

# Report of the Director of Forests for the Year ended 30th June, 1942.

TO THE HONOURABLE THE SECRETARY FOR PUBLIC LANDS.

Sir,—I have to present my report for the year ended 30th June, 1942.

The year under review saw a continuation of the previous year's heavy demand for timber for defence and essential uses, and increasing difficulty of supply, which were accentuated with Japan's entry into the war.

An unusually prolonged drought in South Queensland, ending in floods in February, added to the supply problems.

In view of the serious man-power position and restricted timber imports, the Federal Government found it necessary to declare the timber industry to be a protected industry—the first industry so declared—and then, in order to assist in making available the maximum amount of timber for defence and essential uses, the Federal Government restricted private building to a very considerable extent.

In order that the best use should be made of sawmill capacity and that available timber should be diverted to the most urgent needs, the Commonwealth Timber Controller delegated powers to this Department to act on his behalf in Queensland. The work involved rapidly increased, and the services of the Senior Forester, Mr. A. H. Crane, were then made available to the Federal Government to act as Deputy Timber Controller for Queensland.

A considerable quantity of logging plant of Departmental contractors in North Queensland was impressed for defence works, and much time has been lost because of difficulty in securing spare parts and tyres to maintain old plant, as little or no new logging plant could be obtained.

It is pleasing, therefore, to record that, despite all these tribulations, the cut of mill log timber from Crown lands amounted to 232,300,000 super. ft., which exceeds the previous figure by 4,500,000 super. ft. The total cut of milling timber from Crown and private lands was 331,900,000 super. ft., being 8,600,000 super. ft. greater than any previous total. Much credit is due to the whole industry, including Departmental staff, for a most meritorious performance.

The strength of the permanent staff of the Department was 140 at the end of the year, compared with 183 at the outbreak of war, but only 95 of the original staff remained on duty. During the year the wages staff has fallen from 1,210 to 579, making it very difficult adequately to supervise logging, to protect the forests, and to give access roads necessary attention. The man-power position has forced the suspension of further tree-planting.

At the outbreak of war, the policy was adopted of maintaining stumpage prices to prevent loss of revenue or unwarranted increases in the prices of sawn timber. Logging costs have increased, and in September, 1941, the first increase in key market log prices was made in order to cover the added logging costs.

Finally, it is interesting to record the fact that young pine plantations are now furnishing material for the war effort, 1,900,000 super. ft. of thinnings having been sold during the year, removals being well in hand at the end of the period.

## REFORESTATION.

"The most protracted, widespread, and serious fire season in the history of the Department" were the opening words of this report for 1940-41. As regards its length and scope, this reference now applies better to the 1941-42 season. Seven successive months of the late winter, spring, and summer were attended by almost record low rainfall. Fortunately, other extremes of temperature and high winds were absent. Losses from fire of treated natural forests did not amount to much more than 3 per cent. of the total treated areas, while plantation loss was confined to 42 acres.

In spite of paucity of rain until the end of January, the tubed plantings were completed only little behind schedule. Losses, though greater than normal, did not generally reduce establishment below a satisfactory figure, and refillings were necessary in few cases.

The reforestation programme was initiated for the year on a basis similar to that of last year. In January, however, in order to divert funds and man-power to war needs, it was necessary to effect considerable modification and reduction.

In brief, this amounts to the abandonment of further improvement work and concentration on a minimum programme dictated by the necessity of maintaining existing assets. Planting will be suspended for the duration of the war, tendings, apart from areas subject to lantana and bad

vines, will be confined to areas planted in the past three years, and pruning limited to stands on which the operation had been initiated.

Treatment and firebreak construction on natural forests will be kept down to a minimum. No new construction items will be attempted, surveys have been abandoned, and research limited to long-term established experiments.

Thinning operations in softwood plantations were suspended early following the outbreak of war, in view of the possibility of demand for these small sizes. Last year a small sale of *Pinus taeda* and *Pinus caribaea* thinnings was made, but the sale was not proceeded with. During 1941-42, however, three further sales were made, as follows:—

Ex Beerwah and Glasshouse Mountains—600,000 s. ft. (*P. taeda* and *P. caribaea*).  
Ex Benarkin and Blackbutt—800,000 s. ft. (*P. radiata*).  
Ex Pechey—500,000 s. ft. (*P. radiata*).

At the close of the year a sale of hoop pine thinnings ex Nanango was pending.

In the last few months of the year a number of non-refugee enemy aliens, incorporated as an auxiliary labour corps, were set to work on various works on the western forests.

