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QUEENSLAND.

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ANNUAL REPORT

OF THE

SUB-DEPARTMENT OF FORESTRY

FOR THE

YEAR 1956-57.

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**RAW MATERIAL OF INDUSTRY ON THE ROAD.**

Hauling hardwood logs on a Forest Service built road. 221,366,000 super. ft. of mill logs were cut on Crown lands in 1956-57.

# Report of the Director of Forests for the Year ended 30th June, 1957.

## INTRODUCTION.

The main aim of Forestry is the production of timber to meet the needs of the people of the State.

Queensland has a well developed and prosperous sawmilling and ply making industry which requires, annually, a quantity of between 400 and 500 million super. feet of log timber for its support. This industry is of tremendous economic value to Queensland and it is the responsibility of the Department to provide for its needs. The meeting of this responsibility is the more difficult because, at the present time, approximately 50 per cent. of the logs cut by sawmills comes from private lands.

With the destruction and depletion of our natural forests, there has followed a demand for an adequate programme of forestry works to replace and replenish these forests.

This programme requires two main essentials for its successful fulfilment :

- (1) a continuous and adequate yearly appropriation of funds ;
- (2) an adequate area of reservations set aside permanently for the production of timber.

Whilst a sound foundation has been laid for the future timber requirements of the State, there is a big job still to be done.

It is regretted that last year the funds available for reforestation works were considerably less than for the previous year, with the result the labour force was reduced by the equivalent of over 300 man years. Naturally this had a very detrimental effect on the amount of reforestation work carried out. Undue risks in the protection of the forests against fire have also been enforced because of lack of funds.

Forestry is a long distance project, requiring forward planning, and any sudden reduction in funds must result in inefficiency and waste of money and effort. A regular programme of annual plantation establishment requires increasing funds because of mounting maintenance costs. Any system of annual allocation which may involve serious reduction in funds must be uneconomical.

The cut of timber from Crown lands was well maintained at 221,000,000 super. feet of mill logs. However, an examination of the ability of the forests of Queensland to continue to supply the whole of the State's timber needs, as they have in the past, gives cause for serious concern. Over the past 5 years, the average cut of mill logs each year from the forests of the State has been 430,000,000 super. feet of which 48 per cent. has come from private land, 33 per cent. from State Forests and 19 per cent. from other Crown areas. Very little of the private forest area is being protected and managed for the permanent production of timber. Much of this land is being converted to other use, and large areas are being destructively logged.

In pre-war days the major type of timber logged in Queensland was pine (Hoop, Bunya and Kauri), but since the war hardwood is, by far, the main class of timber milled. Of recent years the annual mill log cut of hardwood has averaged 230,000,000 super. feet, of which approximately 70 per cent. comes from private land, 20 per cent. from State Forests and 10 per cent. from other Crown areas. Already the annual output from private forests has fallen by nearly 30,000,000 super. feet from the peak cut in 1951-52, and it can be expected to fall very markedly over the next ten years. The State Forests are being managed on a sustained yield basis, and the annual production cannot be appreciably increased in the near future. It is important that all hardwood forest, on State Forests, that is of high growth capacity and is economically accessible, should be given silvicultural treatment to bring these areas to full production as soon as possible. 1,000,000 acres should be dealt with at the earliest possible date.

The average cut of cypress pine for the past 5 years has been 52,000,000 super. feet, of which 50 per cent. was from private forests, 24 per cent. from State Forests and 26 per cent. from other Crown areas, mainly leasehold areas. There is little prospect of the output from private land being maintained, whilst the cut from State Forests cannot be increased and sustained until the result of protection and silvicultural work becomes effective. All Cypress Pine forests within State Forest reservations should be brought within a protection system at the earliest date and given regeneration and improvement treatment. Leased areas carrying good stands of Cypress Pine, warranting permanent reservation, should be made State Forests as soon as possible. Many mills depend on these leasehold lands for their supplies and they can only be maintained in the Industry if the pine is protected from destructive fires, ringbarking and wasteful utilisation.

The cabinet woods and miscellaneous species are grown mainly in North Queensland. The mills in Townsville and further north have cut an average of about 100,000,000 super. feet per year for the last five years. Of this, 40 per cent. was obtained from private land, 15 per cent. from State Forests and 45 per cent. from other Crown areas. The best use to which practically the whole of the last category could be put is timber production and watershed protection. These Crown areas should be permanently reserved as State Forests, to be managed as protection and production forest. If the northern industry is to be maintained, early action in this regard is called for. In addition, greatly expanded silvicultural treatment work, in accordance with recently developed technique, must be carried out on the most accessible and productive areas of State Forests, in order to obtain maximum production of the high quality species as soon as possible.

The fact that the natural stands of Hoop, Bunya, and Kauri Pine are fast approaching extinction, is well known. However, action is now well in hand to make good, eventually, the shortage of pine. If the present softwood plantation programme of a minimum annual planting of 5,000 acres per annum can be maintained, Queensland, in 20 years' time, will be producing as much pine as ever in the past. The declining cut in Hoop and Bunya Pine over recent years has been replaced by hardwood and miscellaneous species to the extent of approximately 100 million super. feet per year. However, with falling production of these species, increasing pine production from plantations is necessary, not only to meet the growing demands of an increasing population, but to make good deficiencies in overall supplies of hardwood and miscellaneous species. Plantations will also be required to provide raw material for the growing demands of the pulping industries.

