

Clerk in Charge.

1932.

WESTERN AUSTRALIA.

REPORT

ON THE OPERATIONS OF

The Forests Department

FOR THE

YEAR ENDED 30th JUNE, 1932.

Presented to both Houses of Parliament by His Excellency's Command.

[SECOND SESSION OF THE FOURTEENTH PARLIAMENT.]

PERTH:

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1932.

Forests Department,
Perth, 22nd September, 1932.

The Honourable Minister for Forests.

Sir,

I have the honour to transmit herewith my Report on the operations of the Department for the year ended 30th June, 1932.

I have the honour to be,

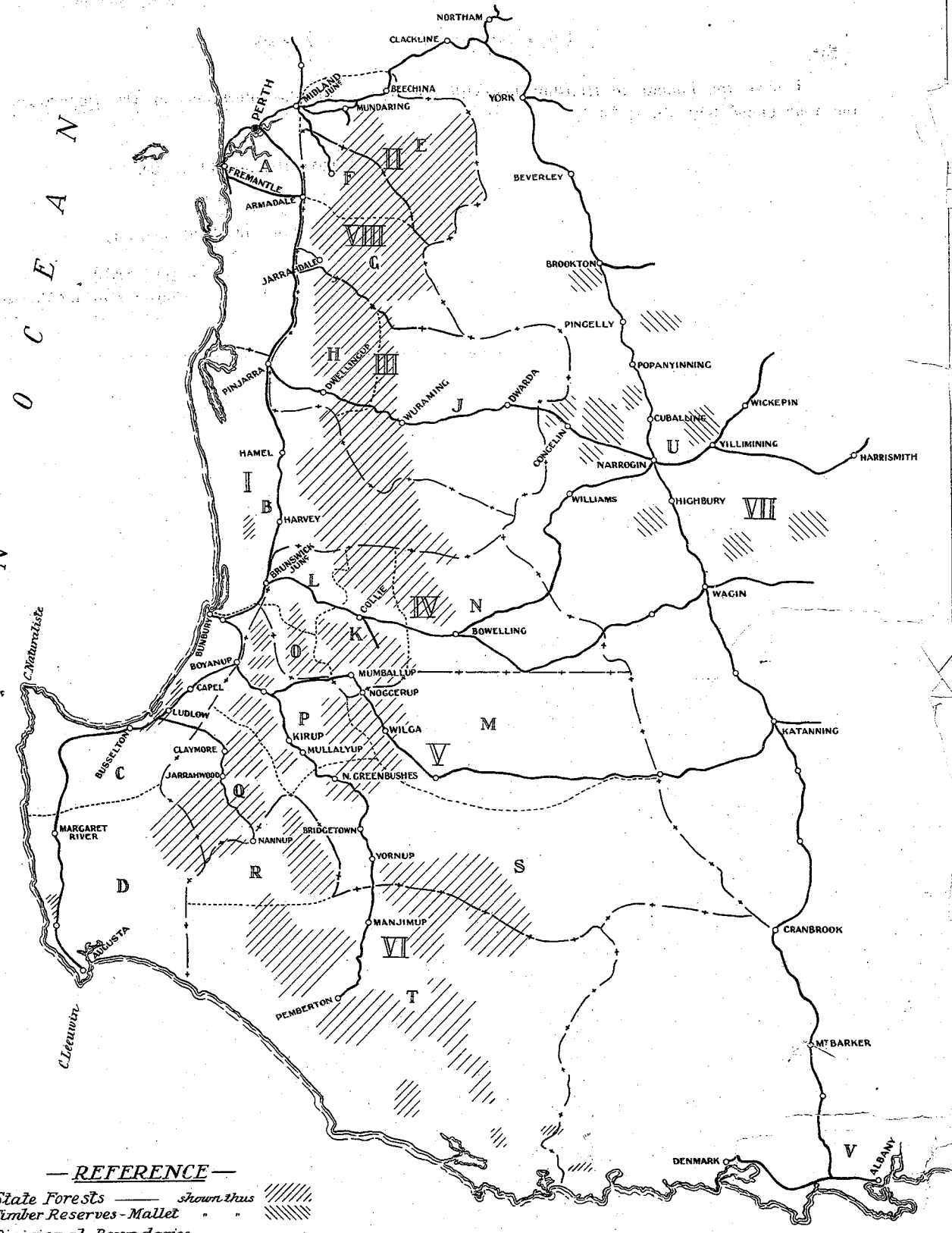
Sir,

Your obedient servant,

S. L. KESSELL,
Conservator of Forests.

S. L. KESSELL

I N D I A N
 O C E A N



— REFERENCE —
 State Forests — shown thus
 Timber Reserves - Mallet " " "
 Divisional Boundaries " " "
 District " " "

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LIST OF BOTANICAL NAMES OF LOCAL SPECIES REFERRED TO IN THIS REPORT.

Jarrah (*Eucalyptus marginata*).

Karri (*Eucalyptus diversicolor*).

Wandoo (*Eucalyptus redunca*, var. *elata*).

Fuart (*Eucalyptus gomphocephala*).

Marri (*Eucalyptus calophylla*).

Tingle Tingle (*Eucalyptus Jacksoni*).

Blackbutt (*Eucalyptus patens*).

Sandalwood (*Santalum spicatum*).

Sheoak (*Casuarina Fraseriana*).

Bullich (*Eucalyptus megacarpa*).

Banksia (*Banksia verticillata*).

Brown Mallet (*Eucalyptus astringens*).

Blackboy (*Xanthorrhoea Preissii*).

Kingia Grass (*Kingia australis*).

KEY TO DISTRICTS AND SUB-DISTRICTS.

Division.	District or Sub-district.
I.	B Yarloop.
	C Busselton.
	D Margaret.
II.	E Mundaring.
	A Metropolitan.
III.	H Dwellingup.
	J Wuraming.
IV.	K Collie.
	L Worsley.
	N Muja.
	O Wellington.
V.	P Kirup.
	M Noggerup.
	S Bridgetown.
	Q Jarrahwood.
VI.	R Nannup.
	T Manjimup.
VII.	U Narrogin and balance of Crown Lands in Agricultural Area.
	V Albany.
VIII.	G Jarrahdale.
	F Karragullen.

(See map on opposite page.)

Annual Report on the Operations of the Forests Department for the Year ended 30th June, 1932.

INTRODUCTORY REMARKS.

The Reforestation Fund created under the Forests Act, 1918, has enabled a permanent establishment to be built up which can keep pace with the reforestation of the area cut over each year, but the Fund has proved quite inadequate to overtake the serious leeway resulting from seventy years of uncontrolled exploitation prior to the passing of the Act. During this period some 960,000 acres of Jarrah forest were cut over, some of it very heavily. On such areas Nature has endeavoured to restore the forest crop, but frequent severe fires and the dominance of useless members of the old crop remaining have resulted in a mal-formed young forest, which can never develop into useful milling timber. This condition exists over tens of thousands of acres which are in consequence putting on little or no effective increment. Fortunately, Nature is kind in the Jarrah forest, and a fast growing, healthy new crop can be re-established on these areas without fail, and without delays, provided the labour is available to carry out the necessary silvicultural measures, and to provide protection from fire, especially in the first few years following regeneration treatment. As the permissible cut under the General Working Plan for Jarrah is regulated on a sustained yield basis, this work may be regarded as immediately reproductive in that, in the next revision of the Working Plan, which is due not later than 1938, the rapid increment being put on by these regenerated forests will play an important part in the calculation of the volume of timber which may be cut from the forest during the subsequent years.

For reasons dealt with fully in last year's report, there is no reserve in the Reforestation Fund, and if it had not been for labour available in connection with unemployment relief work, very serious difficulty would have been experienced in carrying on essential services such as fire control; and the outlook will remain the same until conditions become more normal in the timber industry. With the help of Loan funds set aside by the Government for the purpose, the Department has been able to make use of unemployed bush workers, mill hands, and many men drawn from the city in maintaining and extending the reforestation and afforestation programmes, and a record amount of useful and effective work has been accomplished. With few unimportant exceptions the large numbers of men who have been engaged by the Department from the ranks of the unemployed, have worked with a will and quickly adapted themselves to bush conditions. Those interested in an account of the work accomplished in regenerating and tending the indigenous forests of Jarrah, Karri, and Mallet, and in planting softwoods, are referred to Chapter III. of this report.