The major operations of the year's programme were as follows:—

### 1. Plantations—

(a) Planting.—The total of new plantations established for the year was 2,992 acres, made up of:—

	Acres.
Hoop Pine .. .. .	2,161.3
Kauri .. .. .	254.4
<i>Pinus</i> spp. .. .. .	348.5
Eucalypt spp. .. .. .	218.9
Other .. .. .	9.1
<b>Total .. .. .</b>	<b>2,992.2</b>

These plantings bring the total areas planted as at 30th June, 1942, to:—

	Acres.
Softwoods .. .. .	29,494.3
Eucalypts .. .. .	2,270.0
Other .. .. .	448.2
<b>Total .. .. .</b>	<b>32,207.5</b>

(b) Pruning.—The total area covered in all operations amounted to 4,559 acres.

2. Nurseries and Seed.—Twenty-three nurseries were in plant production at the close of the year. Output to plantations for the twelve months totalled 1,795,000. Total stocks at the close of the year amounted to 5,622,000. It is proposed that plants ordinarily to be planted in 1942-43 will be composted and used for nursery bed improvement.

The first large collection of hoop pine seed since December, 1936, was possible this year. Collection amounted to 18 tons, all of which, with the exception of requirements for 1942 sowings, has been cold-stored.

3. Natural Forests.—The area of natural forests treated during the year was:—

Type of Forest.	Subjected to First Treatment.	Subjected to Other than First Treatment.	Total Treated.
	Acres.	Acres.	Acres.
Cypress Pine .. .. .	6,396	1,938	8,334
Hardwood .. .. .	13,205	28,125	39,330
Hoop Pine .. .. .	652	..	652
<b>Totals .. .. .</b>	<b>20,253</b>	<b>28,063</b>	<b>48,316</b>

This work raised the totals of areas treated at least once at 30th June, 1942, to:—

	Acres.
Softwoods (Cypress Pine—Hoop Pine) ..	167,044
Hardwoods .. .. .	259,306
Other .. .. .	405
<b>Totals .. .. .</b>	<b>426,755</b>

## 4. Protection.—

## (a) Firebreak operations—

(i.) Cleared Breaks—Western Forests—		Miles.
<i>Firebreak construction—</i>		
Cutting and grubbing .. .. .	.. .. .	54.0
Stacking and burning .. .. .	.. .. .	56.7
Grading .. .. .	.. .. .	8.0
Cutting auxiliary roads .. .. .	.. .. .	33.0
<i>Firebreak improvement—</i>		
Grubbing .. .. .	.. .. .	90.7
Grading .. .. .	.. .. .	236.7
2-chain green strip .. .. .	.. .. .	352.7
<i>Firebreak maintenance—</i>		
Sucker and burn .. .. .	.. .. .	1,143.5
Plough .. .. .	.. .. .	84.3
Grade .. .. .	.. .. .	428.9
(ii.) Green Breaks—Coastal Hardwood Forests—		
<i>Firebreak construction—</i>		
Felling dangerous trees .. .. .	.. .. .	79.7
Stacking .. .. .	.. .. .	33.7
Burning .. .. .	.. .. .	65.3
Chipping and/or ploughing .. .. .	.. .. .	38.1
Fire roads .. .. .	.. .. .	45.3
Grading .. .. .	.. .. .	23.0
<i>Firebreak maintenance—</i>		
Brushing .. .. .	.. .. .	282.4
Chipping and/or ploughing .. .. .	.. .. .	1,101.3
Burning .. .. .	.. .. .	1,029.0
Grading .. .. .	.. .. .	56.5
Roads .. .. .	.. .. .	217.0
(iii.) Cleared Breaks—Plantations—		
<i>Firebreak construction—</i>		
Temporary breaks for scrub burning .. .. .	.. .. .	40.6
Clearing .. .. .	.. .. .	25.1
Ploughing .. .. .	.. .. .	37.0
<i>Firebreak maintenance—</i>		
Chipping .. .. .	.. .. .	108.4
Ploughing and/or grading .. .. .	.. .. .	137.0

## (b) Fencing—

A total of 17.6 miles of fencing was erected for plantation protection.

5. *Capital Improvements.*—Apart from the expenditure of £2,914 on the maintenance of cottages, paddocks, phone lines, &c., the following new improvements were added:—

Two garages, 76 miles of phone line, 5 fire towers completed, 2 bunk huts, 1 seed drying shed.