The position may be summed up in the following three main points :

- (1) Assured and increasing appropriations are necessary so that all areas which, in the interests of the State, should be used for timber growing are brought to full production at the earliest date.
- (2) Private lands are at present supplying approximately 50 per cent. of the log cut of sawmills but these areas are being rapidly cut out and the Industry will look to the Crown to meet the lag.
- (3) Further State Forest reservations are necessary so that there will be sufficient suitable land to provide—
  - (a) not less than 200,000 acres of softwood plantations ;
  - (b) 2,000,000 acres of treated hardwood and Cypress Pine forest and North Queensland rain forest.

The growing of timber is a primary industry of the first order, providing an essential product and affording employment to a large number of men. It is the responsibility of the Department to ensure the permanency of this Industry.

### REFORESTATION.

#### Management.

A reduction in funds available for reforestation works necessitated a reduction in wages staffing by several hundred men. Expenditure was £158,000 less than in 1955-56 and only by very heavy curtailment of work on the natural hardwood and cypress pine areas was it possible to maintain a softwood planting of 5,300 acres, which was 800 acres below the previous year's figure. All of the natural regeneration areas were reduced to skeleton staffing in many cases insufficient to ensure adequate fire protection. This resulted in only 15,600 acres of natural forest receiving a silvicultural treatment—the lowest total for many years.

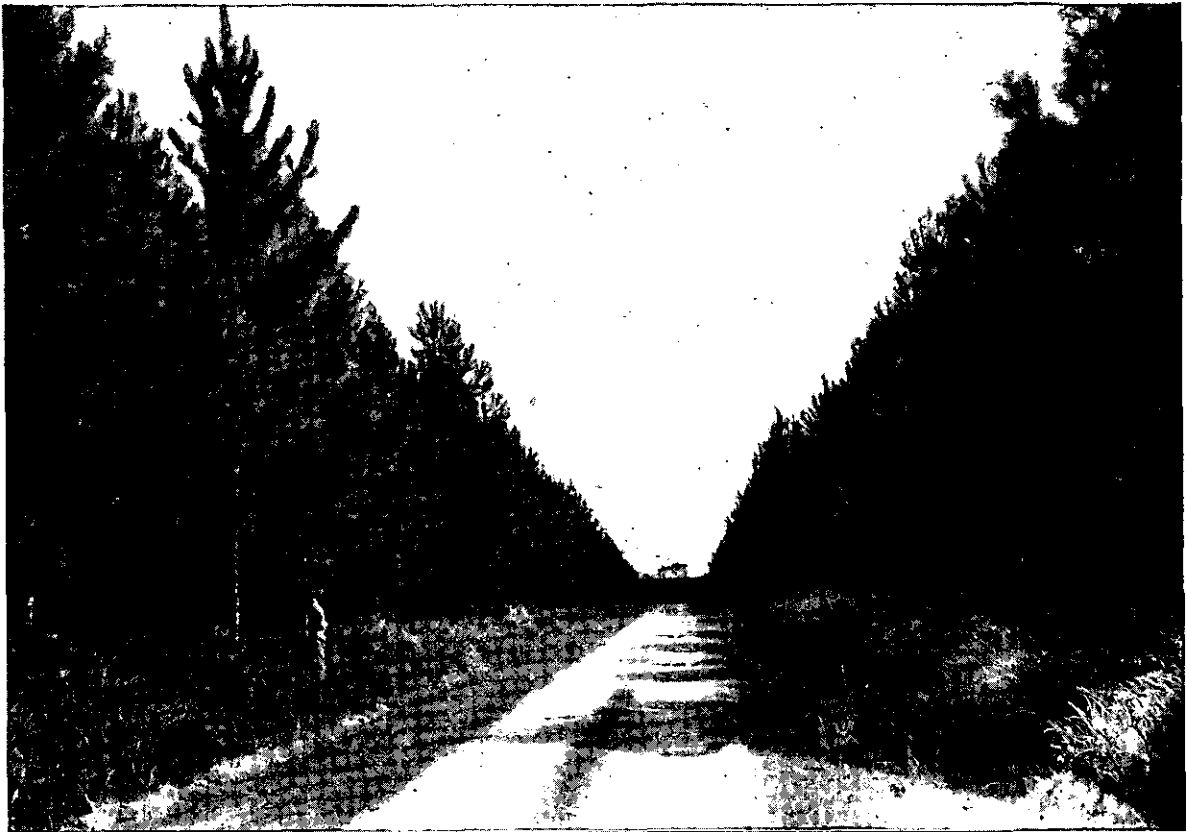
Fire protection works have progressed to the stage where almost 1,500,000 acres of State Forests are intensively protected by 5,700 miles of firebreaks, but much work in this direction has still to be done as this represents only 20 per cent. of the State Forest area.

