 336,000 square miles.

India has had a Forests Department for the last 55 years and operations on a large scale have been carried out by it with a view to protecting the forests from fires and replanting deforested areas. The area of plantations ~~during~~ last year was 247,~~000~~ square miles.

b. British Empire

Within the Empire Canada has reserves of timber which rank after those of Russia and the United States as the third largest in the world, but unfortunately, forest fires destroy more timber than is felled by the lumberman's axe. ~~Any~~ Annual destruction by fires is being put down by authorities as several times the annual growth.

The forest capital of Canada is growing less year by year.

Newfoundland has considerable reserves of timber covering 10,000 square miles, but more than a third of this area has been taken over by a single company for the production chiefly of paper pulp.

Labrador, a dependency of Newfoundland, is believed to have considerable reserves of timber suitable for pulp wood and pit wood.

India, South Africa, Australia and New Zealand are already importers of soft wood.

The United Kingdom is becoming every year more dependent on Russia. The only large reserves within the Empire are those of Canada which are rapidly being depleted by fire.

According to the summary of statements prepared by the British Empire Forestry Conference, London, 1920, the total area of the British Empire is 9,160,220 square miles, of which the total area of merchantable forest is only 685,130 square miles, there being in addition 1,112,030 square miles of unprofitable or inaccessible forest.

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British North Borneo

In Bulletin No. 2 (1916) by the Conservator of Forests of British North Borneo, published by the Department of Forests, Government of British North Borneo, it is stated that "the forests of British North Borneo carry heavy stands of relatively soft woods as well as hardwoods. They can compete with the other timbers on the Australian markets for the same purposes for which these timbers are used, but should bring higher prices as they excel them for interior finishing and furniture. If the requirements of the Australian market are carefully studied and if North Borneo were in a position to fill orders, it should be possible to place a considerable quantity of timber there each year.

The natural markets for Borneo hardwoods are South China, India, the Western United States and London. Softwoods should find a ready sale especially in North China and Australia.

No estimate has been found as to the total stand of timber in British North Borneo, but, in one instance following the coast line for 150 miles there are over 1,000,000 acres of forest within 20 miles of the coast on which the stand of timber will average over 1,500 cubic feet to the acre. Within this stand blocks of over 50,000 acres can be located on which the stand will be well over 2,000 cubic feet per acre. In that district alone the permanent annual possibility

~~The world generally~~

would be over 8,500,000 cubic feet of timbers which have already been well received on foreign markets. The exploitation of forests of British North Borneo has not been developed to the extent they deserve, partly because of the lack of authentic information as to their extent and value. Other factors involve transport and a greater knowledge of the timbers themselves.

In all there are estimated to be more than 2,000,000 acres of commercial forests within 20 miles of the coast. Further large tracts of virgin forest are known to occur, but of ~~which~~ these no particulars are available.

The total quantity of timber exported during the year 1912 was 1,448,639 cubic feet. In 1913 this figure rose to 1,728,049 cubic feet. During the war period shipping difficulties gradually reduced exports. 91% of the timber shipped in 1915 went to Hong Kong. Exports consisted of about 90% in the log and 10% sawn. Of the sawn timber 62% was shipped to London.

India

The total area of forests under the control of the Forests Department in India in 1919-20 was 250,949 square miles, being 23.2% of the total area of India. In addition, corporate bodies are estimated to own 8,000 square miles of forests, and private individuals 77,000 square miles, the total area of forests for India being 336,000 square miles.

India has had a Forests Department for the last 55 years and operations on a large scale have been carried out by it with a view to protecting the forests from fires and replanting deforested areas. The area of plantations ~~during~~ last year was 247,~~000~~ square miles.

b. British Empire

Within the Empire Canada has reserves of timber which rank after those of Russia and the United States as the third largest in the world, but unfortunately, forest fires destroy more timber than is felled by the lumberman's axe. ~~Any~~ Annual destruction by fires is being put down by authorities as several times the annual growth.

The forest capital of Canada is growing less year by year.

Newfoundland has considerable reserves of timber covering 10,000 square miles, but more than a third of this area has been taken over by a single company for the production chiefly of paper pulp.

Labrador, a dependency of Newfoundland, is believed to have considerable reserves of timber suitable for pulp wood and pit wood.

India, South Africa, Australia and New Zealand are already importers of soft wood.

The United Kingdom is becoming every year more dependent on Russia. The only large reserves within the Empire are those of Canada which are rapidly being depleted by fire.

According to the summary of statements prepared by the British Empire Forestry Conference, London, 1920, the total area of the British Empire is 9,160,220 square miles, of which the total area of merchantable forest is only 685,130 square miles, there being in addition 1,112,030 square miles of unprofitable or inaccessible forest.

S T A T E M E N T II.

TIMBER POSITION IN BRITISH COLUMBIA AND THE PACIFIC COAST OF NORTH AMERICA GENERALLY.

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Statement 2.

CONSERVATION OF TIMBER SUPPLIES OF BRITISH COLUMBIA.

The following extract from an article by R.W. Hibberson in the "Journal of Forestry" (Washington, D.C.) for November, 1921, shows the timber position in British Columbia & the Pacific Coast of North America generally:- ~~and the urgent necessity for conservation of the existing supplies:-~~

"To the average man in the street, British Columbia is all timbered. He travels by train through the interior of British Columbia, or by steamer up the Coast and the country everywhere looks green; therefore it must be timber. If you told him there is every danger of a timber famine in British Columbia within 15 years, you would be ridiculed; but there is a very decided danger of a timber famine, and before many years lapse, we will all begin to feel it.

Ten years ago, the center of the logging industry was within a radius of 50 miles of Vancouver. Today it is from 150 to 200 miles from Vancouver, and in some cases operators are towing logs as far as 600 miles to their mills, and an average tow of 200 miles is quite common.

Ten years ago, the average cost of logging was $5 per thousand feet; today it is nearly $20 per thousand feet and in some of our cedar camps last year, the cost was over this figure.

Ten years ago, most of our logging was done within a mile of the salt water; today we are hauling by railroad 10 to 20, and in some cases more miles by railroad to salt water, before we commence to tow logs to the mill.

The interior of British Columbia had the same conditions, where formerly saw mills were built in the heart of the timber, today, logs are brought distances up to 70 miles by water and by rail. This means heavy expense and conditions are getting worse every day. The general public is clamoring for cheap lumber. There can be no cheap lumber in the future, if the logger and mill man are to make a fair profit on their investment. Lumber will steadily rise in price as the timber recedes farther and farther away from centers of population, and the cost of getting the logs to the mill increases year by year.

The logger, in order to get his logs as cheaply as possible is devastating our forests; cutting only the timber that can be cheaply handled, smashing down all the smaller timber inthe process of logging and leaving in the woods to rot or to be burnt, some 30 to 40 per cent. of the volume of timber on the ground. He cannot afford to attempt to log much of the timber in the high elevations or on the rough ground; broken timber is left and on most operations on rough ground, fully half of the timber never reaches the mill, it being broken up and left on the ground. There is no country in the world that would tolerate the wasteful logging methods practiced on the Pacific Coast of Canada and the United States. It is not logging, it is forest devastation.

We have been credited in British Columbia with having 350 billion feet of standing timber. Of this I have no hesitation in saying that there will not be 100 billion feet actually taken to our saw mills in the form of saw logs. This figure of course refers to our virgin timber. Our present output is approximately two billions of feet per year; this figure will be more than doubled within five years, and by 1930 British Columbia will be called upon to supply at least six billion feet per year, possibly more.

As is well known, the eastern United States is almost denuded of timber, they are already dependent on eastern Canada, the southern States and the Pacific Coast for 90 per cent. of their domestic requirements in lumber. The southern States which now cut approximately 12 billion feet per year, will, within seven years, cease to be an exporter of lumber, and the Pacific Coast will be called upon to supply the deficiency.

The United States annually uses 38 billion board feet of lumber; that is to say, all the saw timber we have in British Columbia would only last the people of the United States three years. Her wood fuel consumption is enormous. Last year it was 110 million cords. The United States railroads used annually 125 million railroad ties, and six billion feet of timber is used just for boxes, crates, and barrels. Already the people on the other side of the line are preparing for a timber famine. Reforestation is practiced in many of the eastern States. The pulp and paper companies, who formerly were self-supporting in pulp timber, now obtain two thirds of their pulp, paper, or pulp wood from Canada; and if as is quite probable, Canada prohibits the export of pulp wood across the line, most of these companies will be put out of business, and investments totalling hundreds of millions of dollars will be wiped out.

In Quebec and Ontario, the large pulp and paper companies realize the necessity of a continuous supply of timber; and although they still have thousands of square miles of timber, they are now engaged in systematic reforestation on the cut-over areas; as fast as a tract is logged, they plan to reforest it. Their logging methods are supervised by Government foresters and no waste is tolerated. The Government of the Province of Quebec is now planning to fix the maximum annual cut of timber and also a minimum cut, to stop speculation on Government lands. They have sent young forestry engineers to Europe to study the best forestry methods and are engaged in reforestation on a large scale.

I have no doubt that you think I am painting a very harrowing picture and one that can never come about, but it has come about in other parts of this continent, and will certainly come about here unless we can take measures to prevent it. The fact that we can ship lumber across this continent by rail into New York State, to keep the wood using plants there alive, proves it. New York State once was heavily forested like British Columbia. Her requirements today are 300 board feet per capita. She can only get from her forests 30 feet per capita; the balance of 90 per cent. she must import from Canada, the Pacific Coast, and the southern States.

At the last meeting of the Southern Pine Association it was estimated that 80 per cent. of their mills will close within seven years, not having any further supply of timber for their use. This means that British Columbia and the Pacific States of the United States will have to supply the wants of the United States market and the Prairie Provinces of Canada in addition to filling the wants of the export trade, with Europe, Australia,

South Africa, the Orient, and South America.

British Columbia has an area of 359,000 square miles, of which only 40,000 miles is commercially forested; 110,000 square miles of our timber lands containing 665 billions of feet has been totally destroyed and as the humus has been burned it will be centuries before it is again covered with a forest growth. The Slocan and southern boundary countries of British Columbia have been so burned over that many of the mines and mining towns have to ship their mining timber and fuel by rail, distances up to 70 miles, and this country a few years ago was heavily forested.

The virgin growth of timber in British Columbia is steadily decaying and should be cut and marketed, but the young second growth on which we depend for our future supply of lumber should be jealously preserved. At present we are recklessly cutting it for tie timber, poles and mining timber, destroying fully 30 per cent. of it during the operation.

Depletion of our forests in British Columbia within 20 years with a resultant slump in all enterprise that depends wholly or in part on forest products can only be averted if action is taken without further delay. The action we would propose is that private timberland owners adopt logging methods that will protect and preserve young growth, and leave logged off lands in condition for forest renewal, then the young trees of today will be of merchantable size when needed. This is dependent on keeping fires out of the forests, so that young trees will have an opportunity to grow."

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This article shows what may be expected from the present source of oregon timber, which at present is a large factor in preventing the sale of scantling from Western Australia in the Eastern States and is now competing in the sleeper markets of the world. For use as a sleeper it is creosoted.

Statement 3.