The year under review has been one of the most difficult in the history of the timber industry. Before the extent and possible duration of the world-wide trade depression was realised, stocks of sawn timber had accumulated to a serious extent at many sawmills. Although these stocks have been considerably reduced during the subsequent period when certain mills have been idle, and others working part time, large quantities remain on hand, and this has meant that recent increases in both local and overseas orders have not resulted in greatly increased cutting or employment.

It is disappointing to have to report that full advantage has not been taken by sawmillers and timber exporters generally of this slack period to examine their procedure and practice and lay plans for a well organised attack on new and old markets when trading conditions show signs of becoming more normal. Despite the fact that the markets which have proved their value as a steady outlet during recent difficult times have been those requiring well cut and high grade timber, efforts by the Department to formulate grading rules and assist in other ways to provide for the production of a better standardised product, have met with a friendly but unenthusiastic reception.

The difficulties of cutting "specials" only and the absence of the usual demand for general building scantling from Perth, Adelaide, Melbourne and elsewhere are fully recognised. Nevertheless, to quote one example, it would seem that sawmillers who have had the experience of pulling their sea-

soning stacks to pieces during recent months to procure a proportion of boards suitable for the London market, should be anxious to avoid similar troubles arising from the building-up of similar stacks of mixed and undefined quality classes. This will occur when orders for general cutting become reasonably plentiful unless a closer study is made of the requirements of various markets, and greater efforts made to educate not only the users of the timber to its special properties and virtues, but also to establish better and sounder contact between sawmiller and selling agency. It is difficult to see how this can be brought about without grading rules. Sound grading practice lies not in the selection of perfect timber, but on the contrary, it aims to include in each grade as wide a margin of blemishes as is possible without detracting from the value of the timber for the purpose for which it is required. While the quality of the timber supplied for a particular order continues to be governed—(a) by the class of bush in which the mill happens to be working at the time, (b) by the other orders available for simultaneous cutting, and (c) by the personal views of the benchman and mill manager, buyers will seek to protect themselves by demanding perfect timber. Under such conditions the goodwill between the users and producers which is so essential to the continued welfare of the industry particularly in times of stress will lack a proper foundation. Signs are not wanting that many overseas countries will require large supplies of timber to overtake arrears of maintenance and development in the near future and when the trade finds itself enjoying the prosperity of a seller's market, considerations referred to above may appear again of very little importance, but the view of the Department is that the cutting of a product guaranteed under grading rules mutually acceptable to producer and user is the only way in which the industry can hope to eliminate to a large extent the possibility of future setbacks.

CHAPTER I.

THE FOREST AREA.

Careful consideration has been given to all applications for land in and around State forests, and, with the consent of Parliament, 12,060 acres have been excised and returned to the Lands Department. This has been offset by the dedication of 3 areas of first quality mixed Karri and Tingle forest in the Nornalup district, so that the total area of State forest at the end of the year shows an increase of 3,142 acres.

Some attention has been directed, during the year, to gullies and swamps in the Jarrah country. These are neither as numerous, wide, nor fertile as a casual inspection might suggest. Old tramway formations which are the basis of the road system through the Jarrah forest follow the main gullies, and the traveller may, therefore, traverse for several miles a gully in which for a width of a few chains, species other than Jarrah predominate, but a careful examination shows that very few indeed of these gullies, or the small swamps at their heads, are suitable for settlement, quite apart from considerations such as the difficulties of transport of produce to market, etc. The necessity, owing to depleted funds, of restricting resident overseers and workmen to part-time employment, has directed attention to the possibility of using such gully land where it occurs in sufficient quantity and is reasonably fertile to help support a part-time forest worker. Such a scheme would bring any suitable areas into productivity, and would increase the permanent forest community with consequent advantages in fire control and forest management generally. The problem is being carefully investigated on these lines, and it is proposed to test the practicability of the scheme in a few centres in the first instance.

(1) STATE FORESTS (FORESTS ACT, 1918).

	June, 1931.	June, 1932.	Increase or Decrease.
	acres.	acres.	acres.
Jarrah	2,419,626	2,413,285	— 6,341
Karri	151,567	151,475	— 92
Jarrah and Karri (Mixed)	370,055	368,901	— 1,154
Tuart	5,932	5,932	...
Tingle Tingle	13,967	10,821	— 3,146
Karri and Tingle (mixed) ... ..	...	13,875	+ 13,875
Sandalwood	1,930	1,930	...
Pine Planting	4,835	4,835	...
Total	2,967,912	2,971,054	+ 3,142

During the year 1,327 acres were added, and three new State forests, comprising 13,875 acres, were dedicated. Excisions of areas for land settlement totalled 12,060 acres.

(2) TIMBER RESERVES (FORESTS ACT, 1918).

	June, 1931.	June, 1932.	Increase or Decrease.
Jarrah	acres. 36,279	acres. 35,934	acres. — 345
Other Species—			
Sandalwood	27,105	27,105	...
Pine Planting	5,331	5,521	+ 190
Mining Timber and Firewood ...	1,361,647	1,361,299	— 348
Total	1,430,362	1,429,859	— 503

One additional reserve, No. 96/25 (Pine Planting) near Boranup, was declared, comprising 190 acres. Two reserves were partially revoked to release areas comprising 693 acres for settlement purposes.

CHAPTER II.

REVENUE.

The revenue of the Department continued to decline, only £57,138 being collected, compared with £94,895 for the previous year, and £228,614—the highest revenue collected in any one year, viz., 1927-28.

In May, 1931, Cabinet approval of a 20 per cent. royalty rebate on log timber and a 25 per cent. rebate on inspection fees payable on sawn timber. This contribution towards reducing the production costs of the sawmillers was made with a view to increasing the output of sawn timber, and thus seeking to benefit the industry, the Department, and the State generally.

The royalty derived from log timber, viz., £35,820 represents a decrease of approximately 50 per cent., when compared with the figures for 1930-31, but sandalwood revenue showed a slight increase.

The amount of £8,369 collected under that heading is, however, very considerably below that of the peak year 1927-28, when £53,484 was received.

Owing to the position with regard to overseas orders, inspection fees continue to be low, only £3,096 having been collected compared with £6,868 for the previous year.

PRINCIPAL SOURCES OF REVENUE FOR THE PAST TWO YEARS.

Year.	Royalties.		Inspection fees.	Sandalwood.	Firewood, fencing, and mining timber.	Miscellaneous.	Total.
	Logs for sawmilling.	Hewn timber.					
1930-31	£ 70,611	£ 3,625	£ 6,868	£ 5,380	£ 1,190	£ 7,221	£ 94,895
1931-32	£ 35,820	£ 2,581	£ 3,096	£ 8,369	£ 1,846	£ 5,555	£ 57,267

TIMBER PRODUCTION.

PRODUCTION OF TIMBER FOR YEAR ENDED 30TH JUNE, 1932 (EXCLUSIVE OF MINING TIMBER, FIREWOOD AND PILES AND POLES).