Within the area protected, barely one-third has received a silvicultural treatment and this gap should be bridged at the very earliest.

The wealth that is represented in the natural forests of the State is not generally appreciated. On one Cypress Pine area of about 100,000 acres a recent estimate placed the standing value of the merchantable sized trees at over £1,000,000 to which must be added the potential value of the smaller size classes. This figure can be multiplied many times if all reserved areas are considered. Cypress Pine is very susceptible to fire and, therefore, such an asset demands urgent expenditure on its complete protection and care.

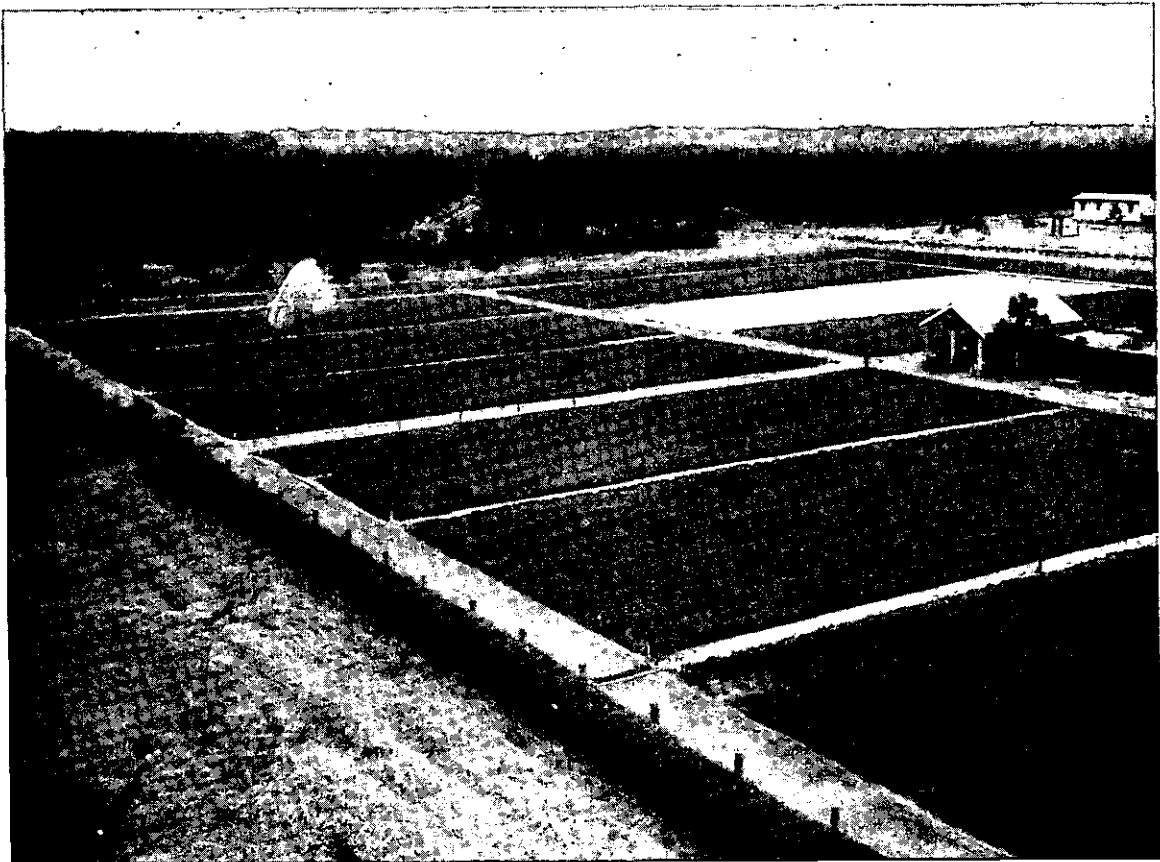
In spite of the long protracted fire season, which extended right through the normally wet period, fire loss was extremely light. It was only by chance that this long dry period was not attended by severely fire hazardous conditions of high temperatures and strong winds, otherwise the loss by fire could have been particularly high.

A measuring stick for assessing effectiveness of fire organisation is difficult to find, but it is considered that the results of the post-war years point to a high degree having been achieved in this respect.



**A POST-WAR DEVELOPMENT.**

Since the war 11,375 acres of pine plantation have been established on the Coastal Wallum lands between Gympie and Maryborough. This Slash pine is 9 years old.



**PORTION OF A FOREST SERVICE EXOTIC PINE NURSERY.**

3,039,000 trees were produced last year from 27 nurseries and 7,826,000 trees remained in stock at the end of the year.

Mention has been made above of the 5,700 miles of firebreaks that have been constructed. A trafficable road is an integral part of the firebreak system. Add to this the roads constructed primarily for access for timber logging and it will be appreciated that road building and maintenance occupy a large part in the Department's operations. This aspect has not previously been emphasised but each year the Department constructs about 100 miles of roads and maintains over 6,500 miles. This involves major expenditure in plant, and later in the report is set out the extent of this Department's equipment. Though extensive, there are marked shortages in certain items that must be rectified at the earliest possible moment.