6. *Expenditure and Labour.*—Total expenditure for 1941-42 on reforestation works was £227,080, made up as follows:—

	£
Plantations .. .. .	54,874
Natural regeneration .. .. .	14,974
Nurseries .. .. .	8,357
Protection (including fire fighting and patrol) .. .. .	66,329
Research .. .. .	2,743
Capital improvements .. .. .	9,661
Surveys .. .. .	1,875
Wet time holidays and leave .. .. .	19,519
Tools, tents, supervision, fodder, &c. .. .. .	34,310
Workers' compensation .. .. .	4,825
Pay roll tax .. .. .	4,878
Miscellaneous .. .. .	4,935
<b>Total .. .. .</b>	<b>£227,080</b>

This total excludes salaries. It includes overhead expenses in connection with the works being carried out by non-refugee enemy aliens, but excludes any payment to them of wages and allowances.

The number of men employed on reforestation works was, at 1st July, 1941, 1,020; at 30th June, 1942, 377 (excludes non-refugee enemy aliens).

Equivalent full-time employment for twelve months was provided for 708 men (excluding the equivalent of 15 men full time on contract work).

## RESEARCH WORK.

Because of the war-time necessity for restriction of operations, no new experimental work is now being carried

out. The more important established experiments are being carried through, and other work has been modified in accordance with circumstances.

On the basis of the experimental work carried out over the last ten years, a modified set of silvicultural instructions for hoop pine were drawn up, but because of the suspension of normal plantation operations issuance is being delayed.

There are also indications that the procedure adopted in the treatment of hardwood areas will require some modification.

## NATIONAL PARKS.

£4,871 were expended on work on National Parks. Four hundred and eighty-seven chains of graded track were constructed, but the principal work was maintenance of existing tracks; £334 were spent in patrols and general supervision.

## FOREST SURVEYS.

Survey work was greatly reduced at the beginning of 1942, when seven camps were disbanded, only one camp being maintained for location of timber stands for early logging for defence or essential purposes.

The total expenditure on surveys was £5,436, of which £4,832 was chargeable against the harvesting and marketing vote.

119,247 acres were closely inspected, 196,064 acres were assessed, and 150,675 acres were subjected to either soil or type survey.

Of the close inspections and assessments, the larger part was made in Central Queensland, where extensive areas were examined for location of commercial hardwood stands.

## FOREST RESERVATIONS.

At 30th June, 1942, there were 6,373,361 acres of forest reservation, as compared with 6,419,422 acres at the beginning of the year, the reduction being due to the recomputation of area of a timber reserve in the Molloy-Port Douglas district, parts of which have been released for selection from time to time.

Over the twelve months, the area of National Parks was increased by 5,227 acres.

Comparative figures are:—

	30th June, 1941.	30th June, 1942.
State Forests .. .. .	3,265,379	3,277,232
National Parks .. .. .	671,578	676,805
Timber Reserves .. .. .	3,154,044	3,096,129
	<b>7,091,001</b>	<b>7,050,166</b>

## HARVESTING AND MARKETING.

## GENERAL.

The total Crown mill log cut and gross receipts were the highest yet recorded. Figures for the year and the previous two years are:—

	1941-42.	1940-41.	1939-40.
Crown Mill Log Cut (sup. ft.) .. .. .	232,392,527	227,803,725	212,449,000
Net Revenue .. .. .	£439,678	£465,871	£397,652
Gross Receipts .. .. .	£959,320	£955,915	£888,360

The following table gives a comparison of milling logs cut on Crown and private lands for the last two years:—

	1940-41.				1941-42.			
	Crown.	Private.	Total.	Per Cent. of Crown to Total.	Crown.	Private.	Total.	Per Cent. of Crown to Total.
Hoop and Bunya Pine .. .. .	146,060,000	6,780,000	152,840,000	95.6	127,390,000	3,510,000	130,900,000	97.3
Kauri Pine .. .. .	9,580,000	760,000	10,340,000	92.6	12,010,000	610,000	12,620,000	95.2
Cypress Pine .. .. .	5,830,000	10,140,000	15,770,000	35.7	7,320,000	6,510,000	14,330,000	54.6
Hardwoods .. .. .	33,850,000	62,500,000	96,350,000	35.1	48,530,000	71,820,000	120,350,000	40.3
Cablnstwoods .. .. .	25,310,000	.. .. .	25,310,000	.. .. .	28,770,000	.. .. .	28,770,000	.. .. .
Secondaries .. .. .	7,380,000	15,190,000	22,570,000	68.3	9,690,000	17,160,000	26,850,000	68
<b>Totals .. .. .</b>	<b>227,810,000</b>	<b>95,370,000</b>	<b>323,180,000</b>	<b>70.4</b>	<b>232,210,000</b>	<b>99,610,000</b>	<b>331,820,000</b>	<b>70</b>
Plantation Timbers .. .. .	.. .. .	.. .. .	.. .. .	.. .. .	180,000	.. .. .	180,000	.. .. .
Imported Timbers .. .. .	.. .. .	.. .. .	2,090,000	.. .. .	.. .. .	.. .. .	750,000	.. .. .
Hardwood Sawn into Sleepers .. .. .	.. .. .	.. .. .	7,570,000	.. .. .	.. .. .	.. .. .	10,610,000	.. .. .
<b>Grand Totals .. .. .</b>	<b>227,810,000</b>	<b>95,370,000</b>	<b>323,180,000</b>	<b>.. .. .</b>	<b>232,390,000</b>	<b>99,610,000</b>	<b>348,860,000</b>	<b>.. .. .</b>