No. of Division.		MILL LOGS.					HEWN TIMBER.				Grand Total.	
		Jarrah.	Karri.	Other.	Total.		Jarrah.	Wandoo.	Total.		In Log.	In Square
					In Log.	Recovery of Sawn Timber.			In Log.	In Square.		
		cub. ft.	cub. ft.	cub. ft.	cub. ft.	cub. ft.	cub. ft.	cub. ft.	cub. ft.	cub. ft.	cub. ft.	cub. ft.
1	Crown Lands ...	817,632	2,015	23,385	843,032	294,900	85,322	...	426,610	85,322	1,269,642	380,222
	Private Property	41,529	...	15,535	57,064	19,972	154,329	...	771,645	154,329	828,709	174,801
2	Crown Lands ...	12,960	...	...	12,960	4,536	3,787	13,583	86,850	17,370	99,810	21,906
	Private Property	36,918	...	...	36,918	12,921	18,993	...	94,965	18,993	131,883	31,014
3	Crown Lands ...	3,591,832	...	515	3,592,347	1,257,321	41,861	116	209,885	41,977	3,802,232	1,299,296
	Private Property	...	214	...	214	75	9,034	...	45,170	9,034	45,384	9,109
4	Crown Lands ...	227,364	...	8,946	236,310	82,708	23,814	...	119,070	23,814	355,880	106,522
	Private Property	445,270	...	27,035	472,305	165,307	141,586	...	707,930	141,586	1,180,235	306,893
5	Crown Lands ...	483,805	...	1,083	484,888	169,711	121,878	...	609,390	121,878	1,094,278	291,589
	Private Property	53,548	...	3,666	57,214	20,025	293,271	...	1,466,355	293,271	1,523,569	313,296
6	Crown Lands ...	1,100,477	2,978,136	...	4,078,613	1,189,264	28,337	...	141,685	28,337	4,220,298	1,217,601
	Private Property	...	...	...	...	...	79,155	...	395,775	79,155	395,775	79,155
7	Crown Lands ...	...	...	5,286	5,286	1,850	...	43	215	43	5,501	1,893
	Private Property	...	...	...	...	...	...	...	...	...	...	...
8	Crown Lands ...	890,842	...	4,874	895,716	313,501	...	...	...	...	895,716	313,501
	Private Property	10,408	...	...	10,408	3,643	...	...	...	...	10,408	3,643
Totals ...	Crown Lands ...	7,124,912	2,980,151	44,089	10,149,152	3,313,791	304,999	13,742	1,593,705	318,741	11,742,857	3,632,532
	Private Property	587,673	...	46,450	634,123	221,943	696,368	...	3,481,840	696,368	4,115,963	918,311
Grand Total ...		7,712,585	2,980,151	*90,539	10,783,275	3,535,734	1,001,367	13,742	5,075,545	1,015,109	15,858,820	4,550,843

* Includes 45,587 cub. ft. Pine; 33,718 cub. ft. Blackbutt; 3,642 cub. ft. Sheoak; 1,432 cub. ft. Wandoo; 697 cub. ft. Marri; 418 cub. ft. Banksia; 45 cub. ft. Bullch.

(Factors for conversion of round to squared: Sawn Karri, 27 per cent.; Other Sawn, 35 per cent.; Hewn, 20 per cent.)

SAWMILLING AND HEWING.

During the year 4,550,800 cubic feet of sawn timber, valued at £546,000, were produced. This quantity shows a reduction of 3,875,500 cubic feet on the figures for the previous year. The absence of overseas orders, particularly for railway sleepers, accounts to a large extent for the decreased output.

The respective quantities obtained from Crown lands and private property are set out in the following statement:—

Year.	From Crown Lands.			From Private Property.		Estimated Value of timber obtained.
	Sawn timber other than sleepers.	Sawn sleepers.	Hewn timber.	Sawn timber including sleepers.	Hewn timber.	
1930-1931	cub. ft. 4,827,781	cub. ft. 450,619	cub. ft. 603,643	cub. ft. 349,956	cub. ft. 2,193,977	£ 1,056,000
1931-1932	3,229,491	84,300	318,741	221,943	696,368	546,000

At the beginning of the year, apart from small mills cutting fruit cases only, 24 mills were operating on Crown lands, but, with the falling off in trade, this number has since been reduced to 17. The temporary closing down of many large mills resulted in considerable unemployment in the timber districts, but with a large programme of forest improvement work in progress, it was found possible to give part time employment to many of these men.

The quantity of hewn timber obtained for the year totalled only 1,015,000 cubic feet. The scheme of unemployment relief cutting introduced by the Government in October, 1930, was continued until October, 1931, when the Railway Department considered they had accumulated stocks sufficient to meet their requirements for several years. At this time the Department was fortunate in securing the cutting of a quantity of sleepers for an overseas order held by a local firm, with the result that it was possible to give approximately three months' full time cutting to the 250 men who had previously been engaged on unemployment relief hewing. Most of these men are now employed by the Department in forest improvement work on the unemployment relief basis.

TIMBER EXPORTS.

During the year under review 3,063,000 cubic feet of timber, valued at £361,700, were exported. In addition, wood manufactures to the value of £88,488 were shipped from the State. These figures do not take into account the fruit cases used in connection with the export of fruit from the State. In this connection it is estimated that the value of fruit cases used last year for export was approximately £33,000, or nearly 9 per cent. of the total value of the timber exported.

The United Kingdom was the largest buyer for the year, and purchased timber to the value of £99,400, South Africa £76,300, Ceylon £65,700, the Eastern States of Australia £54,600, and New Zealand £37,300. A detailed summary of timber exports is given in Appendix 2a to this report.

TIMBER IMPORTS.

The value of timber (including wood manufactures) imported for the year was £164,500. Of this amount only timber to the value of £30,000 is listed as being of overseas origin, the balance, £134,500, being from the Eastern States of Australia, a proportion of which originally came from overseas. Of this, £49,300 represents the value of barrels and casks, the bulk of which will appear in the export table as empty returns. The principal item imported from the Eastern States are undressed timber, valued at £15,000, and furniture to the value of £21,800.

TIMBER INSPECTION.

The Department has been called upon to do very little timber inspection during the year. The volume of hewn and sawn timber submitted for examination totalled 1,167,830 cubic feet, and, in addition, 16,283 lineal feet of poles and piles were inspected.

The revenue received from timber inspection amounted to £3,096.

SANDALWOOD.

Large accumulations of Sandalwood at Fremantle and Port Augusta, coupled with the reduced purchasing power of the Chinese owing to floods and unsettled conditions in China, have seriously affected the business of sandalwood getting in this State, with the result that only 212 tons of Sandalwood were obtained from Crown land for export during the year. Continuous efforts have been

made to rehabilitate the industry. Conditions in China have been closely watched, and information has been obtained from every available source. This information has gone to show that if the interests of all concerned are to be protected it is necessary for the States of South Australia and West Australia to have a common policy and act jointly in restricting shipments to China to actual market requirements.

During the year arrangements were made by the Governments of the two States with the Commonwealth Government for Mr. H. W. Gepp, the Commonwealth Consultant on Development, who was proceeding to the Far East, to make inquiries concerning conditions in China and report on the policy to be followed, with a view to promoting maximum sales at that end. As a result of Mr. Gepp's exhaustive inquiries from all sources during several months in the Far East, a valuable report was submitted, which fully justified the action taken in the past to control the industry, and strongly urged the necessity for a continuation and extension of control of all Sandalwood exports from Australia. Mr. Gepp expressed the opinion that the position could best be handled by single unit control both in Australia and China, and recommended—

- (1) The immediate establishment of a single unit control under the supervision of the Governments of South Australia and Western Australia to cover all activities in Sandalwood in the two States, with the object of ensuring the maximum pulling of new wood and the stability of the market whilst the existing surplus stocks are being sold.
- (2) A sales organisation, under single unit control, representative of Australian interests both in Australia and in China.

Steps have now been taken by the two Governments to place the marketing of Sandalwood in China on a better basis on the lines recommended by Mr. Gepp, and for this purpose an agreement between the two Governments and the Sandalwood Companies holding stocks was signed on the 21st July, 1932.

Under this agreement the management and regulation of the export business in the two States and the marketing policy and prices in China have been placed under the control of an Export Committee, consisting of one representative of each Government and one joint representative of the Companies. The nominees of the various parties are—

South Australia—Mr. E. J. Field, Director of Lands.

Western Australia—Mr. S. L. Kessell, Conservator of Forests.

Companies—Mr. A. E. Jackson.

The agreement provides for a fixed price to the Sandalwood getters and royalty to the Governments on a sliding scale, according to the selling price of the wood on the Chinese market.

The shipment of wood from the two States will be regulated by actual sales in China, and of the total quantity shipped two-thirds will be from Western Australia. Provision has been made for 50 per cent. of each shipment from this State to be taken from accumulated stocks and the remainder from new pulling. In this way, surplus stocks will be definitely reduced by each sale, and at the same time it is hoped that employment will be found for an increasing number of men in the Sandalwood districts.

Sandalwood to the value of £40,500 was exported during the year.

Sandalwood for Oil Distillation.

As a result of the general trade depression there has been a decided falling off in the consumption of sandalwood for oil distillation purposes during the year. Particulars of raw material purchased for this purpose are set out in the following statement:—

SUMMARY OF SANDALWOOD OBTAINED BY DISTILLERS FOR PERIOD 1-7-31 TO 30-6-32.