The cut of plantation thinnings totalled 20,279,880 super. feet and this figure would have been exceeded but for a partial slump towards the end of the year. One of the large operators of Hoop Pine thinnings was also out of production for a period of three months whilst the thinning mill was being remodelled to cope with an increased annual cut.

The total cut is made up as follows :

	1955-56.	1956-57.
	Sup. ft.	Sup. ft.
Native Conifers .. .. .	13,988,449	15,208,472
Exotic Conifers .. .. .	5,738,130	5,028,669
Other species .. .. .	13,453	42,739
	<u>19,740,032</u>	<u>20,279,880</u>

It will be noted that the cut of native conifers increased by nearly one and a-quarter million superficial feet as compared with 1955-56 whilst the cut of exotic conifers decreased by nearly three-quarters of a million superficial feet. The total cut of plantation thinnings is now 123,193,539 super. feet.

Permanent plot inventory work was expanded by the formation of additional camps.

Details of the silvicultural and protection works carried out are given later.

#### Silviculture.

In contrast with 1955-56 the year just closed has been one of rainfall generally well below average. Some centres fared better than others, for example, Yarraman with 2,502 points was only 4 inches below average whilst Beerwah with 2,959 points was 32 inches below. Good rains were experienced during December at all centres, but the previous five months and the succeeding six months did not produce any falls of consequence. The dry spring and early summer of 1956 enabled good scrub burns to be secured and in the bulk of the Hoop Pine areas planting was completed before Christmas. Weed growth on the new Hoop Pine area was below average and, despite the lack of abundant soil moisture, establishment and growth of the newly planted Hoop Pine has been satisfactory. Some drought losses were sustained in a few first year areas and also in some third and fourth year areas.

Generally, the winter 1956 planting of exotic pines has stood up to the dry year particularly well, but the absence of good early winter rains in 1957 delayed the commencement of that year's planting until late June. Lack of rain plus shortage of water affected the yield of planting stock from at least three of the exotic pine nurseries but sufficient stock has been available to meet all our own requirements plus a small surplus for sale to the public.

Weather conditions were favourable for the carrying out of a larger programme of Reforestation work than usual but a reduction in funds compelled a reduction in the amount of work that could be undertaken.

Details of the year's work are as follows : Information for 1955-56 is also given.

	1955-56.	1956-57.
	Acres.	Acres.
Area of natural forest treated ... ..	25,345	15,829
Area of plantations established .. ..	6,198	5,344
Area covered in pruning .. .. .	6,961	9,276
Area tended .. .. .	53,520	61,274
Area thinned merchantably .. .. .	2,576	2,651
Area thinned unmerchantably .. .. .	1,986	3,918

It will be noted that there has been a marked decrease in the acreage of natural forest treated. A reduction in funds naturally results in a reduction in staffing and as the bulk of these reductions took place in the staffs of the hardwood and Cypress Pine areas, the amount of work carried out by those centres suffered. Staffs of the plantation areas also suffered some reduction but favourable weather conditions offset this to a large extent and, apart from the acreage of new plantations established, the amount of work carried out was actually in excess of that for 1955-56.

*Plantations.*

Appendix I. shows, by districts and species, the areas planted from 1st April, 1956, to 31st March, 1957. The area planted for this period is 5,344 acres made up as follows :

	Acres.
Native Conifers (chiefly Hoop Pino) .. .. .	1,680
Exotic Conifers (mainly Slash Pine, <i>P. patula</i> , <i>P. caribaea</i> and <i>P. radiata</i> ) .. .. .	3,636
Broadleaved species .. .. .	0.4
Eucalypts .. .. .	27.6
	5,344.0

As mentioned previously, survival and early growth has been good. The total area of effective plantations, all species, established to 31st March, 1957, is 78,815 acres, of which native conifers account for 41,032 acres and exotic conifers for 33,596 acres.

Scrub and forest burns were generally successful although some damage was sustained by adjoining scrub firebreaks.

Following on the trial, last year, of pushing a small area of scrub with a dozer, arrangements were made this year to have two areas, one of 94 acres and one of 96 acres, in the Yarraman district similarly treated. Costs to the end of the financial year would indicate that, even in a good burning year, this method of handling scrub is not as economical as falling by axe and saw. The area of scrub that can be handled by machines is limited by the need for reasonably easy topography and it is considered that in a wet year pushed areas would be difficult to burn. Further trials with this method of scrub clearing will be carried out during 1957-58.

The dry weather was of great assistance in enabling the tending of first year areas to be carried out economically and to enable the tending of all older areas to be kept up to date. Lantana is still a major problem in the Mary Valley plantations and to a lesser extent in other Hoop Pine areas—it is still our most troublesome weed. The problem of controlling the White Moth Vine (*Araujia albens*) in the Yarraman district is still unsolved and the task of keeping it under control in other Hoop Pine districts is yearly becoming more expensive. The eradication of groundsel in the coastal exotic pine areas and the control of dense wattle on old cultivations within such areas are two of the major weed problems with exotic conifers.

The total area tended for the year was 61,274 acres, an increase of 7,754 acres on the area covered in 1956-57.