FOR COMMONWEALTH

Year	Annual Import of Timber	Annual Export of Timber		Excess of Imports over Exports
	Value	Volume	Value	Value
	£	lds.	£	£
1900	-		-	-
1901	1,368,196		666,952	701,244
1902	1,171,134		564,949	606,185
1903	961,971		848,255	113,716
1904	1,350,886		836,217	514,669
1905	1,072,275		1,027,603	44,672
1906	1,329,456		1,012,111	317,345
1907	1,632,493		805,133	827,360
1908	1,894,591		1,039,114	855,477
1909	1,653,820		1,028,961	624,859
1910	2,115,380		1,020,044	1,095,336
1911	2,785,564		1,069,627	1,715,937
1912	2,863,213		903,603	1,959,610
1913	2,986,476		1,011,041	1,915,435
1914-15	2,160,440		802,186	1,349,212
1915-16	1,723,889		403,461	1,320,428
1916-17	1,478,828		305,393	1,173,435
1917-18	1,404,526		244,711	1,159,815
1918-19	1,838,537		240,387	1,598,150
1919-20	2,476,711		534,018	1,942,693
ø 1920-21	5,092,139		1,403,868	3,688,271

Impossible give total volumes, as exports made partly in super. ft. and partly in made up pieces.

ø Preliminary figures only.

Statement 4.

FOR WESTERN AUSTRALIA

Year	Annual Import of Timber	Annual Export of Timber		Excess of Exports over Imports
	Value	Volume	Value	Value
	£	lds.	£	£
1900	53,274	114,508	458,461	405,187
1901	73,961	143,012	572,354	498,393
1902	73,681	125,135	500,533	426,852
1903	96,062	154,969	619,705	523,643
1904	137,422	161,446	654,949	517,527
1905	75,397	a174,190	689,943	614,546
1906	79,122	a176,614	708,993	629,871
1907	101,324	a128,091	511,923	410,599
1908	78,844	a197,390	813,591	734,747
1909	72,575	a216,609	867,419	794,844
1910	156,044	a241,482	972,698	816,654
1911	121,037	a248,990	986,341	865,304
1912	144,559	a225,942	903,396	758,837
1913	177,457	a272,397	1,089,481	912,024
1914b	66,839	a125,595	502,153	435,314
1915c	93,913	a190,370	808,392	714,479
1916c	59,698	108,642	441,991	382,293
1917c	61,010	77,813	310,893	249,883
1918c	42,272	68,725	274,141	231,869
1919c	60,095	82,715	344,119	284,024
1920c	95,430	101,306	487,666	392,236
1921c	167,471	196,325	1,162,735	995,264

a. Approximate figures only.
b. Six months ended 30th June
c. Year ended 30th June

C. SANDALWOOD - STATE OF THE INDUSTRY.

Sandalwood may be obtained from Crown lands only by persons holding a Forest Produce (Sandalwood) License. Licenses are issued without fee for periods of three months. Every license to cut and remove sandalwood is issued subject to the payment by the licensee of a royalty of £2/-/- per ton, per ton cleaned, for all sandalwood obtained thereunder, and a license must be held by every person cutting, cleaning or removing Sandalwood.

The royalty is collected by the Railway Department as the Sandalwood is being loaded into trucks.

Periodical returns of Sandalwood collected are furnished to this department by the Railway Department, who receive a commission of 5% on all royalty collected on Sandalwood obtained from Crown lands.

It sometimes happens that royalty is collected on Sandalwood obtained from private property, and in such cases a refund is made to the owner of the royalty in full, the Railway Department having agreed to waive their claim to commission on such royalty collected.

The taking of Sandalwood from a considerable area in the Murchison district is prohibited unless the sandalwood is to be used for distillation purposes within the State, and a permit, granting to the holder the exclusive right to take such Sandalwood, has been issued.

There is no restriction as to what shall be done with Sandalwood obtained from other parts of the State, and the bulk of it is exported to China, when the market is favourable.

No Sandalwood licenses have, for some time, been issued, except to those ~~to~~ who had already made the industry their means of livelihood, except with regard to certain classes of individuals whose applications for licenses may be treated as special cases deserving exceptional consideration. These

classes of persons consist of -

(1) Returned Soldiers suffering from gas effects and who require open air work.

(2) Miners suffering from lung trouble.

(3) Prospectors requiring temporary licenses to pull, clean or cart sandalwood.

No more than two quarterly licenses may be issued to any person at one time, so that in the event of any change being made in the control of the industry, not more than six months licenses will have to be considered.

Special cases are kept down to a minimum so that the number of those engaged in Sandalwood getting may be kept within reasonable bounds, and the over-cutting which occurred during the last year or two may be obviated as far as possible.

As from the 1st March, 1920, the royalty on Sandalwood was increased from 5/- per ton to £2/-/- per ton, and that rate of royalty is still payable, as stated above.

Owing to the fact that the market has been overstocked for many months, and there is practically no demand for Sandalwood, the industry at the present time is at a very low ebb.

During the year ended the 30th June, 1921, 6,953 tons of Sandalwood passed over the railways and 10,839 tons were exported.

During the current financial year, however, the position of the trade has become very unsatisfactory, and upon personal enquiry being made amongst those actually engaged in the getting of sandalwood (pullers, cleaners and carters), it was found that the majority desired Government control with a view to stabilising the industry, maintaining more uniform prices and constant employment at a fair rate of remuneration. Under the present system neither the Government nor the Sandalwood worker derives the benefit from the industry which they should obtain.

The annual demand for sandalwood in China absorbs about 6,000 tons. 80% of all Sandalwood used in China comes from Western Australia, and 90% of it is shipped through the port of Hong Kong, some being trans-shipped from Singapore. The balance of her supplies reach China from the other States of Australia, India and from the islands of Java and North Borneo and from Siam, Indo-China, etc.

The Western Australian Sandalwood is sold at prices far below those paid for supplies from the other sources mentioned.

Western Australian Sandalwood is not graded at all until it reaches China, and consequently has an unattractive appearance on arrival. It would probably not pay to grade the wood in Western Australia, although small trial parcels of first-class graded wood might pave the way to grading on a larger scale, if found successful. The general appearance of shipments, however, would be greatly improved if the percentage of small wood in each cargo were reduced to a minimum. It is considered that if no wood under 4" diameter were pulled, and of course shipped, the prices would improve, especially if the output were restricted.

Chinese firms, purchasing lots of up to 100 tons in China from the British import firms (the bulk of the import business is in the hands of about 4 British firms), see to the proper cleaning and grading of the Sandalwood, logs being divided into about 3 classes according to quality, and the balance of the produce is divided into small pieces, smaller pieces, chips and sawdust. Chips are small pieces of wood under about 2 lbs. which get broken off during handling and shipping. Each buyer is obliged to take his share of the chips, but gets them for half the price of the rest of the wood. The logs are cut into lengths of about 3 feet, scraped free of all sapwood, made perfectly smooth and then varnished. These logs are then put up in bundles of about

200 lbs. and tied up in bamboo matting ready for shipment to smaller merchants in other parts of China.

It will thus be seen that Hong Kong is the chief distributing centre, as well as the chief receiving centre for Sandalwood in China.

A considerable quantity is also sent to Shanghai, but Shanghai imports include a good deal of wood which has been re-exported from Hong Kong.

There is an average loss of wood between Australia and the place of sale of about 2%.

The Chinese merchants sell the graded Sandalwood, chips, sawdust, etc. in small quantities to retail shops. In these shops Sandalwood may be bought in the form of small pieces, chips of all sizes, joss sticks, and in various manufactured forms such as trinket boxes, fans, beads, etc. Some shops sell nothing but Sandalwood in its various forms. Others sell it as one of many lines.

Joss sticks are of various sizes and Sandalwood is only one of the many ingredients comprising the material from which they are made. These materials include bamboo core, blue or red pigment and certain medicinal herbs and barks. It would not pay to manufacture joss stocks in Australia, chiefly because labour is so much more expensive than in China.

From imports and exports returns it would appear that in normal times about ~~200,000~~ 2000 tons of Sandalwood are imported into Singapore annually, and about the same quantity is exported. In 1920 over 90% of the wood brought into this port came from Australia, and the bulk of the Sandalwood exported went to Hong Kong, the balance being sent to India and adjacent countries.

Various proposals have been put forward with a view to stabilising the industry, including the formation of a Government monopoly. Full details of the manner in which this monopoly might be conducted were worked out by Mr. Drake

Brockman, who was sent on a special mission to China and Singapore for the purpose of gleaning all details of the trade from the other end. The Government, however, has decided that the trade is of a nature too risky to engage in, and is, therefore, not prepared to take over the handling of Sandalwood as a monopoly. Other proposals for the improvement of the position in which the Sandalwood industry now stands are under consideration.

Latest Notes received from the Executive Officer, Premier's Conference, Sydney, indicating the position in the various States regarding reservation.

Reservation of Forestry Areas.

In May, 1920, the Conference endorsed the desirability of aiming at the reservation of a forest area of 24,500,000 acres in the following proportions:-

Queensland	6,000,000	acres
New South Wales	8,000,000	"
Victoria	5,500,000	"
South Australia	500,000	"
Western Australia	3,000,000	"
Tasmania	1,500,000	"

From information which has been obtained from the various States, it would appear that the position at presentis as follows:-

New South Wales.

State Forest dedication	5,254,165	
Timber reserves	1,518,597	
Total	6,772,762	acres

The revision of timbered lands is still proceeding with a view to securing 5,500,000 acres of State forests.

Victoria.

State Forests	3,405,163	acres
Timber Reserves	757,410	"
Total	4,162,574	"

Queensland.

State Forests and Timber Reserves	4,196,798	acres

South Australia.

Forest Reserves	192,157	acres
Further area suitable for forest purposes and proposed to be reserved	267,333	"
	459,490	"

Western Australia.

Forest Reserves	45,068	acres

Tasmania.

Timber Reserves	1,672,000	acres
State Forests	15,560	"
	1,687,560	"

MUNDARING DISTRICT

Fires occurring in protected areas
(120,000 acres)

1921-1922 season

First fire December 6th

Last fire April 5th

Duration of season 17 weeks

Number of fires - 89

Area burnt	Number of fires
0 - 1 acre	29
2 - 10 acres	34
11 - 20 "	6
21 - 50 "	12
51 - 100 "	4
over 100 "	4
TOTAL	89

Total area burnt 1652¾ acres

Causes of fires

Mill locomotives	25
Government locomotives	20
Travellers	15
Hunters	9
Bush workers	9
Settlers burning off	7
Causes unknown	4
Total	89

Total cost of suppressing i.e. wages of men engaged in fire fighting - £102/10/-

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STATEMENT SHOWING REVENUE AND EXPENDITURE IN VARIOUS STATES FOR YEAR ENDED 30.6.1921.

	Revenue £	Expenditure £
New South Wales	190,742	177,290
Victoria	138,582	127,308
Queensland	165,000	111,000
Tasmania	20,443	2,709
Western Australia	75,469	~~78,340~~ -X-

-X- This includes £15,448 Special Appropriation by the Treasury for Liquidation of Land Improvement Loan Fund.
a £ 10.654 Loan money for land purchase

Forest Journal

F. W. Lawson
Metropolitan Engineer
for Water Supply

The question of Forest Preservation is one which largely interests the Engineer, more particularly one engaged in connection with Water Supply and Conservation. The broad situation has been stated many years ago by Dr. Hough, who stated - "The reciprocal influences that operate between woodlands and climate appear to indicate a close relationship between them. It is observed that certain consequences follow the clearing up of forests, which can scarcely be otherwise regarded than as a direct effect, such as the diminution of flow of rivers and the drying up of rivers and streams. Other effects scarcely less certain are seen in the occurrences of destructive floods, and of unseasonable and prolonged droughts, with other vicissitudes of climate, which it is alleged did not occur when the country was covered with forests. These appear to have been brought about by their removal, and might in a degree be alleviated by the restoration of woodlands to a degree consistent with our best agricultural interests".

Experience has shown that forests afford protection against evaporation, which, in a climate such as is found in Western Australia, is most essential, for it has been observed that on the Western slopes of the Darling Ranges the evaporation is somewhere between 5 to 6 feet on exposed water surfaces. The shade of the trees and their creation and protection of a soil cover makes them natural reservoirs. The leaves, twigs and decaying tree refuse overlaying the soil is the most important factor in retarding evaporation and surface flow. Again a large portion of the rain falling is caught by the leaves of trees and held for a time before reaching the soil. In other words, a well timbered catchment area offers a considerable retarding influence to the storm flows and tends to prevent excessive floods as well as equalising the flow of any stream.