Class of Sandalwood.	Quantity.
	tons.
Roots and Butts (export class), <i>ex</i> Fremantle ...	71
Old Roots and Stumps, <i>ex</i> Crown lands ...	248
Old Roots and Stumps, <i>ex</i> private property ...	131
Sandalwood logs, <i>ex</i> Crown lands ...	216
Sandalwood logs, <i>ex</i> Carnarvon ...	131
Sandalwood, <i>ex</i> private property ...	18
Total ...	815

OTHER FOREST PRODUCE.

The figures relating to mining timber in the statement hereunder again show an increased consumption on the figures for the previous year, due to the general activity in mining operations.

5,400 tons of mallet bark were obtained from Crown lands and private property. These figures show a marked increase on the previous year's output, when 2,000 tons only were obtained. The operations of mallet bark strippers extend over a very large area on both sides of the Great Southern Railway from Beverley southwards, and difficulty has been experienced in supervising operations at a reasonable cost to prevent wasteful stripping methods and the illegal removal of bark from Crown lands. More particularly was this the case in the outlying districts east of the No. 2 Rabbit-proof Fence, where, as a result of the trouble experienced in this connection last year, it was found necessary to alter the system applying to the issue of licenses.

In the past, licenses were issued to the strippers, but, for the current season, licenses are being issued to the merchants buying the bark, who in turn issue orders to the strippers and keep this office supplied with particulars of all orders placed, irrespective of whether the bark is to come from private property or Crown lands. In this way the Department is kept informed of all persons engaged in the stripping of bark and is in a position to keep in touch with their operations. Royalty on bark from Crown lands is paid by the merchants, who deduct the amount from the moneys due to the strippers.

West of the No. 2 Fence, where the Department has a number of mallet reserves, on which improvement work is being done, the control of strippers does not present such a problem. Stripping is carried out here under exclusive permits, which are issued on a royalty basis—the royalty being fixed by auction or tender.

The quantity of bark exported for the year was 4,200 tons, valued at £42,000.

FOREST PRODUCE NOT ELSEWHERE INCLUDED IN PRODUCTION TABLES OBTAINED DURING YEAR ENDED 30TH JUNE, 1932, AND REPORTED TO THE DEPARTMENT.

Description of Forest Produce.	SOUTH-WEST DIVISION AND AGRICULTURAL AREAS.								Central and Eastern Divisions.	North-West and Kimberley Divisions.	Total.
	Forest Division No.										
	1	2	3	4	5	6	7	8			
Mining Timber tons	...	...	...	978	...	...	350	...	7,975	...	9,408 tons
Do. do. lin. ft.	...	...	...	...	...	...	...	...	...	100	30,746 lin. ft.
Sleepers for Goldfields Wood Lines cubic ft.	...	...	...	...	...	...	...	...	...	*30,746	...
Firewood including Charcoal * ... tons	410	116,497	10,800	96	948	...	...	...	25,209	...	25,209 c. ft.
Mining Firewood tons	...	...	...	...	300	...	12,586	30,000	121,641	...	292,978 tons
Piles and Poles * lin. ft.	11,799	2,084	15,927	2,400	7,590	3,811	2,800	...	272,400	†3,988	279,488 tons
Fencing Posts and Rails ... No.	4,750	400	2,650	66	10,602	163	1,794	11,743	284	...	55,354 lin. ft.
Blackboy tons	...	145	...	...	...	...	...	...	22,575	...	43,284 No.
Blackboy Gum tons	...	2	...	...	...	...	...	...	...	...	145 tons
Kingia Grass ... .. "	...	...	...	...	...	...	...	...	...	...	2 tons
Mallet Bark * "	...	5	...	9	...	...	...	1	...	...	1 ton
Wattle Bark "	9	...	...	...	...	...	5,418	...	...	...	5,432 tons
Boronia Magastigma * ... lbs.	...	...	...	...	...	...	2,921	...	...	...	9 tons
	...	...	...	...	...	...	...	...	...	...	2,921 lbs.

* From Crown lands and private property. † Figures for Meekatharra District only.

NOTE.—Except where otherwise stated, this statement includes only forest produce obtained from Crown lands under permit or license.

FOREST OFFENCES.

Fifty-eight offences were reported to Head Office by field officers during the year. Many of these offences were of a minor nature, and amounts totalling £46 14s. 9d. were collected in lieu of prosecution. In six cases proceedings were taken against the offenders, resulting in fines and costs amounting to £37 being inflicted.

Of the six prosecutions, five were taken under the Forests Act and one (taken by Police) under the Bush Fires Act.

Two of the cases were of a serious nature, viz., defacing a Forester's brand placed on timber and attempting to corrupt a Forest Officer by an offer with a view to obtaining a favourable certificate.

Timber illegally cut and seized by the Department was disposed of for £92 11s. 6d., of which £34 14s. was paid by the Department for carting, loading, freight, etc.

Sandalwood amounting to 11 tons 6 cwts., valued at £253, was confiscated. In some instances compassionate allowances were made to the sandalwood getters, amounting in all to £71 10s.

158 tons of mallet bark, valued at £560, illegally stripped on Crown lands was confiscated. Compassionate payments amounting in all to £159 were made in a number of cases to the bark strippers, and, in addition, amounts totalling £69 were paid by the Department in connection with carting, storing, excess railage, etc.

CHAPTER III.

(1.) EXPENDITURE.

Consolidated Revenue Expenditure, which covers administration costs, was reduced to £14,272, compared with £18,511 for the previous period.

Every effort has been made to keep this expenditure to an absolute minimum, and it is difficult to see what further economies can be effected. A revival, however slight, in the timber industry will necessitate increased provision under this heading, but such increase will be more than offset by the additional revenue collected.

In conformity with the Government policy a large number of men were engaged on unemployment relief work, for which an amount of £45,454 was expended from General Loan Fund, on the works listed in Appendix 1b.

Owing to the small amount of revenue collected, the expenditure from the Reforestation Fund was limited to £20,424, practically the whole of which was absorbed in maintaining essential services, leaving a balance in the Fund at the end of the year of £2,325 only. Unless there is an early improvement in the revenue collections, of which three-fifths net is credited to the Fund, assistance from some other source may be required to maintain fire protection and other services of an essential nature.

The following statement shows the position of the Reforestation Fund (Section 41, "Forests Act, 1918") at the end of the financial year:—

	£	£
Revenue for 1931-32 ... ..	...	57,138
Less Sandalwood not apportioned ... ..	...	8,369
		<hr/>
		48,769
Consolidated Revenue Fund Expenditure	14,272	
Less expenditure adjustments	1,168	
	<hr/>	
	13,104	
Interest on Loan	4,921	
Sinking Fund	217	
Special Acts	843	
Audit Fee	121	
Expenditure over-stated	98	
	<hr/>	
		19,304
		<hr/>
		£29,465

After crediting three-fifths of the above amount to the Reforestation Fund, the position at the close of the year was as shown hereunder:—

	£	£
Balance at the 1st July, 1931 ... ..	...	3,402
Three-fifths of revenue transferred	17,679	
Direct recoup	2,349	
	<hr/>	
		20,028
		<hr/>
		23,430
Less Expenditure, 1931-32 ... ..	...	21,105
		<hr/>
Balance available ... ..	...	£2,325

(2.) REFORESTATION OPERATIONS.

(A) FOREST MANAGEMENT.

SUMMARY OF WORK CARRIED OUT DURING YEAR.

District.	Topographical Survey.	Assessment Survey.	Roads and Tracks cleared.	Telephone Lines constructed.
	miles.	acres.	miles.	miles.
DIVISION 1:				
Yarloop	51	58,400	77 $\frac{3}{4}$	...
Busselton ... ..	...	...	...	...
Margaret River ... ..	...	13,500	1 $\frac{1}{2}$	...
DIVISION 2:				
Metropolitan ... ..	...	...	...	...
Mundaring ... ..	...	...	9 $\frac{1}{2}$	...
DIVISION 3:				
Dwellingup	19	...	9 $\frac{1}{2}$	...
Wuraming	12	...	...	...
DIVISION 4:				
Collie ... ..	...	8,600	38 $\frac{1}{2}$	...
Worsley ... ..	...	5,000	17 $\frac{1}{2}$	...
Muja ... ..	...	2,400	...	...
Wellington ... ..	...	...	16	...
DIVISION 5:				
Kirup ... ..	...	2,000	8 $\frac{1}{2}$	...
Noggerup ... ..	...	...	6	...
Jarrahwood ... ..	...	...	8 $\frac{1}{4}$	...
Bridgetown ... ..	...	4,500	...	...
DIVISION 6:				
Nannup ... ..	...	1,500	6	...
Manjimup	59	16,700	14 $\frac{3}{4}$	...
DIVISION 7:				
Narrogin ... ..	...	...	...	...
DIVISION 8:				
Jarrahdale ... ..	...	...	4	...
Karragullen	36	...	51 $\frac{3}{4}$	3 $\frac{1}{2}$
Totals	177	112,600	269$\frac{1}{2}$	3$\frac{1}{2}$

FOREST SURVEYS.