As mentioned last year, the pruning position is still satisfactory and is up to date in all districts. The area covered during the year is as follows :

	Acres.
First operation .. .. .	4,390
Second operation .. .. .	2,054
Third operation .. .. .	2,204
Fourth operation .. .. .	628
	9,276

In addition, 992 acres of plantations were covered for the removal of epicormic shoots.

In Queensland, all pruning, other than the first operation, is carried out from wooden ladders of 8 feet, 12 feet, and 14 feet in length. During the year efforts have been made to secure a light and more economical type of ladder but, so far, no satisfactory substitute for the wooden ladder has been found.

Unmerchantable thinnings in all exotic pine plantings were continued during the year and 3,918 acres of plantations were so thinned.

The thinning is carried out when the plantations are about four years of age and aims at reducing the stocking to 400 stems per acre by the removal of the poorest stems.

Rat damage to Hoop Pine plantations was again experienced during the winter and early spring of 1956, and although the losses sustained were fewer than for 1955 the following figures will give some idea of the seriousness of rat damage in the two major centres of attack :

District.	Acreage attacked.	Trees Killed.	Trees Damaged.
	Acres.		
Yarraman .. .. .	2,175	23,818	28,830
Murgon .. .. .	1,334	11,856	65,060

The cost of patrols, trappings, baiting, and standing up and firming damaged trees in these districts is as follows :

	£	s.	d.
Yarraman .. .. .	3,468	9	11
Murgon .. .. .	3,360	16	3



SEED MOVEMENTS, 1956-57.

Species.	Intake.				Distribution.						Stock 30-6-57.			
	Department Collection.	Private Sources.	Other States.	Overseas.	Department Nurseries.	Brisbane Nursery.	Private Persons.	Other States.	Overseas.	Viability Tests.				
	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.	lb. oz.			
<i>Araucaria cunninghamii</i>	..	..	..	..	6,780 0	..	..	..	..	2 12	4 0	40 7	30 0	39,241 0
<i>Pinus aliioti</i>	697 6	..	..	..	367 4	..	..	..	..	14 3	88 11	137 12	1 4	1,327 7
<i>Pinus caribaea</i>	..	..	..	..	7 10	..	..	..	..	..	0 4	5 4	0 2	36 3
<i>Pinus patula</i>	..	..	..	..	10 15	..	..	..	..	0 4	..	12 8	0 14	59 6
<i>Pinus radiata</i>	..	..	..	..	28 8	..	..	..	..	..	..	..	0 8	123 6
<i>Pinus taeda</i>	..	..	..	..	7 4	..	..	..	..	7 1	..	47 6	0 10	777 9
Miscellaneous--														
<i>Pinus</i> species	21 2	..	..	4 0	7 10	..	..	..	..	0 2	..	1 0	0 12	240 3
Eucalypts	30 0	..	0 12	0 4	6 3	0 15	1 4	1 8	29 9	..	..	..	0 7	103 13
Miscellaneous species	319 5	0 8	0 5	40 8	33 0	20 13	2 9	9 10	49 11	..	..	..	1 2	1,623 14
Totals	1,502 11	0 8	1 1	44 12	7,248 6	21 12	28 3	104 1	323 9	35 11	43,532 13			

Rat attack commenced in June, 1956, and continued until November, 1956, with a peak period from late August to early September. Indications for the year 1957-58 are promising as at the end of June rat population and damage were considerably below that for the same month in 1956. Experts from the Department of Agriculture and Stock, who have been handling the problem since 1951, are of the opinion that the plague is passing and that very little damage should be sustained during 1957-58.

#### Seed Collection and Stocks.

(a) *Araucaria cunninghamii*.—A survey made in October–November, 1956, of the Hoop Pine seed crop which matured in December, 1956, showed that the crop was light and scattered in both scrub and plantation and no collection was made.

Because of the usual reduction in viability of 5–10 per cent. during the year and the normal disposal of seed in Departmental sowings and elsewhere, the stocks of seed of higher viability were considerably reduced during the year.

It is expected that a large collection, the first since 1953, will be made in December, 1957.

At 30th June, 1957, stocks of Hoop Pine seed held in storage were :

L.G.C.							Amount.
							lb.
-20 per cent.	..	..	..	..	..	..	25,921
20-30 per cent.	..	..	..	..	..	..	7,534
30-40 per cent.	..	..	..	..	..	..	4,368
40 + per cent.	..	..	..	..	..	..	1,418
							39,241

(b) *Pinus* species.—A collection of just over 1,000 lb. was made, representing a number of species but, in the main, *P. elliotii* var. *elliotii*, *P. taeda*, *P. radiata* and *P. patula*.

Over 300 lb. of the total collection was from the specially selected seed trees which have been carefully chosen, graded, marked and permanently located.

No collection of *P. caribaea* seed has yet been made from plantation trees, but it is expected that it will not be very long before home production will supply our increasing needs for seed of this species.

A total of 325 lb. of seed of *Pinus* species was exported.

Annual collection of requirements in most of these species is possible, so it is not necessary to hold large stocks.

(c) Eucalypts and Miscellaneous Species.—A steady demand for these species was maintained by overseas and local buyers and collections to supply this and Departmental requirements were made.