In forest land the increased quantity of water retained in the soil has another advantage, inasmuch as the quantity of water which flows over the crest of any weir is diminished in the rainy season, and the seepage water which finds its way into a reservoir during the summer months is considerably increased; it is largely due to this fact that a quantity of water equal to nearly 2-1/2 times its capacity is annually drawn from Victoria Reservoir

In an article "Forests' effects on streams", Australian Forestry Journal, March 1920, it is stated :- "In case of storms accompanied with heavy rains, the maximum outflow in the wooded valley is from 30 per cent. to 50 per cent. less than that from the other (very meagerly wooded) valley, and there is another beneficial circumstance from the action of the forest, that this maximum flow is produced later in the wooded basin than in the other". With this I agree.

The destruction of a forest removes these influences and settlement further intensifies the evil by reason of stock consolidating the soil by constant traffic. The watercourses run more quickly and generally follow sheep and cattle tracks, forming well defined channels and bringing away large amounts of soil to be deposited in the stream beds or in any artificial reservoir constructed lower down the stream. The necessity of constructing silt-catch drains or diversion channels in front of and around the main dam is a practical recognition of this fact.

Forest preservation is a very important factor in preserving the efficiency of storage reservoirs. The roots of large trees and scrub form a network which binds the soil together. Total destruction of forests on a catchment area will be followed by a loss of efficiency in the reservoir due to silting. This effect has been measured and in two streams in Switzerland the amount of silt in the water from a catchment area in its natural condition was about one-third of that from a catchment area that had been cleared. Cultivation also has a marked effect in this direction. A moment's consideration will show that the soil is cultivated or ploughed when heavy rains are anticipated and therefore the conditions are most favorable for the discharge into a stream of a very large amount of silt. The erosion problem is more serious in Western Australia, as, owing to our long summer (practically 7 months) with a very small rainfall and the light soil found in most of our agricultural areas, the surface soil becomes loose and friable, and with the intense rainfall of about 34" in the vicinity of Perth the run off is considerable, and therefore it may be stated that without forest protection our soils are in such a condition that erosion may readily take place and undoubtedly does.

In Western Australia there is also a further problem in regard to the salinity of the water. This matter has been fully investigated in connection with railway water supplies and results have been ably set out in paper No. 4193 by Robert Bleazby, A.M.Inst.C.E. and published in the Proceedings Vol.CCIII page 395. A brief synopsis might be given as follows :-

Name of Dam or Weir.	Date constructed.	Salt in water originally.	Date when too salt for boilers.	Salt g. per g.	Methods taken for purification of water.	Result salinity g.p. g.	Remarks.
Cranbrook	1888	Fit for boiler.	1902 1908	53	Diversion of salt bearing streams.	6.5	
Yornaning	1888	"	1909	60	do.	5 to 11	Trees to be allowed to grow on catchment of fresh streams.
West Yuna	1912	g.p.g. 12.3	1914	69.5	Flooding & scouring.	19.5 to 27	Experiment not complete.
Chidlows Well	1898	Fit for boiler.	1909 1915	35 47.5	Diversion of salt streams & scouring.	22.9	Arrangements made to allow catchment to revert to bush.
Burlong	1896	"	Some years later	Too salt for boiler.	Scouring & allowing timber to grow up.	10	

The result of these investigations show that wherever there has been any marked clearing of forests the salinity of the water has been increased. In this respect the attention of the Commission might be drawn to a comparison of the salinity of the water from Mundaring and Victoria Reservoirs. The average salinity of Mundaring being 22 grains per gallon (varying from 6 to 34) as against that of Victoria Reservoir of 13.4 grains per gallon.

In the former case a considerable amount of ring-barking was done, whilst in the catchment area of the latter very little clearing has ~~kkan~~ taken place, and every effort is being made to prevent any additional settlement taking place.

For the purpose of obtaining a satisfactory supply of water for the Metropolis a total area of 531,400 acres, or 830 sq. miles out of 975,920 sq. miles in Western Australia has been reserved as catchment areas, and although this may at first glance appear to be a large amount, experience has shown that every large city has outgrown the reserves set apart for water supply purposes and eventually some of the supply has had to be obtained from contaminated or doubtful sources. Instances have occurred of small villages having to be removed owing to the construction of large impounding reservoirs.

mundaring 569 sq miles

It would, in my opinion, be a wise step to as early as possible set aside any land adjacent to growing towns in Western Australia suitable for catchment areas as reserves, either for water supply or forest preservation purposes. In the end this will be the cheapest for the State, and, after all, the small amount of land so reserved will be an inducement to settlement, as the assurance of a reasonable water supply of good quality is one of the first considerations for close settlement.

Personally I would prefer to see all catchment areas allowed to remain in their natural condition, even although some revenue may apparently be lost. The more settlement or camping on catchment areas, the greater liability there is to fire, and again experience has shown that in two areas in California one was burnt out. The area of the burnt out catchment was only 1/29th of the unburnt, and immediately after the fire a heavy storm occurred and the small area 1/29th of the large area discharged more water than the larger area, showing that the water held in reserve was much less - or that the greater portion of the rainfall was discharged as a flood and not naturally regulated as in the case of a well wooded area.

I would therefore venture the opinion that before any landthat may be suitable for water conservation purposes is alienated or even leased the Water Supply Authorities should be consulted and due consideration given to any recommendation for the complete reservation, as alienation of catchment areas ultimately means costly resumptions, and thus, although it may not at the time be popular, ultimately for the future good of the State too liberal provision cannot be made in this direction. In placing this view before the Commission I do not want it to be thought that anything but aympathetic treatment has been met with, but it is hard to make prospective settlers realise that no good purpose can be served by allowing settlement on any catchment area.

A further provision should be made that in all land alienated a strip of at least 100 feet on either side of every stream or watercourse should be reserved as a water supply or forest reserve, and no timber should be removed from such reserves for any purpose whatsoever. Again as any timber leases or concessions fall in through effusion of, time, the concession should be amended so as to exclude any water reserve or catchment area.

LOADS TUART PRODUCED AT WONNERUP.

		Loads.
September,	1921	21·34
October,	"	3·66
November,	"	7·85
December,	"	39·95
January,	1922	13·74
February,	"	41·66
March,	"	29·50
April,	"	27·77
May,	"	39·48
June,	"	43·67
	Total -	268·62 loads.

Average 26-8 Loads per month

WONNERUP TUART MILL

TRADING AND PROFIT AND LOSS A/CS. FOR PERIOD ENDED

30th JUNE, 1922

TRADING ACCOUNT

Dr.				Cr.		
June 30	To Wages	£2,639. 4.1		June 30	By Sales	£3017.19.9
	" Haulage	1,029. 3.9			" Stock -	
	" Forage	288.11.3			Sawn timber £590 - -	
	" General Mill Expenses	285.18.3			Material 9 13 8	
	" Freights	265.14.5				599.13.8
	" Working Material	180. 9.1			By Timber used in construction	788. 9.0
	" Rent on Siding	35. 0.0			" Gross loss to Profit & Loss A/c.	317.18.5
			£4,724. 0.10			£4,724. 0.10

PROFIT AND LOSS ACCOUNT

Dr.				Cr.		
June 30	To Trading A/c. (Gross loss)	317.18.5		June 30	By Balance (net loss)	1,839. 1.7
	" Interest on Cap.	675.16.4				
	" Depreciation	323. 7.9				
	" Insurance	81.17.1				
	" Discounts	404.17.6				
	" Compensation Fund	35. 4.6				
			£1,839. 1.7			£1,839. 1.7

BALANCE SHEET FOR PERIOD ENDED 30th JUNE, 1922.

LIABILITIES	£ s d	ASSETS		£ s d
Capital	11,263 12 2	Buildings		
(Special fund provided under forests Act,1918)		Workers' Cottages	£ 2,038 4 10	
		Mill Buildings	2,216 10 10	
		Turnery Shop	60 11 9	£4,315 7 5
		Railway Siding		2,157 5 4
		Bridge & Railway Crossings		195 10 4
		Pipe Line (Water Supply)		577 9 10
(Reforestation Fund)	3,155 6 4			
		Plant & Machinery	4,027 0 6	
		Less Depreciation	297 17 11	3,729 2 7
		Tools & Equipment	620 1 7	
		Less Depreciation	25 9 10	
				594 11 9
		Sundry Debtors		410 16 0
		Stock on hand		
		Sawn Timber	590 0 0	
		Working material	9 15 8	
				599 15 8
		Profit & Loss A/c. (Net Loss)		1,859 1 7
	£14,418 18 6			£14,418 18 6

STATEMENTS SINCE MR. COXON WAS APPOINTED MANAGER OF MILL.

TRADING ACCOUNT.

June 30	To Wages	2,009.11. 3		June 30	By Sales		3,017.19.9
	Haulage	787. 7. 1			Timber used in construction		788. 9.
	General Mill expenses.	119. 2. 8			Stock		
	Freights	263.19. 1			Sawn timber	£590	
	Forage	288.11. 3			Material	£9.13.8	599.13.8
	Working material	102. 1.11					
	Rent(Siding)	20. 0. 0					
	Gross profit	815. 9. 2					
		£4,406. 3. 5					£ 4,406. 2.5

PROFIT AND LOSS ACCOUNT.

To	Int. on Capital	563. 3. 8	By	gross profit	815. 9.2
	Depreciation	269.10. 0		Net loss	521. 5.0
	Discounts	404.17. 6			
	Insurance	67.15.11			
	Compensation Fund	29. 7. 1			
		£ 1,388.11.11			£ 1,336.14.2

EXTRACT FROM LANDS FILE 1946/13

Reports made July, 1916.

Loc 609

"Mrs. Pitt (whose husband is at the Front) and her son supplied the following particulars, viz. have held this property since 1912; have sold about £100 worth of produce altogether including vegetables and potatoes. No sale of fruit was mentioned. The capital expenditure on the property to date is £1,000, area of orchard about 8 acres." (Price reduced from £5.16.0 to 20s. per acre).

Loc 379

"Bullen's orchard comprises about 10 acres from which no sales of produce have been made so far as we could gather. We were unable to obtain any detailed particulars respecting the expenditure or returns from this orchard, the owner being absent at the fields. Therefore it is obvious that no disparaging remarks were made concerning it" (Price reduced from £1.11.0 to 12s.).

Loc 370

"Simmons has held his property 5 years, has sold about £50 worth of cream per annum for the past 2 years; he stated that most of the other produce was used for his domestic requirements and the feeding of his stock. His cleared land comprises 25 acres, 15 acres of which is under orchard; the capital expenditure on his property to date being £1,500. No sale of fruit was mentioned" (Price reduced from £1.1.0 to 10s.)

Loc 371

"Bourke has held his property 5½ years; has sold £210 worth of potatoes and 6 cases of fruit, the remainder being destroyed by birds, very little else; his cleared land comprises about 20 acres, 12 acres being under orchard. Mr. Bourke informed us that the capital expenditure on his property to date is as follows:- £225 from Agricultural Bank, £400 of his own funds, 5 years' labour, which he considers equivalent to £750, making a total of £1397, or £75 per acre on the improved portion of his property". (Price reduced from £5.5.0 to 17s.6d).

"The orchards of Messrs. Pitt, Bullen, Simmons and Bourke comprise some of the most promising in point of growth and have done as well as may be expected, having regard to the quality of the soil in the respective cases, but it is open to question whether the results achieved justify the expenditure incurred. We are aware, and regret, that Mr. Bourke's ill health is attributable to strenuous work, and possibly to the painful disappointment he has experienced as the result of his efforts in establishing a profitless orchard.