No special survey camps were sent to the field during the year. The small amount of topographical survey carried out was done by the regular staff in the various Divisions to enable them to proceed with the normal development of their administrative charges.

Co-operation with State Saw Mills, Millars' Timber & Trading Co., and Wilgarrup Karri and Jarrah Co. in connection with log lines surveys is being maintained. Reference trees are being established by the companies' surveyors in the forest, and field notes are made available. Under this arrangement 65 miles of log lines were traversed during the year.

ASSESSMENT AND CLASSIFICATION.

Timber classifications were carried out in the Yarloop, Margaret River, Collie, Worsley, Bridgetown, and Manjimup districts.

In the Manjimup district 16,700 acres of mixed Karri and Jarrah on State Forests were assessed. In Collie and Worsley districts assessments were made on the country involved in the Collie River Irrigation Scheme and the Bussell's Brook area.

54,000 acres of cut-over bush at Mornington were assessed on broad grid lines and 4,000 acres on the Harvey River received a detailed classification.

At Greenbushes further detailed classification was carried out with a view to recommendations for land alienation.

At East Kirup 2,000 acres were classified in detail on a large scale plan to enable a pine plantation to be laid. Subdivision was subsequently carried out.

Prior to the commencement of regeneration operations detailed compartment stock maps are prepared.

WORKING PLANS.

The pressure of administrative work placed on the trained staff during the year, owing especially to unemployment relief works, has been such that no preparation or revision of Working Plans has been possible.

PERMANENT ESTABLISHMENTS.

At Keenan State Forest in the Margaret River District, a new 4-roomed house was erected on the pine plantation.

A house was dismantled at Inglehope and re-erected at Yanmah. Extensive fencing and stock yards were built at this centre, where provision for stock grazing for group settlers is being made.

Karragullen district office was connected to the Postmaster General's telephone line, 3½ miles of earth circuit line being erected.

Extensive additions were made to the network of forest roads during the year. These are situated chiefly at those centres where new camps have been established and new tracts of country placed under management, such as Willowdale, Hoffman, Hamilton River, Wellington, and Karragullen. 269½ miles of new forest roads were opened up. The labour employed was recruited chiefly from men receiving Government relief at the neighbouring mill villages, and use was made of old log lines and whim tracks.

(B) SILVICULTURE.

(a) Jarrah.

SUMMARY OF OPERATIONS FOR THE YEAR.

Division and District,	Top Disposal.	Treated for Regeneration.	Thinning.	Improvement Work.	Tree-marking.	
					Sawmilling.	Hewing.
DIVISION 1— Yarloop	acres. 890	acres. 3,829	acres, 11,935	acres. 6,398	acres. ...	acres. ...
DIVISION 2— Mundaring ... ..	...	109	606	...	...	...
DIVISION 3— Dwellingup Huntly Wuraming	1,028 480 1,905	2,243 2,466 2,188	2,066 108 2,050	... ... ...	1,079 809 1,443	736
DIVISION 4— Collie Worsley Wellington	1,243 65 ...	678 1,043 504	1,260 ... 757	4,976 4,555 1,668	1,556	198
DIVISION 5— Kirup Noggerup Jarrahwood Bridgetown	696 205	94 128 1,536 668	1,976 ... 297 72	2,342 ... 2,090 14	117 ... 1,582 ...	3,874 392 ... 18
DIVISION 6— Nannup Manjimup ... ..	... ...	1,169 298	... ...	... 2,506	......	......
DIVISION 7— Jarrahdale Karragullen ... ..	... 1,316	12 328	698 1,152	... 2,646	... 3,760	......
Totals	7,828	17,293	22,977	27,195	10,346	5,218

The main features of silvicultural work in the Jarrah forest during the foregoing twelve months have been the continuance and development of the greatly increased programme of silvicultural work instituted last year, the marked extension of the area of younger age classes thinned and tended to allow for a more vigorous development, and the large number of unemployed who have been absorbed on this work.

The area cut over for sawmilling has again, owing to trade depression, shown a big decrease, only 7,828 acres being cut over when compared with 24,593 acres in 1930-31.

This decrease, combined with the general extension of silvicultural operations, has enabled the Department to make up to some extent the leeway of past years, and the comparison for the years 1929-32 between trade cutting and silvicultural work, which should, under the general Working Plan, at least be equal, is given hereunder:—

Cut-over (1929-32) = 71,300 acres.
Treated (1929-32) = 129,201 acres.

The additional area of Jarrah forest which was given intensive treatment for the first time either to secure natural regeneration or by way of thinning and fire protecting existing regrowth amounted to 51,131 acres.

Thinning operations were carried out over 23,000 acres, partly in sapling stands resulting from the first regeneration work carried out by the Department some years ago and partly in natural regrowth. Large areas of natural regrowth in the sapling and pole stage have been ruined by repeated severe fires occurring before the introduction of the first fire control measures, which were instituted within the last decade only; but, where any areas are located on which the second crop has escaped severe damage, attention is given to these before regeneration operations are commenced on adjoining forest.

The restocking of areas carrying useless trees and malformed regrowth, by means of regeneration cleaning, took place over 17,293 acres, while preliminary treatment to relieve immature trees from competition from useless overmature Jarrah and Marri and aid the establishment of the necessary Jarrah advance growth was carried out on 27,195 acres, chiefly in the Collie, Kirup, and Jarrahwood areas.

The increased programme of work has enabled new centres of operations to be opened up at Willowdale, Hoffman, Hamilton River, Wellington, Yanmah, and Dingup, where camps of relief workers, both single and married, recruited from town and country, have been established.

Up to 500 relief workers and 450 sustenance men were employed during the year.

The total area of Jarrah bush which has now been brought under fairly intensive silvicultural treatment and protection from fires is 174,479 acres.

(b) *Karri.*

In the vicinity of Big Brook, where 4,597 acres of prime karri have already been treated for regeneration, a new centre was established, 4 and 5 Mile Brook. Here during the year 1,270 acres of karri received a preliminary regeneration treatment. This area carries a stand of young karri. The area treated was surrounded by a firebreak system.

Work was continued at Big Brook, where a further 120 acres received treatment and improvements were carried out on the firebreaks.

At Boranup no work was carried out on the Karri Working Circle.

The total area of Karri which up to the present has received silvicultural treatment is 8,353 acres, of which 2,366 acres have been thinned, the latter a very fine stand of young karri at Boranup.

(c) *Mallet.*

This past year has seen the inception of a greatly increased regeneration programme in the mallet areas of the Narrogin District, where poor classes of country unsuitable for agricultural purposes are being put to productive use. Regeneration is effected by clearing and sowing. The increase is illustrated by the fact that, in 1929-30, 277 acres were sown, 403 acres in 1930-31, and 955 acres during the past year. The area under mallet will be further augmented in 1933, for which purpose 1,127 acres were cleared, and clearing work was partially carried out on 317 acres during the year under review. 95 lbs. of seed was collected.

The improved type of firebreak introduced in 1930-31 was extended over 3,729 chains. No thinning was undertaken during the past twelve months.

The extension of operations has been instrumental in providing relief work for unemployed men in the district.

The area thinned is now 756 acres, and the area sown 2,399 acres.

(d) *Sandalwood.*

Sandalwood reforestation during the year was confined to the sowing of small experimental plots of about one acre at Bullock Holes Reserve, Yellari Reserve, Lakeside Reserve, and Seahill Reserve.

Progress reports on the sowings of past years show that, although a fair average height growth is put on every year, the ravages of rabbits in the open country, fenced country, and even in cases where plants have been separately surrounded by a wire guard, leave only a very small percentage of surviving plants.

(C).—FIRE CONTROL.