The hardwood log output from Crown lands was nearly 15,000,000 super. feet higher than any previous figure, and, for both Crown and private lands, was by some 19,000,000 super. feet the greatest on record.

The table illustrates the State's almost complete dependence on Crown forests for pine supplies, and also indicates that Crown forests are expected to produce a greater proportion of a much increased demand for hardwood.

The cut of hoop and bunya pine shows a decrease, which, in view of the difficulties encountered, can be understood—of the 127,390,000 super. feet cut, 9,860,000 were ply logs, 63,010,000 mill logs, and 54,520,000 super. feet tops.

#### VENEERS AND PLYWOOD.

Sales through the Plywood and Veneer Board were:—

Market.	South Queensland.		North Queensland.	
	Square feet 3/16 inch basis.	Value.	Square feet 3/16 inch basis.	Value.
Queensland..	8,980,825	£ 73,673	889,360	£ 7,263
Interstate ..	43,857,225	359,779	13,498,170	110,227
Overseas ..	1,608,030	13,190	2,774,750	22,668

This represents mainly pine plywood.

Returns available from veneer and plywood mills show the following approximate total quantities treated and produced:—

Logs treated—33,400,000 super. ft.  
Plywood produced 3/16 inch basis—61,200,000 sq. ft.  
Veneers produced 1/16 inch basis—98,400,000 sq. ft.

#### NORTH QUEENSLAND TIMBERS.

The district forester for North Queensland reports that, despite the fact that much of the North Queensland logging contractors' plant has been impressed for defence purposes, a record quantity of Crown logs was marketed. The total quantity marketed was 47,803,328 super. feet, compared with the previous highest sales of 39,793,664 super. feet. Increased orders for specially selected maple logs for air-screws, rifle furniture, and pontoon manufacture were met; the sales of this species being 7,616,248 super. feet—an increase of 2,295,672 super. feet over the previous year. To meet all orders for specially selected maple, it was necessary to secure some supplies from private lands. Towards the end of the year, the Department discontinued the logging of walnut which is used for ornamental furniture.

The following table shows the quantities of various species cut for the past two years:—

Species.	1940-41.	1941-42.
Kauri Pine ..	9,583,865	11,958,825
Maple ..	5,320,576	7,616,248
Walnut ..	1,864,076	1,632,513
Silky Oak ..	11,966,058	12,930,807
Hickory ..	1,018,671	1,369,288
Other Cabinetwoods	2,292,780	3,083,991
Scrubwoods ..	7,015,376	7,826,914

#### CONSTRUCTIONAL TIMBERS (Round and Squared).

Operations on constructional timbers under Departmental contractors were well maintained and cutters were provided with constant employment throughout the year. There was a heavy demand from the Railway Department for sleepers and other permanent-way timbers. In addition, a special army order of 70,000 6-foot sleepers for overseas was supplied.

A comparison of major supplies cut under Departmental contracts with the two previous years is as follows:—

Specification.	1939-40.	1940-41.	1941-42.
Sleepers .. .. (pieces)	224,048	293,251	306,209
Crossings .. .. (super. feet)	77,070	275,855	246,425
Transoms .. .. (super. feet)	170,191	283,122	349,451
Bridge Timbers .. (lineal feet)	113,647	38,999	93,850

In this table sleepers include sleeper blocks converted to sleepers according to number yielded.