"We found the settlers were generally dissatisfied with their prospects, many of them having permanently left the district, notably Messrs. Edwards, Lowrie, Roberts, Thorn, Salmon, Blythe and Harvey, all of whom abandoned orchards, while others were compelled to seek employment elsewhere to enable them to live, and, again, others were reluctantly contemplating the same course of action."

The prices of these blocks have been reduced as follows Edwards - £4.7.0 to 20s. Lowrie - £1.16.0 to 15s. Roberts - £5.7.0 to 15s. Thorn - £1.7.6 to 12s. Salmon - £2.5.0 to 15s. Blythe - £2.3.0 to 15s. Harvey - £5.15.0 to 38s. Love - £1.6.6 to 6s.

C O P Y

In accordance with instructions received I made an inspection of the Forest country to the East of Albany, called the Denmark Settlement. The time at my disposal being limited, I was unable to see the whole of the country in question, but with the help of the settlers and Road Board officials I inspected what they considered was an average of the whole. I went as far West as Hell's Hole, and examined in fair detail the settlement along Scott's Dale.

PAST HISTORY

Denmark was originally held by Millars' Timber Co. as a sawmilling concession. In 1904 the Government purchased it together with the 28 miles of railway at a cost of £50,000. Millars ha d by that time exploited a large percentage of the marketable timber, but, and this is of particular interest from a forestry stand point, they did not cut the timber out in the usual way adopted at Karridale and in the Jarrah forests. The procedure they adopted is, I think, unique in the annals of sawmilling in Western Australia, for they ringbarked the Karri forests on a face, and that is to say, they killed all the living trees; what they considered were merchantable they then felled and the remainder they left standing dead.

I have not as yet found out why they adopted this course which, on the face of it, would seem to have been an expensive one from their standpoint, but I have no hesitation in saying that from a forestry standpoint it was justified, for the splendid even regrowth of seedlings which sprang up formed a new forest which, in time to come, would have provided a fine even stand of marketable timber. The photographs herewith show what a remarkably good growth the Karri has made in 14 years.

Unfortunately there is very little of this first regrowth left, the reason being that the Government of the day decided to convert the forests of Denmark - forests which would have yielded in perpetuity a revenue to the State and given em-

ployment to a large number of timber workers - into an agricultural settlement.

The method employed to destroy the forests and convert them into so-called agricultural land was briefly as follows :- The seedlings growth which had sprung up after Millars had ceased operations was slashed down, while the country was sub-divided into a number of holdings. Millars' old tram tracks offered an excellent basis for the sub-division, and these were reserved as roads and the holdings surveyed so as to have a boundary on these roads. The cost of the above work amounted to, it seems, £109,806.

The condition of the forests after the slashing had been effected must have been deplorable, for it is obvious that for every seedling Karri that was slashed down 4 to 6 suckers grew up. Indeed this is well shown on the areas that have not been taken up, such as Karri Sucker Hill, which adjoins Manner's property. The photograph herewith, though a poor one, gives some idea of the resulting thicket.

That the steps taken to convert this forest country into an agricultural settlement was open to criticism is shown by the opinion expressed by Mr. A.R. Richardson, Minister for Lands, in a letter to the Premier (file 7128/96) :-

> "That there is not a very great extent of first class land in the Concession, but that a certain amount of settlement would follow the acquisition of the property by the State, but the heavy initial expense of clearing and getting the soil into a good condition of cultivation would retard selection to any large extent."

From my inspection of the area I should say that it would have been quite possible to havepicked out all the really good agricultural land and alienated it without damaging to any great extent the Karri forests.

The lots were thrown open in 1909 and 119 settlers took them up on certain conditions, and at prices ranging from £15 to to £400 a lot. The conditions were not observed, and very little

of the rent in most instances was paid. Today of the 119 settlers there are 50 in occupation, and 28 holdings are abandoned.

In 1916, owing to the deplorable condition of the settlements, a board was appointed to report. It included Mr. Lefroy and Mr. Canning, men whose knowledge of land values and farming in general is beyond dispute. The report of the board (1945/13) is of such great interest that it should be read by all interested in land settlement in the extreme South West. Here are a few excerpts :-

> "It has been forcibly impressed upon the Board that the expenditure by the State in scrubbing and grassing has proved valueless to the selector, owing to the fact that during the interval which elapsed between the date of burning off and effective occupation a more dense second growth of scrub and young timber took place."
>
> "The late Surveyor General in Corres. 2471/08 p.76, states: 'The expenditure in question has proved an absolute failure.'"
>
> "Our investigations go to show that the unsatisfactory condition of affairs is directly due to three main causes, viz., (a) heavy initial cost of clearing and want of funds; (b) lack of experience and adoption of wrong methods of procedure; (c) want of stock and the fact that the quality of soil is such that it requires heavy fertilising before satisfactory crops can be grown."
>
> "The Denmark country is certainly the most heavily timbered and expensive area in any portion of the South Western Division to bring under cultivation.
>
> "By the testimony of individual settlers, it costs from £20 to £30 per acre to thoroughly clear this heavily timbered Karri and scrub land; in one case we were assured the cost reached £40 per acre."
>
> "The Board was frequently assured that the soil, although apparently of good quality, is lacking in fertility. It is claimed that no returns can be obtained without heavy manuring, and even then the yields were produced at a loss. In some instances, selectors who had had experience in Gippsland (Victoria) and the Northern Coastal District of New South Wales, claimed that the results from Denmark were very disappointing, especially in regard to the fact that after a good burn in the places mentioned, grasses etc. can be sown and a good growth is immediately available for stock, while in the case of Denmark, although the same method was tried it was an utter failure, and it was found necessary to cultivate and manure the soil before any satisfactory results could be obtained, thus adding to the expense of development and thereby using up the financial resources of the selector before he could get a return."
>
> "In the case of W. Love who holds Location 448, the Board was requested to submit a special report setting forth the unsatisfactory position in which he is situated

due to the poverty of the soil. This settler states that he has occupied his holding 6 years, has expended thereon the sum of £736 including an Agricultural Bank advance of £100, and the whole of his 6 years' labour. The sale of produce during 6 years only amounts to £15, although he had made repeated efforts and given the soil heavy applications of manure."

"Attempts to grow other crops have proved failures, and he goes on to state: 'I have exhausted all my means in the endeavour to develop this land, have followed the advice of Professor Paterson and the Manager of the State Farm at Denmark all to no purpose. I was told by land officials in Perth that this block was a good one, whereas it is absolutely worthless as shown by analytical test No. 271/16, dated 18/3/16, made by the Government Analyst.' The Board is of the opinion that the lessee's contention is unfortunately justified by the analysis quoted which we saw.

"We also perused the lessee's Savings Bank Account Book which discloses the fact that the funds amounting to £558 had been withdrawn by Love since he began operations on his land.

"The Board found the hopeless conditions primarily due to unsatisfactory crop returns; the price of the land is hardly a contributing factor of the present state of affairs. In support of this view, it is only necessary to instance the fact that in the majority of cases only nominal sums on account of rent have been paid. At the same time we admit that there is justification for complaint against the existing values placed on the land, especially the loading for improvements, and though a reduction in price to what is in the opinion of the Board a reasonable value for the land, will not give in most cases immediate relief, it will lift a prospective burden from the most progressive settlers and perhaps enable them to obtain further financial assistance. In some cases the settlers stated that if a substantial reduction in the purchase money was not granted, they would be reluctantly compelled to leave their holdings."

The recommendations of the Board resulted in a sweeping reduction in the price of the land, in some cases from £12 to £1/8/- per acre. In other words, the greater part of this large sum of £109,806 has been written off. Now it has been demonstrated that Karri land without any expenditure of money whatever, with nor care or forestry treatment, will grow this valuable timber at the rate of 100 cubic feet per acre a year. The age of maturity of the species has not yet been ascertained, but it may be put down at a maximum of 100 years. We may therefore expect, without any expense or sylvicultural operations, 100 x 100, or 10,000 cubic feet of timber (200 loads) to the acre at maturity. Much more than this has been actually

developed, e.g. Nornalup, the question of the value of the land from a timber point of view should be thoroughly investigated.

As to the future of Denmark, the settlers I interviewed are in doubt regarding the Karri land that still remains. They realise the cost of clearing in this country when the suckers form a dense thicket and they asked me if nothing could be done to find a use for the young timber. It might have a value for paper making, and I am making enquiries in this direction, but I am not very sanguine as to this solution of the difficulty. No doubt if there is a sufficient area of this country still remaining it would pay to treat it on forestry lines. It would entail a certain amount of expenditure in thinning operations to put it in a sound condition, but this work would, I gather, be very acceptable to the settlers who, as has been shown in the Board's report, have little chance of making a living on their farms.

Such a course would entail the excising of this sort of country from the lots that are occupied and the reservation of all lots that have not been taken up on which Karri regrowth is established. Some settlers I saw stated they would be glad to be rid of those areas on their farms which were still covered with regrowth; that they had quite enough country cleared and were paying rent on what was no good to them. I am unable to say whether a sufficient number of settlers are of the same opinion. It is obvious that unless it is possible to get a number of adjoining settlers to agree to this course, it will be difficult, if not impossible, to obtain sufficiently large and at the same time compact areas for the purpose in view. In view of the great value of Karri timber, and the fact that the ground is unsuitable for farming, I think it would be desirable to sound the opinions of the settlers on this matter.

RECOMMENDATIONS

1. That the report of the Board that enquired into the Denmark Estate be published in the press. (See Lands 1946/13).

2. That an enquiry be made with a view to finding out whether it is feasible to resume andreserve sufficient Karri land in the Estate for the purpose of re-establishing a forest there.

26/3/1918. (Sgd.) C. E. Lane Poole.

I		II		III	IV	V	VI	VII	
Loads in round		Loads in square 40% recovery		Export Val. @ £7/10/- per ld. of sawn timber f.o.b.	Gross saleable wealth which settler must produce per annum to equal this off 100 acres on which he is established at a cost of £1000				
per ac.	per 100 ac.	per ac.	per 100 ac.		for 5 yrs.	for 10 yrs.	for 15 yrs.	for 20 yrs.	
				£	£	£	£	£	
2.5	250	1	100	750	186	102	71	53	
5	500	2	200	1500	319	159	103	73	
7.5	750	3	300	2250	452	216	135	91	
10	1000	4	400	3000	585	273	167	114	
12.5	1250	5	500	3750	718	330	200	135	
15	1500	6	600	4500	851	387	232	155	
17.5	1750	7	700	5250	984	444	264	175	
20	2000	8	800	6000	1118	501	296	196	
22.5	2250	9	900	6750	1251	558	329	216	
25	2500	10	1000	7500	1384	615	361	237	
27.5	2750	11	1100	8250	1517	671	393	257	
30	3000	12	1200	9000	1650	728	425	277	
32.5	3250	13	1300	9750	1783	785	458	298	
35	3500	14	1400	10500	1916	842	489	318	
37.5	3750	15	1500	11250	2049	899	522	338	
40	4000	16	1600	12000	2182	956	554	359	
42.5	4250	17	1700	12750	2315	1013	586	379	
45	4500	18	1800	13500	2448	1070	619	400	
47.5	4750	19	1900	14250	2581	1127	651	420	
50	5000	20	2000	15000	2714	1184	683	440	
75	7500	30	3000	22500	4044	1753	1005	644	
100	10000	40	4000	30000	5375	2322	1328	848	
125	12500	50	5000	37500	6705	2891	1650	1052	
150	15000	60	6000	45000	8036	3460	1972	1256	
175	17500	70	7000	52500	9366	4029	2294	1460	
200	20000	80	8000	60000	10697	4598	2616	1664	
225	22500	90	9000	67500	12027	5167	2938	1868	
250	25000	100	10000	75000	13358	5736	3261	2071	