District.	Area under Fire Control.	Area afforded Complete Protection.					
		Indigenous Forest.			Pine Plantation.		
		In course of Treatment.	Regenerated and tended to 15th June, 1931.	Fire Losses.	Being Cleared for Planting.	Planted Area.	Fire Losses.
DIVISION No. 1—	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Yarloop... ..	20,000	11,813	530	...	455	806	...
Busselton	6,000	...	...	...	210	1,019	...
Margaret River	4,000	...	2,366	...	570	12	...
DIVISION No. 2—							
Metropolitan	4,500	...	...	...	1,362	1,308	...
Mundaring	10,000	462	2,323	...	454	1,947	2
DIVISION No. 3—							
Dwellingup	200,000	3,382	24,454	...	...	...	...
Wuraming		4,111	12,159	...	...	...	...
DIVISION No. 4—							
Collie	155,000	...	...	...	20	409	...
Worsley		14,551	21,562	56	...	...	...
Muja ... ..		...	...	...	...	...	...
Wellington ... ..		...	...	...	...	...	...
DIVISION No. 5—							
Kirup	92,400	3,082	21,650	190	...	...	...
Noggerup		4,145	16,318	...	...	...	...
Jarrahwood		12,200	212	6,166	...	...	...
Bridgetown		10,000	...	...	...	...	...
DIVISION No. 6—							
Nannup	8,000	1,666	3,897	...	...	64	...
Manjimup	11,000	5,488	4,730	145	60	74	...
DIVISION No. 7—							
Narrogin	50,000	1,500	3,155	2	...	...	...
Albany	500	...	...	...	266	235	...
DIVISION No. 8—							
Jarrahdale	4,400	...	3,525	...	...	...	...
Karragullen	20,000	3,597	10,764	...	...	...	...
Totals	717,800	54,009	133,599	393	3,397	5,874	2

The season under review again showed that fire losses can be reduced to a minimum by a proper system of fire control. This statement gains strength when it is remembered that the trained field staff essential for the management of such a system had been greatly depleted and in most districts only a skeleton staff remained.

The losses were practically negligible—only 0.2 per cent. of fully protected country, and .06 per cent. of the whole area under control being burnt, the lowest figures on record.

The results obtained are due mainly to the adoption of a better technique gained by the experience of the past years, and were probably helped by the absence of particularly difficult and dangerous "blow up" days, although the summer was long and in some districts exceptionally dry.

Overseers resident on the blocks over which they have charge become more familiar with the problems peculiar to their area of control. Sapling and pole stands, once crowded together and easy prey for a fire, have been thinned and debris removed by controlled burning. Compartment fire lines have been improved and straightened. The "picking-up" and burning of debris on the floor of certain treated compartments has also been carried out. All these tend to reduce hazards and to ease and simplify fire control in the forest.

(3.) AFFORESTATION.

AREAS OF CONIFERS ESTABLISHED DURING THE MONTHS OF JUNE, JULY, AND AUGUST, 1931.

District.	Plantations.	Area established prior to 1931.				Area established, 1931.				Grand Total.
		<i>Pinus radiata.</i>	<i>Pinus pinaster.</i>	Other conifers.	Total.	<i>Pinus radiata.</i>	<i>Pinus pinaster.</i>	Other conifers.	Total.	
		acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
DIVISION 1— Yarloop ...	Myalup ...	2	409	17	428	...	96	4	100	528
	Harvey Weir	153	22	23	198	14	13	...	27	225
	Hamel ...	18	33	2	53	...	...	...	...	53
Busselton ...	Coolilup ...	29	730	23	782	...	19	...	19	801
	Stirling ...	1	194	9	204	...	3	11	14	218
Margaret River	Boranup ...	...	...	...	...	...	12	...	12	12
DIVISION 2— Metropolitan ...	Applecross	...	367	...	367	...	116	...	116	483
	Gnangara ...	...	311	7	318	...	169	...	169	487
	Collier ...	...	213	...	213	...	125	...	125	338
Mundaring ...	Helena ...	477	23	44	544	...	107	1	108	652
	Greystones	437	50	57	544	...	142	...	142	686
	Beraking ...	142	9	72	223	1	56	20	77	300
	Mudros ...	138	30	29	197	...	...	...	...	197
	Darkin ...	85	23	4	112	...	...	...	...	112
DIVISION 4— Collie ...	Mungalup	59	5	3	67	...	...	...	...	67
	Proprietary	...	248	4	252	...	25	...	25	277
DIVISION 6— Manjimup ...	Big Brook...	34	...	34	68	6	...	...	6	74
DIVISION 7— Albany ...	Pardelup ...	103	3	...	106	102	12	1	115	221
EXPERIMENTAL AREAS ...	Nannup ...	14	32	18	64	...	...	...	...	64
	Bowelling	9	29	27	65	...	...	...	...	65
	Albany ...	1	4	9	14	...	...	...	...	14
Total ...	...	1,702	2,735	382	4,819	123	895	37	1,055	5,874

The planting of a further 1,055 acres in 1931 brings the total areas of State Pine Plantations to 5,874 acres. For the first time since the commencement of systematic planting, in 1926, the annual planting area has exceeded 1,000 acres, and it is proposed that the annual planting area be maintained at this figure in the future.

The Metropolitan plantations (Applecross, Gnangara, and Collier) increased in area by 410 acres, Mundaring (three (3) plantations) by 327 acres, Harvey Weir and Myalup by 127 acres, and Pardelup by 115 acres. Of the total area planted *P. pinaster* claimed 895 acres, *P. radiata* 123 acres, and other species (on an experimental scale) 37 acres.

The main features of the year's operations have been (a) the marked lowering of costs of establishment, mainly due to the continued improvement in methods; (b) the considerable extension in clearing for future planting (three new plantations were opened up); (c) the increased use of *Pinus pinaster*, which for the year was the chief planting stock; (d) the restriction in the planting of experimental varieties (400 acres of these are now in existence); and (e) the use made of unemployed labour in all branches of work, especially in the tending of growing plantations.

Pending the establishment of the new plantations, which are all on much better soil types, a high proportion of the year's planting was on coastal sandplain country which has hitherto been unproductive, despite the proximity of the land to the metropolitan area.

The experimental planting of exotics last season was confined to the following species:—*P. canariensis*, *P. Coulteri*, *P. ponderosa*, *P. muricata*, *P. halepensis*, and *P. laricio*. It is now considered that sufficient species and areas during the past five years have been established at various centres throughout the South-West to give definite indications as to their suitability or otherwise for future planting. No stock for experimental areas will be raised during the coming year.

Piecework clearing at relief work rates has been carried out by unemployed men at Mundaring Weir, Gnangara, Collier, Applecross, Myalup, Harvey Weir, Ludlow, and Margaret River. Approximately 1,000 acres have been cleared for planting in 1932.

During the year operations commenced at three (3) new centres—Margaret River, East Kirup, and Scaddan (Mt. Lawley). Clearing is being undertaken as an unemployment relief measure.

The locally grown softwood placed on the market during 1930-31 was 58,585 cubic feet—44,669 cubic feet from Crown lands and 13,916 cubic feet from private property, and during 1931-32 45,587 cubic feet, of which about half was supplied from Crown lands. The demand is on the increase, but it will be some years before we have sufficient supplies reaching even early maturity to come anywhere near meeting the demand.

(4.) RESEARCH AND INVESTIGATION.

In the past twelve months consideration of the question of grading rules for Western Australian timbers has been the principal line of investigation, although some time has been spent on problems of seasoning, utilisation, and certain minor items which have cropped up from time to time. As in previous years close touch has been maintained with the Forests Products Division of the Council for Scientific and Industrial Research, and thanks are due to officers of the Division for assistance and advice with many problems under investigation.

A Committee of Sawmillers is now working on the problem of grading in co-operation with the Department. Draft grading rules have been drawn up to cover the supply of three grades of flooring boards. These specifications are at present under consideration by the main body of Sawmillers. Some attention has also been paid to other classes of product, such as sleepers, paving blocks, and ordinary building timber. A comprehensive report has been prepared giving some idea of relative quantities of various classes of product exported and showing all existing specifications on which timber is now supplied. This will give a basis for future work on preparation of more suitable grading rules.