Seed of all species to the value of £850 was exported during the year.

The schedule on page 6 gives details of seed movement for the year.

#### Nurseries.

At the commencement of the year there were 29 nurseries in production but, of these, one Hoop Pine nursery has been closed down and two other Hoop Pine nurseries did not produce stock. The number of nurseries in production may now be regarded as 27, comprising 18 Hoop Pine nurseries, seven exotic pine nurseries, one producing Eucalypts and one in Brisbane producing stock of various species for supply to the public.

The cost of producing Hoop Pine planting stock is high, especially in the smaller nurseries, and consideration is now being given to closing down a number of these and securing stock for the areas they serve from a nearby larger nursery. The total nursery capacity in respect of Hoop Pine is greater than funds and labour will allow to be utilised.

The use of filter press in lieu of animal manure was adopted for Hoop Pine nurseries—experimental results indicating the suitability of the material as a manure. In those areas where animal manure is cheaply and readily available its use is being continued. Filter press continues to give satisfactory results with the exotic conifers but there are indications that the rate of application may have to be increased.

As mentioned earlier, the dry season had some effect on the yield of planting stock from at least three of the exotic pine nurseries. It is possible, however, that had the rate of application of filter press been at a higher rate the yield would have been satisfactory.

"Chlorosis" also affected the yield of *Pinus elliottii* from the Passchendaele nursery and, to date, it has not been possible to definitely determine the cause of the trouble and to apply corrective measures.

Generally, it may be said that the quality of the planting stock from all nurseries was satisfactory.

The number of plants on hand at 30th June, 1957, totalled 7,826,000 while during the year 3,039,000 plants were despatched to plantations, school forest plots and supplied to the public.

#### *Regeneration Treatment of Natural Forest.*

Due to the reduction in funds for the year and the desire to maintain a reasonable planting programme, it was necessary to reduce to a minimum the wages staff on the hardwood and Cypress Pine forests. As a result, the total acreage of natural hardwood and Cypress Pine forest recovery treatment during the year fell to the low figure of 15,600 acres.

Treatment of North Queensland rain forests was also lower than for the previous year—logging difficulties and shortage of trained staff to carry out the work being the principal factors responsible for the reduction.

Details of the acreage of various forest types treated for 1956–57 and for the previous year are :

	1955–56.	1956–57.
	Acres.	Acres.
Eucalypt Forest .. .. .	12,710	9,329
Cypress Pine .. .. .	11,845	6,322
Tropical Rain Forest .. .. .	790	178
Natural Hoop Pine .. .. .	..	..
	<hr/>	<hr/>
	25,345	15,829

It is to be regretted that the acreage of natural forest being treated each year is steadily falling. Even in years when ample funds are available, the remoteness of the larger Cypress Pine and hardwood forests from the larger towns, and their isolation, renders it most difficult to retain staff at a level high enough to enable large areas to be treated. At the moment no solution to the problem is envisaged.

#### *Supply of Trees to the Public.*

Sales to the public totalled 187,640 trees, a reduction of over 37,000 on the number sold last year. The dry winter of 1957 caused a number of purchasers to cancel their orders and had winter planting conditions been normal the number of sales would have exceeded 250,000.

The dry conditions prevailing over the greater part of the year also affected the sale of miscellaneous species from the Rocklea (Brisbane) nursery.

Distribution of sales by species and by purchasers is as follows :

By Species.		By Purchasers.	
Slash Pine .. .. .	84,020	Farmers .. .. .	124,998
<i>Pinus taeda</i> .. .. .	3,598	Schools .. .. .	5,930
<i>Pinus patula</i> .. .. .	9,705	Private .. .. .	50,882
<i>Pinus radiata</i> .. .. .	17,431	Government Depart- ments .. .. .	5,830
Hoop Pine .. .. .	32,409		
Miscellaneous .. .. .	40,477		
	<hr/>		<hr/>
	187,640		187,640

Sales of miscellaneous species from the Rocklea nursery totalled 30,690 of a cash value of £1,427 0s. 3d.

#### **Silvicultural Research.**

*Staff.*—The staff position was unchanged during the year, the number of trained officers engaged wholly on Silvicultural Research being maintained at 10, located as follows: North Queensland (3), Mary Valley (1), Beerwah (2), Brisbane Valley (1), Dalby (1), Head Office (2).

*Field Work.*—(i.) *North Queensland.* The results of silvicultural treatment following logging in tropical rain forest are shown in an experiment at R. 185 Danbulla which was remeasured this year. Two 1-acre plots are involved, the control having received no treatment other than logging, while the other was treated in accordance with the rules formulated in 1946. The initial treatment was completed in 1950 and subsequently useless species were brushed in 1952. In April, 1957, a further treatment was applied, aimed at promoting the growth of regeneration of better quality species which the 1950 treatment had secured.