The following table shows the total quantity of constructional timbers and miscellaneous items sold by this

Department both at stump and from operations of Departmental contractors for the year:—

Sleepers .. ..	289,081 pieces
Sleeper Blocks .. ..	174,617 pieces
Headstocks, Crossings, and Transoms ..	781,183 superficial feet
Girders, Corbels, Piles, Sills .. ..	244,685 lineal feet
Poles .. ..	200,617 lineal feet
House-blocks .. ..	113,717 lineal feet
Fencing Material .. ..	108,054 lineal feet 37,337 pieces
Hewn and Bridge Timbers .. ..	75,530 superficial feet 24,991 lineal feet
Mining Timbers .. ..	889,805 lineal feet 59,439 pieces
Fuel .. ..	75,699 tons
Rosewood .. ..	97 tons
Mulga Bark .. ..	15 tons
Sand .. ..	13,416 cubic yards
Gravel .. ..	2,086 cubic yards
Soil .. ..	2,369 cubic yards
Stone .. ..	815 cubic yards
Charcoal .. ..	39,023 bags
Plants .. ..	1,630

#### LOGGING.

As mentioned earlier, shortage of man-power, due to requirements for defence, made logging operations more difficult than previously.

The Department is pleased to note the continuation of the co-operation of the Liquid Fuel Board, ensuring sufficient supplies of petrol to allow of our remaining logging plants working full time.

During the year timber-getters were given a new award by the Arbitration Court, which, while improving pay and conditions of the men, will also tend to make the industry more attractive to those engaged in it.

The quantities hauled and payments to logging contractors are as follows:—

	Super. Feet.	Amount Paid.
Southern Queensland .. ..	83,018,785	£ 233,731 1 6
Northern Queensland .. ..	29,971,577	118,609 17 2
		£352,340 18 8

#### LOGGING ROADS.

Expenditure on logging roads, both in new construction to make accessible further areas, and in the maintenance of existing roads, amounted to £39,381, made up as follows:—

	£
H. and M. Fund .. ..	38,803
Special Employment Works Fund .. ..	578
	£39,381

The above figures exclude expenditure by P.E.I. on Forestry roads not charged to Forestry funds, and amounting to approximately £52,000.

#### SAWMILL LICENSES.

At 30th June, 1942, there were 515 sawmill licenses in force, of which 425 were for general milling, and 90 restricted licenses. Of the latter, 47 were for resawing, 10 for cases only, 11 for sleepers only, and 22 otherwise restricted. Nine cases were under review.

#### OFFENCES.

One hundred and thirty-six offences were reported. Proceedings were instituted in 39 cases, and fines totalling £157 6s. imposed. In 62 cases royalty was collected or the timber seized and sold, and warnings issued.

In 21 cases of minor offences warnings only were issued, whilst in 14 cases there was not sufficient evidence for action to be taken. In all cases revenue to the extent of £333 was recovered.

#### FOREST PRODUCTS INVESTIGATIONS.

This work has been drastically curtailed during the year. Out of six officers engaged in technical work at the outbreak of war, five are now occupied in important other activities, such as producer gas research and timber control duties for the Commonwealth Government.

Charcoal research and production have formed the major part of the work of the Investigations Section. Research was concentrated on improving charcoal quality and burning methods. A vented pit was designed and developed for commercial use, private burners were assisted by advice, and developments in production method were summarised with a view to publication of up-to-date data.

At the request of the Co-ordinator-General of Public Works, the Department undertook the building-up of reserve stocks of charcoal for producer gas purposes. By 30th June, 1942, some 39 pits had been established and 27,500 bags of charcoal produced, a further 17,200 bags being purchased from private pit owners.

The Department has continued as far as possible advisory activities on seasoning, timber utilisation, and preservation, and in this direction has given preference to matters having a bearing on the war effort. The Department's seasoning kilns are being used for drying timbers required for defence and allied purposes.

Work on borer control was continued, with useful results.

#### EXPENDITURE.

Total expenditure for the year was £814,724, subdivided as follows:—

	Revenue.	Loan.	Trust.
	£	£	£
Salaries .. .. .	37,637	10,172	..
Extra Living Allowance .. .. .	813	..	..
Travelling and Incidentals .. .. .	5,792	..	..
Reforestation .. .. .	193,080	34,000	..
National Parks .. .. .	5,295	..	..
Harvesting and Marketing—			
Log Timber .. .. .	..	..	406,928
Hewn, Split, and Pole Timber .. .. .	..	..	81,716
Roads .. .. .	577	..	88,804
	£248,104	£44,172	£527,448

#### CONCLUSION.

I have to acknowledge a loyal and sustained effort on the part of officers during the year.

I have the honour to be, Sir,

Yours faithfully,

V. GRENNING,  
Director of Forests.