Arrangements have been made with the Forests Products Division of the Council for Scientific and Industrial Research for the loan of an officer of the Division for co-operative work on this problem for a period of five months. It is hoped in this time to make a substantial contribution towards the preparation of suitable grading rules for the main classes of product cut from Jarrah and Karri.

Minor investigations only have been carried out on the question of seasoning and general utilisation. Following experimental work on hardwoods for cases in the previous year, further attempts have been made to advance the merits of the hardwood case, particularly for petrol and kerosene cases. Attention has also been paid to the question of seasoning of timber for this purpose. Two oil companies are at present showing interest in the possibilities of hardwood for case manufacture.

(5.) ARBORICULTURE.

During the year ended 31st August, 1931, the number of plants distributed from Hamel Nursery was 93,984, or 44 per cent. less than last year. 34,575 were sold to the public, 2,821 were issued free to public bodies, charitable institutions, etc., and 56,588 were supplied to Departmental plantations and arboreta.

Pinus radiata superseded *Eucalyptus cladocalyx* (Sugar gum) as the most popular tree distributed.

CHAPTER IV.

(1.) LEGISLATION.

Forests Act Amendment Act, 1931.

An amendment to the Forests Act, 1918, was assented to on the 3rd December, 1931, extending for a further twelve months the provision of the amending Act of 1930, which excluded the whole of the sandalwood revenue from the provisions of Subsection (2) of Section 41 of the principal Act, and provided for its transfer to Consolidated Revenue.

Forest Regulations.

A number of amendments to the Forest Regulations were made during the year, the most important of which are dealt with hereunder:—

Inspection Fees.

The charge for the inspection of sleepers from private property was increased from decimal six to decimal nine of a penny per cubic foot. A number of complaints were received from overseas countries mostly arising from the class of sleepers being cut on private property from immature trees and by inexperienced men, and a more stringent examination was therefore considered necessary in the interests of the sleeper export trade.

Licenses.

An additional regulation was prescribed prohibiting the cutting of timber in pastoral and gold-fields districts within a radius of twenty chains from wells, waterholes, claypans, watercourses, or rivers.

(2.) ADMINISTRATION.

The following staff changes took place during the year:—

(a) *Professional Division.*

Mr. T. N. Stoate, B.Sc., Dip. For., Senior Assistant Conservator, returned to duty on 23rd December, 1931, after 16 months absence abroad. This period was spent chiefly at the Imperial Forestry Institute, Oxford, in connection with the post graduate course provided under the Russell Grimwade Prize awarded to him for 1931.

Mr. J. O'Donnell, B.Sc., Dip. For., finished his post graduate course at the Waite Agricultural Research Institute in South Australia, and on the 5th August, 1931, commenced duty as a probationer.

(b) *General Division.*

Two "D" Grade Asst. Foresters were appointed, two Asst. Foresters "C" Grade were promoted to Foresters "C" Grade, one Forester "C" Grade was retired, and two Asst. Foresters "D" Grade were retrenched. An Asst. Forester "C" Grade resumed duty on 6th November, 1931, after extended leave of absence for nearly two years, during which period his services were on loan to a company in South Australia.

(c) Head Office staff remained unchanged throughout the year.

It affords me great pleasure to place on record the excellent work of all members of the staff during a particularly difficult year.

S. L. KESSELL,
Conservator of Forests.

22nd September, 1932.

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APPENDIX 1a.

CONSOLIDATED REVENUE FUND.

Statement of Receipts and Expenditure for the year ended 30th June, 1932.

DR.				CR.								
				£	s.	d.	£	s.	d.			
To Log royalty from all sources	35,819	12	10	By Salaries	...	...	10,786	10	2
„ Sandalwood Revenue	8,368	11	4	„ Travelling and Forage Allowances	...	...	1,304	7	9
„ Miscellaneous royalties	6,272	11	8	„ Maintaining State Nursery	...	...	59	19	9
„ Inspection Fees	3,096	3	2	„ Library	...	...	3	0	10
„ Rents	1,373	3	5	„ Postage and Telephones	...	...	117	14	8
„ Sales	1,187	8	11	„ Stationery and Printing	...	...	142	2	1
„ Miscellaneous Revenue	1,149	11	3	„ Advertising	...	...	29	1	3
							„ Timber Inspection	...	...	142	10	5
							„ Sandalwood Control	...	...	57	2	3
							„ Mileage (Department car)	...	...	63	0	5
							„ Extra Remuneration, Reg. 79	...	...	7	3	0
							„ Workers Compensation Premiums	...	...	215	15	6
Less Mining Leases royalty Transfer	...			£57,267	2	7	„ General Equipment	...	...	40	5	4
				129	2	7	„ Mileage Allowances	...	...	522	8	2
							„ Freights and Fares	...	...	113	5	6
							„ Travelling Allowances	...	...	149	2	6
							„ Expenses in connection with illegally cut timber	...	...	195	2	6
							„ Timber Industry Regulations	...	...	209	3	7
							„ Miscellaneous	...	...	114	1	5
							Balance Excess of Revenue...	...	...	14,271	17	1
										42,866	2	11
										£57,138	0	0

APPENDIX 1b.

Statement of Reforestation and Afforestation Expenditure for the Year ended 30th June, 1932.

DR.	£	s.	d.	£	s.	d.	CR.
To Division No. 1:							
Mornington	2,399	9	3				
Yarloop	3,499	12	1				
Ludlow	963	19	2				
Boranup	239	8	9				
Keenan's	4,043	10	0				
Harvey Weir	568	8	4				
Myalup	623	16	11				
General	1,512	19	2				
				13,851	3	8	
„ Division No. 2:							
Mundaring	4,002	5	10				
Gnangara	1,398	10	6				
Collier	670	10	3				
Applecross	851	6	0				
Scaddan	7	9	6				
Pardelup	923	19	2				
Pardelup (Suspense)	217	11	0				
General	1,102	1	0				
				9,173	13	3	
„ Division No. 3:							
Dwellingup	4,023	0	1				
Huntly	3,942	19	6				
Wuraming	1,324	0	6				
General	899	16	4				
				10,189	16	5	
„ Division No. 4:							
Collie	1,768	16	9				
Collie, South	3,234	9	3				
General	1,042	10	11				
				6,045	16	11	
„ Division No. 5:							
Jarrahwood	1,942	13	2				
Kirup	1,508	15	2				
Greenbushes	472	0	6				
General	1,110	14	11				
				5,034	3	9	
„ Division No. 6:							
Manjimup	3,881	14	3				
Nannup	720	3	0				
General	596	16	2				
				5,198	13	5	
„ Division No. 7:							
Narrogin	2,820	12	5				
General	465	1	1				
				3,285	13	6	
„ Division No. 8:							
Jarrahdale	2,036	5	10				
Karragullen	4,001	7	8				
General	826	11	2				
				6,864	4	8	
„ Training of Staff				95	3	2	
„ Research and Investigation				341	14	4	
„ Topographical Surveys				755	15	2	
„ General Silviculture				37	8	1	
„ Salaries and Allowances				3,777	14	7	
„ General Equipment				1,226	14	11	
				*£65,877	15	10	
							£65,877 15 10

*£45,454 2s. 0d. of this amount represents Unemployment Relief Expenditure from special loan funds made available for the purpose.

APPENDIX 2a.

Exports of Timber, Tanning Barks, Sandalwood and Essential Oils for the Year ended 30th June, 1932.