Growth data up to 1957 is summarised below :—

(a) Average annual girth increment for the more important species—

Species.	Plot.	G.B.H. Class.					
		0-12".	12-24".	24-36".	36-48".	48-60".	60-72".
<i>Agathis palmerstoni</i> .. ..	Treated ..	1.6" (2)	1.6" (4)	..	..	..	..
	Control ..	0" (1)	..	..	..	..	..
<i>Flindersia bourjotiana</i> ..	Treated ..	1.04" (9)	1.28" (3)	0.64" (2)	0.35" (1)	..	..
	Control ..	..	0.5" (2)	..	0.5" (1)	0.8" (1)	..
<i>Darlingea spectatissima</i> ..	Treated ..	1.0" (4)	2.05" (1)	..	0.23" (1)	..	..
	Control ..	0.16" (6)	0.30" (4)	0.55" (2)	..	..	..
<i>Blepharocarya involucrigera</i> ..	Treated ..	1.1" (10)	1.6" (11)	1.7" (1)	0.2" (1)	..	0.8" (1)
	Control ..	0.25" (3)	0.34" (6)	..	..	0.25" (3)	0.39" (2)

Figures in brackets show the numbers of stems in each class.

Response to treatment is marked, particularly in the smaller size classes.

(b) Basal Area Increment per acre—all stems 20 feet + in height.

Plot.	Stems per Acre.			Standing B.A. per Acre—Square Feet.			Deaths.		New Stems.		C.A.I. Square Feet.	
	1948.	1950.	1957.	1948.	1950.	1957.	No.	B.A.	No.	B.A.	Gross.	Net.
Control ..	807	..	808	150.1	..	146.5	68	23.1	69	2.3	2.2	-0.4
Treated ..	..	50	601	..	28.4	56.3	3	2.4	554	21.2	4.3	4.0

In addition, the representation of Group "A" species—the high quality cabinetwoods—has shown a marked increase in the treated plot :

Plot.	No. of 20' + Stems per Acre—Group "A" Species.		B.A. per Acre—Square Feet.		
	Original.	1957.	Original.	1957.	C.A.I.
Control .. .. .	10	8	1.7	2.0	0.03
Treated .. .. .	6	60	4.4	8.5	0.6

Following the successful establishment of regeneration and enrichment plantings of Queensland Maple (*Flindersia brayleyana*) in an experimental area at R. 310 Gadgarra, which was intensively treated between 1925 and 1930, several experiments have been established to give an indication of the stocking which should be aimed at in applying further treatment to stands of this type. In 1953, when treatment was commenced, the stand consisted of about 1,600 stems per acre above 3 inches g.b.h. of which 100-200 stems per acre were Maple and other prime cabinetwoods.

The treatments applied were :

- Control untreated. Stems were selected at average spacings of 16 feet x 16 feet and 20 feet x 20 feet for comparison with other plots.
- Stems were selected for retention at a spacing of 16 feet x 16 feet, and all useless species and useless stems of desirable species removed, together with merchantable thinnings where possible, and serious competitors with select stems.
- The understory was brushed, and all useless species, and useless stems of desirable species ringbarked.
- The understory was brushed, and the stand thinned to an average spacing of 20 feet x 20 feet.

SILVICULTURAL EXPERIMENT.



Queensland Maple—3 years old—planted under 30 years old Hoop Pine in the Mary Valley.



Hoop Pine—7 years old—planted under 21 years old Slash Pine at Beerburum.

Basal Area increments for the comparable select stems are set out below :

Plot.	Total Stand per Acre—1957.		Select Stems.				
	No. of Stems.	B.A.	No. per Acre.	B.A. per Acre—1957.	B.A. Increment per Acre.		
					1953-55.	1955-57.	C.A.I.
A. . . . .	1,600	190.0	116	80.0	5.0	4.0	2.25
	..	..	164	99.1	6.1	5.0	2.8
B. . . . .	588	135.0	112	87.8	8.8	6.7	3.9
	..	..	172	109.5	10.4	7.7	4.5
C. . . . .	313	130.8	112	77.5	..	6.9	3.45
	..	..	160	98.4	..	8.5	4.25
D. . . . .	112	77.3	112	77.3	..	8.0	4.0

A rapid and quite marked response to treatment is indicated.

Experiments in the control of Stinging Tree (*Laportea moroides*), as mentioned in the last report, have been continued. With 2,4-D sodium salt, there is some indication that season of application may be important. Ester formulations have given an excellent kill in all seasons.

A small scale trial of the use of Dalapon for the control of Kikuyu grass in old pasture lands which are being replanted gave promising results, and a more extensive experiment using this material is proposed.

*Pinus caribaea* continues to make rapid growth in trial plots in North Queensland. Considerable success has been achieved using the terminal wedge technique for grafting this species. Since succulent scions can be used with this method, the period during which grafting may be carried out may be greatly extended.