I		II		III	IV	V	VI	VII	VIII	IX	X	XI
Loads in round		Loads in square 40% recovery		Export val. @ £10 per 1d. of sawn timber f.o.b.	Gross saleable wealth which settler must produce per annum to equal this off 100 acres on which he is established at a cost of £1000.				Present value of timber discounted @ 6%			
per ac.	per 100 ac.	per ac.	per 100 ac.		for 5 yrs.	for 10 yrs.	for 15 yrs.	for 20 yrs.	for 5 yrs.	for 10 yrs.	for 15 yrs.	for 20 yrs
				£	£	£	£	£	£	£	£	£
2.5	250	1	100	1000	230	121	82	60	747	558	417	311
5	500	2	200	2000	408	197	125	87	1494	1116	834	623
7.5	750	3	300	3000	585	273	168	114	2241	1675	1251	935
10	1000	4	400	4000	762	349	211	141	2989	2233	1669	1247
12.5	1250	5	500	5000	940	425	253	169	3736	2792	2086	1559
15	1500	6	600	6000	1117	501	296	196	4483	3350	2503	1870
17.5	1750	7	700	7000	1295	577	339	223	5231	3908	2921	2182
20	2000	8	800	8000	1472	652	382	250	5978	4467	3338	2494
22.5	2250	9	900	9000	1649	728	425	277	6725	5025	3755	2806
25	2500	10	1000	10000	1827	804	468	304	7473	5584	4173	3118
27.5	2750	11	1100	11000	2004	880	511	332	8220	6142	4590	3429
30	3000	12	1200	12000	2182	956	554	359	8967	6700	5007	3741
32.5	3250	13	1300	13000	2359	1032	597	386	9714	7259	5424	4053
35	3500	14	1400	14000	2536	1108	640	413	10462	7817	5842	4365
37.5	3750	15	1500	15000	2714	1184	683	440	11209	8376	6259	4677
40	4000	16	1600	16000	2891	1259	726	468	11956	8934	6676	4988
42.5	4250	17	1700	17000	3069	1335	769	495	12704	9492	7094	5300
45	4500	18	1800	18000	3246	1411	812	522	13451	10051	7511	5612
47.5	4750	19	1900	19000	3423	1487	855	549	14198	10609	7928	5924
50	5000	20	2000	20000	3601	1563	898	576	14946	11168	8346	6236
75	7500	30	3000	30000	5375	2322	1327	848	22419	16752	12519	9354
100	10000	40	4000	40000	7149	3080	1757	1120	29892	22336	16692	12472
125	12500	50	5000	50000	8923	3839	2187	1392	37365	27920	20865	15590

METHODS OF COMPUTATION

Column I

100 loads in column II = 40%
? " = 100%

$$100 \times \frac{100}{40} = 250 \text{ loads}$$

Column II

Column III

Column II x 10 =
e.g. 100 x 10 £1000

Columns IV to VII

To the value of the timber in column III add for column IV £300
V £600
VI £900
VII £1200

These figures represent simple interest on initial outlay in establishing a settler
i.e. £1000 at 6% for 5 years = £300
£1000 " 6% " 10 " = 600
£1000 " 6% " 15 " = 900
£1000 " 6% " 20 " = 1200

The object then is to find what annual return for the respective period equals this combined figure of timber value and compound on cost of establishing settler. This may be worked out as in example hereunder by using the third column of tables given on page 261 of Chapman's "Forest Valuation", e.g.

Export value of sawn timber	£8000
Simple interest on initial outlay for 10 years	600
	£8600

From tables -

£1 per annum obtained every year for 10 years amounts to £13.1808 at the end of that period allowing interest @ 6%.

$$\text{Therefore } \frac{8600}{13.1808} = 652.5$$

per annum each year for 10 years would amount to £8600.

Columns VIII to XI

Present values of £1 due in respective periods are given in second column of tables on page 261 of Chapman's "Forest Valuation" - same example as above.

£8000 = value of sawn timber in 10 years' time
Present value of £1 in 10 years = £.5584
Present value of £8000 " " = £4467.2

METHODS OF COMPUTATION

Column I

100 loads in column II = 40%
? " = 100%

$$100 \times \frac{100}{40} = 250 \text{ loads}$$

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Present value of £1 in 10 years = £.5584
Present value of £8000 " " = £4467.2

1343/20

C O P Y

THE HON. THE MINISTER FOR LANDS.

Will you please advise me whether you would be prepared to concur in the recommendation of the Acting Conservator of Forests on previous page.

(Sgd.) J. Scaddan,

3.2.22. MINISTER FOR FORESTS.

HON. J. SCADDAN.

I agree with the Conservator of Forests that sheoak should be reserved. The flat lands suitable for cultivation do not carry sheoak; but a little of the high land adjacent to the flats is some time needed for residence, sheds, etc. This should, I think, be granted to a settler.

(Sgd.) J.M.

9.2.22. MINISTER FOR LANDS.

1343/20

C O P Y

THE HON. MINISTER FOR FORESTS.

I understand that certain experiments are in progress having as their object an investigation of the value for agriculture of the so-called bottle-brush country near Albany.

The bottle-brush flourishes on comparatively low-lying, open flats which are divided by low hills and ridges carrying a pure stand of sheoak. This sheoak, although badly damaged by fire, is the best in the State, and the small area concerned is practically the only pure sheoak forest that we have. It is generally admitted that for agricultural purposes the sandy knolls carrying sheoak are useless, and their value for grazing is very low. Their future value for the raising of a crop of sound sheoak remains to be decided, but they promise well for the regeneration of this valuable timber. The present crop has at the present time a fairly high market value.

I have had a rough survey made by the local forester showing the approximate position andextent of the pure sheoak country, all of which is within the area marked in red on the attached litho. I do not think that any immediate reservations are necessary until the experiments in connection with the bottle-brush country are complete. If these experiments are successful the pure sheoak country should be excluded when the area is subdivided and declared State Forest when their boundaries are then fixed. If no settlement is to take place for some considerable period within the area shown red on the plan attached hereto, it should be declared Timber Reserve and the bottle-brush country released for alienation as required.

If you approve of these suggestions I would recommend that the matter be placed before the Hon. Minister for Lands with a view to securing his concurrence.

(Sgd.) S.L. Kessell,

21st January, 1922. ACTG. CONSERVATOR OF FORESTS.

SUMMARY OF JARRAH BELT

Taken from Classification Plans 1919.

Table of Areas

	Areas in acres		
Virgin Country	Under Tenure	Not Under Tenure	Totals
0 to 3 loads	348,640	1,140,360	1,489,000
4 to 7 loads	116,830	191,670	308,500
8 and over	388,920	74,080	463,000
Cut Over Country			
0 to 3 loads	388,870	467,730	856,600
4 to 7 loads	304,300	98,500	402,800
8 and over	10,000	12,350	22,350

463,000
50,000
513,000

NET RATE OF ROYALTY SUGGESTED

340 super feet to the ton

Distance of main line siding to port.	Net royalty per cubic foot in the round.	Net royalty per load in the round
miles.		
1 - 20	1.86d.	7/9
21 - 40	1.42d.	5/11
41 - 60	1.06d.	4/5
61 - 80	.76d.	3/2
81 - 100	.5d.	2/1

Bunnings' and Lewis & Reid's permits were extended for further terms at increased royalties. They objected to increased rates and it was arranged that they pay at the old rate until the royalty question had been finalised. and any rate decided upon, whether more or less than that fixed at the extension should be paid as from the date of such extension.

SAWMILLING PERMITS, (LAND ACT AMENDMENT ACT, 1904.)

Permit No.	Area Original	Area Existing	District and name of permit holder	Class of timber	Terms	Output of mill in loads per day	Royalty	Remarks
PERMITS FROM 20 - 40 MILES FROM MAIN LINE SIDING TO PORT.								
37/11	19,730	19696 3 23	Collie Lewis & Reid	Jarrah	Orig. 1/1/10 to 31/12/19 Ext. 1/1/20 to 31/12/20 1/1/21 to 31/12/21	23	6/- per load	Ext. held up pending decision of Min. re sleeper supply. Still operating conditionally on payment of a royalty of 1/7d. per cu. ft. in round, with reduction of 15% if accounts are paid within current month
71/11	20,028	20,028	Collie Trees Ltd.	Jarrah	Orig. 1/4/14 to 31/12/23 Ext. 1/1/24 to 31/12/28	10	As prescribed by Regn.	Still operating
82/11	4,750 8,000 amended 12/10/16	8,000	Collie S.S. Mills	Jarrah	Orig 1/10/15 to 30/9/25	5	do.	Still operating
93/11	4,700	4,700	Donnybrook Bunning, Rbt.	Jarrah Sheoak	From year to year from 1/10/16, but not to exceed 10 years from currency thereof. Ext. 1/10/17 to 30/9/18 1/10/18 to 30/9/19 1/10/19 to 30/9/20 1/10/20 to 30/9/21 1/10/21 to 30/6/22	14 also cutting 96/11	Sheoak 12/- square Jarrah 4/- per load.	Late S.M.P. 8/11. Amalgamated with permits Nos/ 96/11 & 147
6/11	5,300	5,300	Donnybrook Bunning, Rbt.	Jarrah Sheoak	From year to year from 1/4/17, Ext. 1/4/18 to 31/3/19 1/4/19 to 31/3/20 1/4/20 to 31/3/21 1/4/21 to 31/6/22	14 also cuts 96/11	Sheoak 12/- square Jarrah 4/- per load	Still operating. Late S.M.P. 15/11. Amalgamated mits 93/11 & 147
PERMITS FROM 40 - 60 MILES FROM MAIN LINE SIDING TO PORT.								
44/11	18,000	17730 0 19	Collie Buckingham Bros.	Jarrah	Orig. 1/7/10 to 30/6/20 Ext. 1/7/20 to 30/6/21 1/7/21 to 30/6/22	14-15 also cuts 83/11	As prescribed by Regn.	Still operating Amalgamted with 83/11
61/11	57,595	55419 1 31	Nannup Kauri Timber Co.	Jarrah	Orig. 1/1/12 to 31/12/21	40	do.	Still operating Ext. held up pending decision of Min. re sleeper supply
76/11	20,000	20,000	Pinjarra Whittaker Bros.	Jarrah	Orig. 1/7/15 to 30/6/25	35 also cuts 84/11	do.	Renewal of S.M.P. 1/11 Amalgamated with 84/11 Still operating.
80/11	25,740 20,510 amended 18/12/18 21060 amended 16/11/21	20,957 3 38	Collie State S. Mills	Jarrah	Orig. 1/10/15 to 30/9/25		do.	Not operating January 1922
83/11	25,000	20,130	Collie Buckingham Bros.	Jarrah	Orig. 1/7/16 to 30/6/26	25 Cut by 44/11	do.	Amalgamated with Permits No. ~~76/11.~~ 44/11 & 76. Still operating.