Item and Country of Destination.	Quantity.	Value.	Item and Country of Destination.	Quantity.	Value.
TIMBER—			WOOD MANUFACTURES—contd.		
<i>Dressed, N.E.I. :</i>			<i>Other :</i>		
Commonwealth of Australia	cubic feet. 523	£ 152	Commonwealth of Australia	...	4,206
United Kingdom	22,799	2,440	United Kingdom ... ..	...	3
British Malaya	3,333	450	Netherlands East Indies ...	...	1
Ceylon	2,858	288		...	4,210
India	73	8		...	
Mauritius	59	7	Total, Wood Manufactures	...	85,488
Territory of New Guinea	889	142		...	
Netherlands East Indies ...	910	92	Total, Timber and Wood	...	447,188
Sweden	314	32	Manufactures ... ..	...
	31,758	3,611			
<i>Undressed, Railway Sleepers :</i>			SANDALWOOD—		
United Kingdom	6,671	750		cwt.	
Ceylon	456,871	53,628	British Malaya	2,295	3,370
India	234	28	Ceylon	142	213
New Zealand	206,280	20,628	Hong Kong	19,542	28,351
South African Union	480,476	51,039	India	4,180	6,270
Portuguese East Africa ...	914	109	Japan	745	1,201
	1,151,446	126,182	Netherlands East Indies ...	814	1,141
				27,718	40,546
<i>Undressed, N.E.I. :</i>			TANNING BARK—		
(a) Commonwealth of Australia	431,694	54,496	Commonwealth of Australia	39,341	20,606
United Kingdom	784,633	96,258	United Kingdom	1	1
British Malaya	1,440	456	Germany	35,441	17,133
Ceylon	96,601	11,801	Netherlands	9,390	4,276
India	2,340	281		84,173	42,016
Malta	1,250	200			
Mauritius	34,027	4,093	ESSENTIAL OILS—		
New Zealand	138,523	16,713	<i>Non-Spirituos, N.E.I. :</i>		
South African Union	204,402	25,299	Commonwealth of Australia	...	3,633
Territory of New Guinea ...	28,279	3,459	United Kingdom ... ..	...	39,562
Portugese East Africa ...	8,246	990	Ceylon ... ..	...	28
Belgium	51,202	6,122	Hong Kong ... ..	...	2,938
China	5,055	627	India ... ..	...	105
Germany	14,676	1,869	China ... ..	...	2,632
Japan	32	8	France ... ..	...	2,200
Netherlands	77,069	9,235	Germany ... ..	...	2,960
	1,879,469	231,907	Japan ... ..	...	830
			Netherlands ... ..	...	1,700
Total, Timber Exports	...	361,700	Netherlands East Indies ...	...	2,391
			Philippine Islands ... ..	...	32
WOOD MANUFACTURES—			United States of America	...	23
<i>Casks and Shooks :</i>				...	59,034
(b) Commonwealth of Australia	...	72,370	<i>Eucalyptus :</i>		
Ceylon ... ..	...	8	British Malaya ... ..	...	109
British Malaya ... ..	...	6	United Kingdom ... ..	...	158
Netherlands East Indies ...	...	11		...	267
	...	72,395		...	
<i>Furniture :</i>			Total, All Exports ... ..	...	£589,051
Commonwealth of Australia	...	8,783			
United Kingdom ... ..	...	100			
	...	8,883			

(a) Value includes £545 of staves for which no quantity is shown. (b) Includes empty returns.

APPENDIX 2b.

Imports of Timber, Tanning Substances and Essential Oils for the Year ended 30th June, 1932.

Item and Country of Origin.	Quantity.	Value.	Item and Country of Origin.	Quantity.	Value.
TIMBER—	cubic ft.	£	WOOD MANUFACTURES—cont'd.		£
<i>Timber, Dressed—</i>			<i>Furniture :</i>		
<i>Architraves, Mouldings, etc. :</i>			Commonwealth of Australia ... ..	...	21,835
Commonwealth of Australia ... ..	...	1,044	United Kingdom ... ..	...	502
<i>Tongued and Grooved :</i>			British Malaya ... ..	...	5
New Zealand	125	3	South African Union ... ..	...	2
Norway	1,520	133	China ... ..	...	33
Sweden	12,693	1,106	Czecho Slovakia ... ..	...	4
	14,338	1,242	France ... ..	...	8
			Germany ... ..	...	196
			Italy ... ..	...	6
			United States of America ... ..	...	23
				...	22,614
<i>Timber Dressed, N.E.I. :</i>			<i>Plywood and Veneers :</i>		
(a) Commonwealth of Australia	2,392	761	Commonwealth of Australia ... ..	...	10,460
United Kingdom	15	4	United Kingdom ... ..	...	158
Norway	167	53	France ... ..	...	63
Sweden	538	176	Germany ... ..	...	6
Germany ... ..	...	4	Japan ... ..	...	149
(b) United States of America	722	200	Philippine Islands ... ..	...	28
	3,834	1,198	United States of America ... ..	...	33
				...	10,897
<i>Timber Undressed—</i>			<i>Spokes, Rims, and Felloes :</i>		
<i>Timber for making Boxes :</i>			Commonwealth of Australia	No.	
Commonwealth of Australia ... ..	...	2,317	... ..	23,181	1,602
British Malaya	7,724	666	United States of America	92	40
(c) New Zealand ... ..	...	865		23,273	1,642
Czecho-Slovakia	2,512	249	<i>Tool Handles (including Axe) :</i>		
Finland	824	62	Commonwealth of Australia ... ..	...	6,382
Latvia	30,851	2,213	United Kingdom ... ..	...	113
Netherlands	163	141	Canada ... ..	...	217
Norway	12,325	1,253	United States of America ... ..	...	1,752
Poland	5,021	502		...	8,464
Sweden	23,702	2,370	<i>Wood Manufactures, N.E.I. :</i>		
United States of America	22,517	1,188	Commonwealth of Australia ... ..	...	23,594
	...	11,826	United Kingdom ... ..	...	365
			Canada ... ..	...	77
<i>Timber Undressed, N.E.I.—</i>			New Zealand ... ..	...	1,274
Commonwealth of Australia	92,391	15,071	China ... ..	...	7
United Kingdom	2	10	Esthonia ... ..	...	39
New Zealand	18,261	4,207	France ... ..	...	9
China	91	36	Germany ... ..	...	86
Japan	221	108	Italy ... ..	...	36
Norway	832	240	Japan ... ..	...	28
Noumea	233	115	Latvia ... ..	...	1,223
Philippine Islands	2,023	550	Norway ... ..	...	7
Siam	94	65	Sweden ... ..	...	1,347
Sweden	3,525	1,284	Switzerland ... ..	...	38
United States of America	25,411	4,088	United States of America ... ..	...	149
	143,084	25,774		...	28,279
			Total Timber Imports	...	164,496
WOOD MANUFACTURES—					
<i>Barrels and Casks :</i>			TANNING BARK—	cwt.	
Commonwealth of Australia ... ..	...	49,308	Commonwealth of Australia	4,738	2,057
British Malaya ... ..	...	1	Territory of New Guinea	21	10
	...	49,309		4,759	2,067
<i>Clothes Pegs :</i>					
Commonwealth of Australia ... ..	...	2,190			
United Kingdom ... ..	...	3			
Germany ... ..	...	3			
Sweden ... ..	...	11			
	...	2,207			

(a) Value includes £55 for which no quantity is shown.

(b) Value includes £96 for which no quantity is shown.

(c) Value includes £845 for timber imported via Commonwealth States and for which no quantity is shown.

APPENDIX 3.

TIMBER INDUSTRY REGULATION ACT, 1926.

Annual Report, 1931.

With the temporary closing down of many sawmills, owing to scarcity of orders, very little work in connection with the administration of this Act has been necessary. The whole of the inspections on timber holdings and the investigations of accidents have been carried out by the District Inspector, who has also assisted forest officers in connection with timber inspections and other duties.

During the year 190 notifiable accidents were reported, one of which proved fatal. 137 inspections of timber holdings were made, and seven requisitions were served requiring attention to defects in plant, etc. The average number of person employed on timber holdings subject to the provisions of the Act dropped from 2,340 in the year 1930 to 1,253 for the year under review. The number of accidents that occurred to every 100 persons employed was 15.14, as compared with 21 for the previous year. The following returns have been prepared, but, owing to the cost of printing, have not been included in the report:—

- (1) Number of notifiable accidents reported in accordance with Section 14, according to months, and indicating the nationality and age of the person injured, the period of incapacity, the number of occasions on which the first aid outfit was used, and the monthly fatigue symbol during the year ending 31st December, 1931.
- (2) The number of notifiable accidents reported during the year 1931, according to months and days of the week on which the accidents happened.
- (3) By months, the time at which the notifiable accidents occurred.
- (4) The number of hours worked on the day and up to the times of sustaining the accidents by persons injured.
- (5) The number of accidents reported during the year 1931, classified according to the cause of accident and location of injury.
- (6) The number of accidents reported during the year 1931, classified according to the cause of accident and nature of injury.
- (7) The number of accidents reported during the year 1931, classified according to the location and nature of injury.
- (8) The personal cause of the accidents reported during the year ended 31st December, 1931, as determined by the District Inspector.

Perth, 22nd September, 1932.

S. L. KESSELL,
Controlling Officer.