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Permit No.	Original	Existing	District and name of permit holder.	Class of timber.	Terms	Output of mill in loads per day	Royalty	Remarks.
		a. r. p.	PERMITS FROM 40 - 60 MILES FROM MAIN LINE SIDING TOPORT.					
4/11	15,430	15,430	Pinjarra Whittaker Bros.	Jarrah	Orig. 1/1/16 to 31/12/25	Cut by 76/11	As prescribed by Regltn.	Amalgamated with Permits 76/11. Still operating
9/11	37,000 37,320 amended 11/1/22	37,320	Collie Wandoo Timber Co. Ltd.	Jarrah	Orig. 1/10/16 to 30/9/22	20 p.d.	do.	Still operating.
2/11	6,700	6,568 2 11	Donnybrook Swan Saw Mills Ltd.	Jarrah	From year to year from 1/4/17, but not to exceed 10 years from the currency thereof. Ext. 1/4/18 to 31/3/19 1/4/19 to 31/3/20 1/4/20 to 31/3/21 1/4/21 to 31/3/22		do.	Late S.M.P. 14/11. Mill not yet erected. Permission to hew granted.
4/11	10,000	10,000	Collie Bunning Bros. Ltd.	Jarrah Banksia	From year to year from 1/10/16, but not to exceed 10 years from currency thereof. Ext. 1/10/17 to 30/9/18 1/10/18 to 30/9/19 1/10/19 to 30/9/20 1/10/20 to 30/9/21 1/10/21 to 30/6/22	40 p.d. also cutting 97/11 & 99/11	Jarrah 6/- p.ld. Banksia 5/- rnd.	Late S.M.P. 9/11. Amalgamated with Permits 97/11 & 99/11. Still operating.
5/11	19,800	17,600	Donnybrook Preston Valley Saw Mills.	Jarrah	From year to year from 1/1/17 , but not to exceed 10 years from currency thereof. Ext. 1/1/18 to 31/12/18 1/1/19 to 31/12/19 1/1/20 to 31/12/20 1/1/21 to 31/12/21	25 p.d.	Jarrah 6/- per load	Ext. pending decision of Min. re sleeper supply. Late S.M.P 10/11. Still operating.
7/11	10,000	9,986	Collie Bunning Bros. Ltd.	Jarrah Banksia	From year to year etc. from 1/4/17. Ext. 1/4/18 to 31/3/19 1/4/19 to 31/3/20 1/4/20 to 31/3/21 1/4/21 to 30/6/22	Cut by 94/11	Banksia 5/- round Jarrah 6/- per load	Late S.M.P. 36/11. Amalgamated with Permits 94/11 & 99/11. Still operating.
9/11	10,000	10,000	Collie Bunning Bros. Ltd.	Jarrah Banksia	From year to year etc. from 1/7/18. Ext. 1/7/19 to 30/6/20 1/7/20 to 30/6/21 1/7/21 to 30/6/22	Cut by 94/11	Banksia 5/- round Jarrah 6/- per load	Late S.M.P. 25/11. Amalgamated with Permits 94 & 97/11.
97/11	15000	15000.	Jarrahwood Australian Pencil Wood Process Ltd.	Karri	Original 1.1.19 to 31.12.29.		As prescribed by Regulation	Not operating
		a. r. p.	PERMITS FROM 60 - 80 MILES FROM MAIN LINE SIDING TO PORT.					
7/11	20,001	18934 3 4	Pinjarra State Saw Mills	Jarrah	Orig. 1/1/09 to 31/12/18 Ext. 1/1/19 to 31/12/19 1/1/20 to 31/12/20 1/1/21 to 31/12/21 1/1/22 to 31/12/22	40 p.d.	As prescribed by Regltn.	Still operating.
18/11	81,500	81,235	Pinjarra Commsr. Railways	R. Banksia Jarrah Flooded Gum Sheoak	Orig. 1/7/15 to 30/6/25	49 p.d.	R. Banksia 5/- round Sheoak 10/- in square Jarrah as prescribed by regltn.	Still operating.

Permit No.	AREA Original	AREA Existing	District and name of permit holder.	Class of Timber	Terms	Output of mill in loads per day	Royalty	Remarks.
			PERMITS FROM 80 - 100 MILES FROM MAIN LINE SIDING TO PORT.					
34/11	28,510	28,510	Pinjarra Port & Co. Ltd.	Jarrah Sheoak	Orig. 1/7/10 to 30/6/20 Ext. 1/7/21 to 30/6/31	17 p.d.	Jarrah as prescribed by regln. Sheoak 10/- in square	Subject to special agreement. Still operating.
42/11	23,000	21,499	Manjimup Wilgarrup Karri & Jarrah Coy.	Karri	Orig. 1/4/10 to 31/3/20 Ext. 1/4/20 to 31/3/21 1/4/21 to 31/~~12~~/31 3	32	As prescribed by regltn.	Subject to special agreement. See For. File 363/10 page 207. Still operating.
60/11	38,000	38,000	Collie Commr. of Rlwys.	Jarrah	Orig. 1/4/12 to 31/3/22		do.	Exempt from erecting Mill until 31/3/21.
73/11	7,000	7,000	Manjimup State Saw Mills	Karri	Orig. 1/1/15 to 31/12/24	Cut by 86/11	do.	Still operating.
79/11	38,550	38,~~5~~3~~0~~0	Pinjarra State Saw Mills	Jarrah	Orig. 1/10/15 to 30/9/25	19 p.d.	do.	Still operating.
81/11	25,878	25,878	Pinjarra State Saw Mills	Jarrah	Orig. 1/10/15 to 30/9/25	12 p.d.	do.	Still operating. Patterson granted permission to cut on this area.
85/11	79,000	76008 0 3 (a. p.)	Manjimup State Saw Mills	Karri	Orig. 1/7/16 to 30/6/26	50 p.d.	do.	Still operating.
86/11	143,000	142509 1 0	Manjimup State Saw Mills	Karri Banksia	Orig. 1/7/16 to 30/6/26	31 p.d. Also cuts 75/11.	Banksia 10/- sq. Karri as prescribed by regltn.	Still operating.

STATEMENT OF TIMBER ROYALTIES, FEES, ETC. ON HARDWOODS IN ALL STATES EXCEPTING SOUTH AUSTRALIA.

State	Royalty on Logs per load	Royalty on Logs per cu.ft.	Royalty on Hewn Sleepers per load	Royalty on Hewn Sleepers per cu.ft.	Royalty on Poles lin.ft.	Royalty on Piles lin.ft.	Inspection Fees
New South Wales (minimum)	Ironbark & Murray redgum 9s.0d Tallow-wood 7s.6d Other hardwoods 4s.6d	Ironbark & Murray redgum 2.16d Tallow-wood 1.8d Other hardwoods 1.08d	Ironbark & Murray redgum 15s.6d Tallow-wood 12s.0d Other hardwoods 6s.9d	Ironbark & Murray redgum 3.24d Tallow-wood 2.88d Other hardwoods 1.62d	Ironbark and tallow-wood 2d X Other hardwoods 1½d X	Ironbark, tallow-wood and Grey Box ¾d. to 6d. according to size Murray red gum 6d. to 1s. according to size Other hardwoods 2d. to 4d. according to size	per 100 super.ft. Pole cross arms - 8d. Sawn timber of mean sectional dimensions 12" sq. and under - 6d. Hewn sleepers - ¾d. Hewn or sawn timber of cross sectional dimensions 18" x 18" and upwards - 2½d. All other timber, including piles and poles - 4d.
Queensland (minimum)	¾s.	.72d	2s.6d	.6d	½d to 1d. acc.to size	2d. to ¾d. acc.to size	- - - - - - -
Tasmania (minimum)	4s.6d	1.08d	6s.	1.44d	1½d to ¾d acc.to size	2d. to 4d " " "	- - - - - -
Western Australia (minimum)	2s.1d	.5d	4s.2d	1.0d	1d. to 8d acc.to size	4d. to 1s.8d " " "	Sleepers .6d cu.ft. Other timber .8d cu.ft. Poles, poles and beams, 1/3rd of royalty
Victoria (minimum)	Ironbark, Grey Box, Grey Gum, Bluegum and Redgum 6s.0d 1.44d Other eucalypts 4s.6d 1.08	Ironbark, Grey box, Yellow box, red box and redgum 16s. to 14s. acc.to size 3.84d to 3.36d acc. to size Yellow stringybark and mahogany 9s.4d to 8s.8d acc.to size 2.24d to 2.08d acc. to size Messmate 8s. to 7/1d 1.92d to 1.7d	Ironbark, Grey box, Yellow box, red box and redgum 16s. to 14s. acc.to size 3.84d to 3.36d acc. to size Yellow stringybark and mahogany 9s.4d to 8s.8d acc.to size 2.24d to 2.08d acc. to size Messmate 8s. to 7/1d 1.92d to 1.7d		Ironbark, Grey Box & Redgum 5d. to 8½d acc.to size Messmate and Stringybark 4d. to 9d. acc.to size	Redgum 8d. to 1s.6d ac.to size Messmate, Stringybark and Bluegum 6d. to 9d. acc. to size	- - - - - - - -

X Up to 12" butt diameter measured in the rough. Over 12" butt diameter - at pile rates.

STATEMENT OF TIMBER ROYALTIES, FEES, ETC. ON HARDWOODS IN ALL STATES EXCEPTING SOUTH AUSTRALIA.

State	Royalty on Logs per load	Royalty on Logs per cu.ft.	Royalty on Hewn Sleepers per load	Royalty on Hewn Sleepers per cu.ft.	Royalty on Poles lin.ft.	Royalty on Piles lin.ft.	Inspection Fees
New South Wales (minimum)	Ironbark & Murray redgum 9s.0d	2.16d	Ironbark & Murray redgum 13s.6d	3.24d	Ironbark & tallow-wood 2d X	Ironbark, tallow-wood and Grey Box 3d. to 6d. according to size	per 100 super ft. Pole cross arms - 8d.
	Tallow-wood 7s.6d	1.8d	Tallow-wood 12s.0d	2.88d	Other hardwoods 1½d X	Murray red gum 6d. to 1s. according to size	Sawn timber of mean section-dimensions 12" sq. and under - 6d.
	Other hardwoods 4s.6d	1.08d	Other hardwoods 6s.9d	1.62d		Other hardwoods 2d. to 4d. according to size	Hewn sleepers - 3d.
							Hewn or sawn timber of cross sectional dimensions 18" x 18" and upwards - 2½d.
							All other timber, including piles and poles - 4d.
Queensland (minimum)	3s.	.72d	2s.6d.	.6d	½d to 1d. acc.to size	2d. to 3d. acc.to size	- - - - - - -
Tasmania (Minimum)	4s.6d	1.08d	6s.	1.44d	1½d to 3d acc.to size	2d. to 4d. " " "	- - - - - - -
Western Australia (minimum)	2.1d	.5d	4s.2d	1.0d	1d. to 8d acc.to size	4d. to 1s.8d " " "	Sleepers .6d cu.ft. Other timber .8d cu.ft. Poles, piles and beams, 1/3rd of royalty } less 15%
Victoria (minimum)	Ironbark, Grey Box, Grey Gum, Bluegum and Redgum 6s.0d	1.44d	Ironbark, Grey Box, Yellow Box, Red Box and red gum 16s. to 14s. acc.to size	3.84d to 3.36d acc.to size	Ironbark, Grey Box & Redgum 5d. to 8½d acc. to size	Redgum 8d. to 1s.6d acc. to size	- - - - - - -
	Other eucalypts 4s.6d	1.08d	Yellow stringybark and Mahogany 9s.4d to 8s.8d acc.to size	2.24d to 2.08d acc.to size	Messmate and Stringybark 4d. to 9d. acc.to size	Messmate, Stringybark and Bluegum 6d. to 9d. acc.to size	
			Messmate 8s.to 7s.1d	1.92d to 1.7d			

X Up to 12" butt diameter measured in the rough. Over 12" butt diameter - at pile rates.

STATEMENT OF TIMBER ROYALTIES, FEES, ETC. ON HARDWOODS IN ALL STATES EXCEPTING SOUTH AUSTRALIA.

State	Royalty on Logs		Royalty on Hewn Sleepers		Royalty on Poles	Royalty on Piles	Inspection Fees
	per load	per cu.ft.	per load	per cu.ft.	lin.ft.	lin.ft.	
New South Wales (minimum)	Ironbark & Murray redgum 9s.0d	2.16d	Ironbark &Murray redgum 13s.6d	3.24d	Ironbark & tallow-wood 2d X	Ironbark, tallow-wood and Grey Box 3d.to 6d.according to size	per 100 super ft. Pole cross arms - 8d. Sawn timber of mean section-dimensions 12" sq. and under - 6d. Hewn sleepers - 3d. Hewn or sawn timber of cross sectional dimensions 18" x 18" and upwards - 2½d. All other timber, including piles and poles - 4d.
	Tallow-wood 7s.6d	1.8d	Tallow-wood 12s.0d	2.88d	Other hard-woods 1½d X	Murray red gum 6d.to 1s.according to size	
	Other hardwoods 4s.6d	1.08d	Other hardwoods 6s.9d	1.62d		Other hardwoods 2d.to4d. according to size	
Queens-land (mini-mum)	3s.	.72d	2s.6d.	.6d	½d to 1d. acc.to size	2d.to 3d.acc.to size	- - - - - - -
Tasmania (Minimum)	4s.6d	1.08d	6s.	1.44d	1½d to 3d acc.to size	2d.to 4d. " " "	- - - - - - -
Western Australia (minimum)	2.1d	.5d	4s.2d	1.0d	1d. to 8d acc.to size	4d.to 1s.8d " " "	Sleepers .6d cu.ft. Other timber .8d cu.ft. Poles, piles and beams, 1/3rd of royalty
Victoria (minimum)	Ironbark, Grey Box, Grey Gum, Bluegum and Redgum 6s.0d	1.44d	Ironbark, Grey Box, Yellow Box, Red Box and red gum 16s. to 14s. acc.to size	3.84d to 3.36d acc.to size	Ironbark, Grey Box & Redgum 5d.to 8½d acc. to size	Redgum 8d.to 1s.6d acc. to size	- - - - - - -
	Other eucalypts 4s.6d	1.08d	Yellow stringybark and Mahogany 9s.4d to 8s.8d acc.to size	2.24d to 2.08d acc.to size	Messmate and Stringybark 4d. to 9d. acc.to size	Messmate, Stringybark and Bluegum 6d.to 9d.acc.to size	
			Messmate 8s.to 7s.1d	1.92d to 1.7d			

X Up to 12" butt diameter measured in the rough. Over 12" butt diameter - at pile rates.

STATEMENT OF TIMBER ROYALTIES, FEES, ETC. ON HARDWOODS IN ALL STATES EXCEPTING SOUTH AUSTRALIA.

State	Royalty on Logs		Royalty on Hewn Sleepers		Royalty on Poles	Royalty on Piles	Inspection Fees
	per load	per cu.ft.	per load	per cu.ft.	lin.ft.	lin.ft.	
New South Wales (minimum)	Ironbark & Murray redgum 9s.0d	2.16d	Ironbark & Murray redgum 13s.6d	3.24d	Ironbark & tallow-wood 2d X	Ironbark, tallow-wood and Grey Box 3d. to 6d. according to size	per 100 super ft. Pole cross arms - 8d. Sawn timber of mean section-dimensions 12" sq. and under - 6d. Hewn sleepers - 3d. Hewn or sawn timber of cross sectional dimensions 18" x 18" and upwards - 2½d. All other timber, including piles and poles - 4d.
	Tallow-wood 7s.6d	1.8d	Tallow-wood 12s.0d	2.88d	Other hardwoods 1½d X	Murray red gum 6d. to 1s. according to size	
	Other hardwoods 4s.6d	1.08d	Other hardwoods 6s.9d	1.62d		Other hardwoods 2d. to 4d. according to size	
Queensland (minimum)	3s.	.72d	2s.6d.	.6d	½d to 1d. acc. to size	2d. to 3d. acc. to size	- - - - - - -
Tasmania (Minimum)	4s.6d	1.08d	6s.	1.44d	1½d to 3d acc. to size	2d. to 4d. " " "	- - - - - - -
Western Australia (minimum)	2.1d	.5d	4s.2d	1.0d	1d. to 8d acc. to size	4d. to 1s.8d " " "	Sleepers .6d cu.ft. Other timber .8d cu.ft. Poles, piles and beams, 1/3rd of royalty } less 15%
Victoria (minimum)	Ironbark, Grey Box, Grey Gum, Bluegum and Redgum 6s.0d	1.44d	Ironbark, Grey Box, Yellow Box, Red Box and red gum 16s. to 14s. acc. to size	3.84d to 3.36d acc. to size	Ironbark, Grey Box & Redgum 5d. to 8½d acc. to size	Redgum 8d. to 1s.6d acc. to size	- - - - - - -
	Other eucalypts 4s.6d	1.08d	Yellow stringybark and Mahogany 9s.4d to 8s.8d acc. to size	2.24d to 2.08d acc. to size	Messmate and Stringybark 4d. to 9d. acc. to size	Messmate, Stringybark and Bluegum 6d. to 9d. acc. to size	
			Messmate 8s. to 7s.1d	1.92d to 1.7d			

X Up to 12" butt diameter measured in the rough. Over 12" butt diameter - at pile rates.

SAWMILLING PERMITS, (FORESTS ACT, 1918)

Abbreviations
P.M = per month
Id. = load.
p.d. = per day

Permit	Holder	Existing area	District	Class of Timber	Term	Loads Mill Capacity	Net Royalty	Remarks
28	Bunning Bros. Ltd.	1570 ac.	Mundaring	Jarrah Redgum	Orig. 8/12/18 to 7/2/19 Ext. 8/2/19 to 7/2/20	20 p.m.	1/3 ld.Jarrah 1/- " Redgum	Cancelled 7.2.20
32	G.W., C.G., & F.T. Firns.	560 ac.	Pinjarra	Jarrah	Orig.20/3/18 to 19/3/19 Ext. 20/3/19 to 19/3/20	80 p.m.	1/- ld in round. ~~rough~~	Expired 19/3/20
33	Payne Bros.	176 ac.	Donnybrook	Jarrah Sheoak	Orig.27/3/18 to 26/3/19 Ext. 27/3/19 to 4 /7/19		2/- ld.round Jarrah; 10/- ld.square Sheoak	Expired 4/7/19
38	Bunning Bros.	717 ac.	"	Jarrah	Orig.22/5/18 to 21/5/19 Ext. 22/5/19 to 21/11/19		2/- per ld. in round	Cancelled 21/11/19
39	Plavin, Chas.	780 ac.	Collie	Jarrah Sheoak	Orig.24/5/18 to 23/5/19 Ext. 24/5/19 to 23/5/20 " 24/5/20 to 23/5/21	5 sawn p.d.	2/- ld.in round Jarrah. 10/- ld.in squre Sheoak	Cancelled 24/5/21
40	Millars T. & T. Co.Ltd.	6400 ac.	Donnybrook	Jarrah	Orig.15/5/18 to 14/5/19 Ext. 15/5/19 to 14/9/19	2000 p.m.	2/- ld. in round	Expired 15/9/19
44	Wilson, Ernest	707sq.mls.	Mundaring	Redgum	Orig.16/7/18 to 15/7/19 Ext. 16/7/19 to 15/7/20		No royalty to be charged	Special permit for experimental purposes. Cancelled 27/11/19.
46	Keith, A.E.	720 ac.	Albany	Jarrah	Orig.27/8/18 to 26/8/19		2/- ld. in round	Cancelled 30/4/19
47	Bunning Bros.	1740 ac.	Donnybrook	Jarrah	Orig.31/7/18 to 30/7/19		2/- ld.in round	Cancelled 30/7/19
49	Harper, A.J.	1282 ac.	Albany	Jarrah Sheoak	Orig.16/9/18 to 15/9/19 Ext. 16/9/19 to 15/9/20 " 16/9/20 to 15/9/21 " 16/9/21 to 15/9/22	Abt.1 ld. p.d.	2/- ld. in round Jarrah 5/- ld in square Sheoak. 10/- ld in square Sheoak. Amended as from 16/9/20. Waste Sheoak 4d. cord from 10/2/21	Still operating
50	Connell, W.R.	240 ac.	Bridgetown	Jarrah	Orig.16/9/18 to 15/9/19 Ext. 16/9/19 to 15/9/20	10 p.d.	2/- ld in round	Cancelled 21/6/20. "Cut out"
54	Plavin, Chas.	7600 ac.	Pinjarra	Jarrah	Orig.15/10/18 to 14/10/28	15 p.d.	3/1 ld in round	Still operating. Amalgamated with permit 101
57	Adelaide Timber Co. Ltd.	15765 ac.	Donnybrook	Jarrah	Orig.28/11/18 to 30/9/22	7½ sawn p.d.	1/2 ld in round. 2/6 ld sleepers in Square	Identical with late S.M.Permit 90/11. Still operating
59	F.A. and A.W. Payne	1440 ac.	"	Sheoak	Orig.28/2/19 to 27/2/20		10/- ld in square	Cancelled for non-compliance with clause 7 of agreement 23/7/19
65	Bunney, A.R.	900 ac.	Mundaring	Jarrah	Orig.14/4/19 to 13/4/20 Ext. 14/4/20 to 13/4/21 " 14/4/21 to 13/4/22		3/3 ld sleepers in sq. 2/3 in round	Still operating
75	Griffith, F.J.	3900 ac.	Donnybrook	Jarrah	Orig.15/5/19 to 14/5/22		2/- ld in round	Cancelled 2/3/21. Non compliance with conditions

Permit	Holder	Existing area	District	Class of Timber	Term	Mill Capacity	Net Royalty	Remarks
79	Mitchell & Ryan	1720 ac.	Bridgetown	Jarrah	Orig.27/6/19 to 26/6/20 Ext. 26/6/20 to 25/6/20 " 26/6/20 to 25/6/21 " 26/6/21 to 25/6/22	6 p.d.	2/6 ld in round	Still operating
82	Phillips, W.H. Barrymore, H.S.	1200 ac.	"	Jarrah			3/- ld in round	Cancelled.Conditions not accepted by applicant
90	D.J.Markey & Sons	1100 ac.	"	Jarrah	Orig.19/8/19 to 18/8/20 Ext. 19/8/20 to 18/2/21 " 19/2/21 to 18/5/21 " 19/5/21 to 18/11/21 " 19/11/21 to 18/5/22	10 p.d.	2/- ld in round	Still operating
91	Swan Saw Mills, Ltd.	15800 ac.	Jarrahwood	Jarrah	Orig.22/8/19 to 21/8/29	30 p.d.	3/2 ld in round	Still operating
94	Bennett, Stokes and McSwain	1583 ac.	Albany	Jarrah Sheoak	Orig.31/8/19 to 31/8/20	1 p.d.	2/- ld in round Jarrah 5/- ld in square Sheoak	Cancelled 2/7/20
95	Ryan, J.P.	480 ac.	Bridgetown	Jarrah	Orig. 2/9/19 to 1/9/20		2/- ld in round	Cancelled 27/4/21
97	Smith, A.	3150 ac.	Collie	Jarrah	Orig. 2/9/19 to 1/9/22	Cut by Trees Ltd.permit 71/11	2/3 ld in round	Still operating
98	Farley,D.V.C.	550 ac.	Donnybrook	Jarrah	Orig.30/9/19 to 29/9/22	¾ p.d.	2/- ld in round	Still operating
99	Bunning Bros.	580 ac.	Collie	Jarrah	Orig.30/9/19 to 29/9/20		3/- ld in round	~~Still operating~~ Cancelled 24/3/20
100	Keith, A.E.	1600 ac.	Albany	Jarrah	Orig.20/9/19 to 19/9/20	1 p.d.	1/2 ld in round	Cancelled 13/8/20
101	Flavin, Chas.	3100 ac.	Pinjarra	Jarrah	Orig.20/11/19 to 19/11/24	Mill 15 p.d. Cuts also Permit 54	3/1 ld in round	Still operating.Amalgamated with Permit 54
106	Buckingham Bros.	5200 ac.	Collie	Jarrah	Orig.25/11/19 to 24/11/24	Mill 14 - 15 p.d.	2/- ld in round	Amalgamated with S.M. Permits 44/11 and 83/11.Still operating
107	Collie Land & Timber Co.Ltd.	8344 ac.	"	Jarrah	Orig.29/11/19 to 28/11/24	10 - 12 p.d.	5/- ld.in square. 2/- ld.in round	Still operating
108	Millars' T. & T. Co. Ltd.	12637 ac.	Donnybrook	Banksia	Orig.18/12/19 to 17/12/20		5/- ld.in round	Cancelled 27/8/20
110	McSweeney, Joseph	480 ac.	"	Jarrah	Orig. 8/1/20 to 7/1/21 Ext. 8/1/21 to 7/1/22	5 p.d.	2/- ld.in round	Expired 19/3/21
111	Bunning Bros.	1450 ac.	Metropolitan	Jarrah	Orig.21/1/20 to 20/1/21		3/- ld.in round	Expired 20/1/21
112	Millars' T.& T. Co. Ltd.	317 ac.	Pinjarra	Jarrah	Orig.21/1/20 to 20/1/21		3/- ld.in round	Lapsed 16/2/21
114	Holmes, T.H.	2800 ac.	"	Jarrah Sheoak	Orig.25/2/20 to 24/2/22 Ext. 25/2/22 to 24/2/23	12 p.d.	3/- ld.in round Jarrah 10/- ld. in square Sheoak	Still operating
118	Mann, A.S.	7724 ac.	Metropolitan	Jarrah Wandoo	Orig.29/3/20 to 28/3/21 Ext. 29/3/21 to 28/3/22	2 p.d.	2/- ld.in round Jarrah & Wandoo	Under exemption

Permit	Holder	Existing Area	District	Class of Timber	Term	Mill Capacity	Net Royalty	Remarks
120	Smith, J.F.	4850 ac.	Jarrahwood	Jarrah Sheoak	Orig.24/3/20 to 23/3/21 Ext. 24/3/21 to 23/3/22	10-14 p.d.	Jarrah 3/- ld in round. Sheoak 5/- ld. in round, 10/- ld. in square	Under exemption (1 truck of Sheoak only)
122	Millars' T. & T. Co. Ltd.	900 ac.	Collie	Bullich	Orig.12/4/20 to 11/4/21		3/- ld. in round	Cancelled 12/4/21
123	Lewis & Reid, Ltd.	880 ac.	Donnybrook	Jarrah	Orig.30/4/20 to 29/4/21 Ext. 30/4/21 to 29/4/22	12 p.d.	3/6½ ld. in round	Still operating
126	Hampel, J.F.W.	1225 ac.	Bridgetown	Banksia Mill Logs	Orig.31/5/20 to 30/5/21 Ext.31/5/21 to 30/5/22		6/- ld. in round	" "
133	The Federal Trading & Engineering Co.	4300 ac.	Pinjarra	Jarrah			4/6 ld. in round	Cancelled. Agreement not completed.13/12/20
139	Bentley, J.L.	500 ac.	Donnybrook	Jarrah Mill Logs	Orig.28/5/20 to	No Mill	2/- ld. in round	Permission granted to cut 10 loads Jarrah in round. Cancelled 16/12/21
140	Gardiner, Maitland.	3855 ac.	"	Banksia Mill Logs	Orig. 1/7/20 to 30/6/21	No Mill	12/- ld. in round	Cancelled 16/12/21
141	Groth, H.A.	1000 ac.	Albany	Sheoak	Orig.28/6/20 to 27/6/21 Ext. 28/6/21 to 27/6/22	1 p.d.	10/6 ld. in square	Still operating
144	Timber Corporation, Ltd.	1000 ac.	Bridgetown	Jarrah	Orig.15/9/20 to 14/9/21 Ext. 15/9/21 to 14/9/22	20 p.d.	3/3 ld. in round	Not at present operating. Under exemption
145	Nicholson, John.	10000 ac.	Jarrahwood	Jarrah	Orig. 1/9/21 to 31/8/24	Mill not erected. 10/12 p.d. Mill to be erected	5/3 ld. in round	Not yet operating
147	Bunning Bros. Ltd.	600 ac.	Donnybrook	Jarrah Logs Sheoak	Orig.27/8/20 to 26/8/21 Ext.*27/8/21 to 30/6/22 Conditionally	Cut by Mill at Argyle.	3/- ld. in round Jarrah. 12/- ld. in sq. Sheoak *(Granted conditionally on payment of 4/- ld. in round)	Not yet operating. Amalgamated with permits 96/11 and 93/11
149	Australia Overseas Co.	120 ac.	Pinjarra	Jarrah Mill Logs	Orig.30/8/20 to 29/8/21	5 sawn p.d.	5/- ld. in round	Cancelled 13/1/21
155	Jenkins, W.M.	1104 ac.	Bridgetown	Jarrah	Orig.1/12/20 to 30/11/21 Ext. 1/12/21 to 30/11/22	Mill to be erected. 5-8 p.d.	4/9 ld. in round	Not yet operating
156	Grist and Nicholas	1300 ac.	Donnybrook	Jarrah	Orig.1/1/21 to 31/12/21 Ext. 1/1/22 to 31/12/22	8 p.d.	5/1 ld. in round	Still operating
157	Plavin, Chas.	35500 ac.	Collie	Jarrah	Orig.1/11/20 to 31/10/25	5-10 p.d.	6/2 ld. in round	" "
159	Howe, E.L.	12 ac.	Metropolitan	Morrell			2/- ld. in round	Canc'd 26/10/21
161	Amalgamated Collieries of W.A., Ltd.	500 ac.	Collie	Jarrah	Orig.1/1/21 to 31/12/21	3 p.d.	7/- ld. in round	Still operating
164	Millars' T. & T. Co.Ltd.	2580 ac.	Jarrahwood	Jarrah	Orig.1/1/21 to 31/12/21 Ext. 1/1/22 to 31/12/22	30 p.d. Jarrahwood mill	4/- ld. in round	" "
167	Whistler Bros.	1500 ac.	Bridgetown	Jarrah, Wandoo, Marri, Banksia, Blue Gum, Marlock, Leschenault	Orig.1/1/21 to 31/12/21	5 p.d.	5/- ld. in round on all timbers	" "
180	Bunning Bros. Ltd.		Donnybrook	Jarrah Mill Logs	Orig.1/1/21 to 30/6/21 Ext. 1/7/21 to 31/12/21		Lump sum £15	" "

Permit	Holder	Existing area	District	Class of Timber	Term	Mill Capacity	Net Royalty	Remarks
183	Lawson, S.E.	2270 ac.	Collie	Sheoak, ~~Banksia~~ Prickly, ~~Prickly~~, Native Pear	Orig. 1/1/21 to 31/12/21 Ext. 1/1/22 to 31/12/22	2 p.d. Cuts also 207	£1/-/10 ld. in square	Still operating.
184	Mann, G.L.	5800 ac.	"	Native Pear, Sheoak, Scrub Banksia	Orig. 1/3/21 to 28/2/22		10/8 ld. in square	Cancelled 3/3/21 Could not conform to provisions of agreement
186	Connell, W.R.	420 ac.	Bridgetown	Jarrah	Orig. 1/3/21 to 28/2/22	5 p.d.	6/3 per load	Timber to be sold for local settlers' use only at £1 above cutting costs. Canc'd 7/11/21
187	Ryan, J.F.	3400 ac.	Bridgetown	Jarrah	Orig. 1/3/21 to 28/2/22	3-6 p.d.	4/2 ld. in round	Not operating. Under exemption
188	Thompson, G.F.	722.2.0 a. r.p.	Donnybrook	Jarrah	Orig. 1/3/21 to 28/2/22 Ext. 1/3/22 to 28/9/23	1/3 p.d.	2/6 ld. in round	Still operating
197	Groth, H.A.	1000 ac.	Albany	Sheoak	Orig. 1/3/21 to 28/2/22	1 p.d.	13/6½ ld. in sq.	" "
198	~~Steele~~ Mile, H.	2050 ac.	"	Sheoak	Orig. 1/3/21 to 28/2/22 Ext. 1/3/22 to 28/2/23	1 p.d.	12/6 ld. in sq.	Under exemption
204	Lewis & Reid, Ltd.	8000 ac.	Donnybrook	Jarrah	Orig. 1/5/21 to 30/4/22	12 p.d.	5/- ld. in round	Not operating. Under exemption
207	Lawson, S.E.	236 ac.	Collie	Jarrah	Orig. 1/5/21 to 31/12/21	2 p.d. Cuts also 183	4/6 ld. in round	Still operating
208	Palmer, R.	122 ac.	"	Jarrah	Orig. 1/5/21 to 30/4/22	2 p.d.	3/- ld. in round	" " " "
210	Talbot, A.J.	5000 ac.	"	Jarrah	Orig. 1/6/21 to 31/5/22	10 p.d. Mill to be erected	6/- ld. in round	Not yet operating
216	Timber Corporation, Ltd.	34,800 ac.	Bridgetown	Jarrah	Orig. 1/4/21 to 31/3/31	25 p.d.	As prescribed by Forest Regulations	" " " " " " " "
217	Kauri Timber Co., Ltd.	3500 ac.	Jarrahwood	Jarrah	Orig. 1/7/21 to 30/6/22	50 p.d.	8/4 ld. in round	Cut out. Cancellation being dealt with
218	Waters, Anthony.	190 ac.	Kundaring	Jarrah & Marri	Orig. 1/7/21 to 30/6/22	½ p.d.	5/- ld. in round	Still operating
220	Cummins and Barham.	2415 ac.	Collie	Sheoak and Prickly Banksia	Orig. 1/6/21 to 31/12/21		£2/16/- ld. in square	Cancelled 7/11/21
222	Adams and Best	550 ac.	Donnybrook	Jarrah	Orig. 1/9/21 to ~~30~~ 31/8/22	1 p.d.	6/- ld. in round	Under exemption
225	Bunning Bros., Ltd.		"	Jarrah	Orig. 1/9/21 to 31/8/22		6/- ld. in round	Cancelled 6/1/22 Conditions not accepted
226	Douglas Bros.	200 ac.	Albany	Jarrah	Orig. 1/9/21 to 31/8/22	1 p.d. Cuts also 241	5/- ld. in round	Still operating
228	Barrymore, W.S.	1200 ac.	Bridgetown	Jarrah	Orig. 1/10/21 to 30/9/22		7/- per load	Cancelled 16/11/21. Conditions not accepted
229	Hurst and Reilly.	1344 ac.	Donnybrook	Jarrah	Orig. 1/10/21 to 30/9/22	1 [illegible] p.d.	6/- ld. in round	Not yet operating
241	Douglas Bros.	3000 ac.	Albany	Sheoak	Orig. 1/12/21 to 30/11/22	1 [illegible] p.d. Cuts also 225	10/- ld. in square	Still operating
242	Carter, V.E.		Donnybrook	River Banksia	Orig. 1/12/21 to 30/11/22		£1 per load in the round	" "

Permit	Holder	Existing area	District	Class of Timber	Term	Mill Capacity	Net Royalty	Remarks
243	Miller, E.E.	50 ac.	Donnybrook	Jarrah	Orig.1/12/21 to 30/[illegible]/22	1 p.d.	6/- ld. in round	For fruit cases Not yet operating
245	Savage, James		Jarrahwood	River Banksia	Orig.1/12/21 to 31/5/[illegible]		8/- ld. in round	20 loads only for W.A.G.R. Not yet operating
263	Swan Saw Mills, Ltd.	1250 ac.	"	Jarrah	Orig.1/2/22 to 31/1/23	Cut by Permit 91 Claymore	5/- ld. in round	Not yet operating.