(ii.) *Central Coastal Queensland (Bowenia)*.—In 1951 an experiment was established to observe the response of Slash Pine (*P. elliottii*) to the application of ground rock phosphate on an area which initially had a total  $P_2O_5$  content of only 35 parts per million. As subsequent measurements have failed to indicate any response to treatment, phosphate analyses of needles have been undertaken as a check on whether the fertiliser has been taken up by the plants. Treatment means for the experiment are :—

Treatment.	Average Height 1956.	Height Increment 1955-56.	$P_2O_5$ Content of Needles Based on Oven Dry Weight.
	Feet.	Feet.	p.p.m.
Control . . . . .	10.75	2.39	1,389
2 cwt. per acre broadcast . . . . .	10.55	2.31	1,860
4 cwt. per acre broadcast . . . . .	10.55	2.17	2,340
2 cwt. per acre applied to individual stems . . . . .	10.25	2.12	1,590

The needle analyses agree closely with similar determinations made at Beerwah, where a marked response to treatment was observed. The reason for the lack of response in this case is at present obscure.

(iii.) *South Queensland (a) Tree Breeding—Slash Pine*.—Of 554 grafts attempted during the 1956 season 334 (60 per cent.) were successful and have been transferred to the seed orchard. After the 1957 grafting season, it is anticipated that sufficient stock will be available to complete planting of the present seed orchard. A site for a second seed orchard has been located and this will be planted with grafts from the best twelve trees at present included in the tree improvement programme. To this end, all parent trees have been critically examined and the selection made.

*Caribbean Pine*.—Two hundred grafts from the 1956 season were transferred to the field at Bowenia in May, 1957. The procedure adopted with the previous year's stock was again followed, the plot being isolated by a wide strip of Slash Pine for possible later use as a plus stand.

*Pinus radiata*.—As mentioned in the last report, scions and rooted cuttings of elite trees of *P. radiata* have been obtained from the New Zealand Forest Service in exchange for scions of Slash Pine. Representatives of all of the ten *P. radiata* trees involved are now established in Queensland as a source of material for local use.

*Hoop Pine*.—With the completion of the glasshouse at Imbil, a greatly accelerated grafting programme has been initiated with this species. During the year, 80 grafts were transferred to the field and have since made good growth but, as yet, there is no definite tendency for the scions to form a strong leading shoot, even though the plants have been supported by stakes.

*Kauri Pine*.—Cuttings and Air-layers have again failed to develop roots. Vegetative reproduction is extremely difficult in the case of older trees of this species and, as yet, no satisfactory technique is in sight.

(b) *Exotic Pines*.—During the year, revision of the volume tables for Slash Pine was completed and new tables were issued. Two sets of equations were developed, using Predominant Height and Total Height respectively as variables. In the former case, it was found necessary to separate the data on the basis of initial spacing for Total Volume and Merchantable Volume. The equations are as follows :

1. Using Predominant Height (H) and Basal Area (A) as variables—

(a) Total Volume U.B.

(i.) Stands planted at 8 feet x 8 feet spacing :

$$V. = 0.458 A - 0.029 H + 0.376 AH + .458.$$

(ii.) Stands planted at 7 feet x 7 feet spacing :

$$V. = -0.118 A - 0.031 H + 0.406 AH + 0.500.$$

(b) Merchantable Volume to 4 inch D.U.B. less 6 inch stump.

(i.) Stands planted at 8 feet x 8 feet spacing :

$$V. = 3.370 A - 0.033 H + 0.352 AH - 0.574.$$

(ii.) Stands planted at 7 feet x 7 feet spacing :

$$V. = 2.761 A - 0.038 H + 0.392 AH - 0.525.$$

(c) Volume in Pruned Section (lower 22 feet 6 inches of stem, less 6 inch stump).

$$V. = 10.31 A + 0.002 H + 0.057 AH - 0.135.$$

2. Using Total Height (H) and Basal Area (A) as variables—

(a) Total Volume U.B.

$$V. = .391 AH - 0.21.$$

(b) Merchantable Volume to 4 inches D.U.B. less 6 inch stump.

$$V. = .387 AH - 1.26.$$

(c) Volume in Pruned Section.

$$V. = .177 AH + 0.98.$$

In the case of the predominant height tables, there is some indication that the relationship between volume and basal area may not be linear in extreme cases, and further data is being collected to check this point.

Seasonal pruning trials over the last two years have shown that Slash Pine may be pruned in all seasons without fear of insect attack. In view of these results, the period during which pruning of exotic pines may be carried out has been extended.

The decline in increment of stands of *Pinus taeda* on R. 589 Beerwah, particularly those on shallower soils, has caused concern for some time. This decline was most marked in areas which had made very good growth between 1947 and 1951. On these "degrade" areas, trees had thin crowns, poor colour, and other symptoms normally associated with phosphate deficiency, although at time of planting, phosphate levels were satisfactory. Response to application of phosphate has been marked, as the results of a typical experiment show :

Treatments—(Applied October, 1952).	G.B.H. Increment 1953-56 (Select Stems)—Inches.				Basal Area Increment 1953-56 (Whole Stand)—Square Feet Per Acre.			
	Block 1.	Block 2.	Block 3.	Treat- ment Average.	Block 1.	Block 2.	Block 3.	Treat- ment Average.
A. Control . . . . .	1.66	1.65	1.24	1.52	15.3	13.1	12.5	13.6
B. 1 cwt. superphosphate + ½ cwt. ground rock phosphate per acre . .	2.93	2.14	2.21	2.40	22.6	16.9	25.9	22.0
C. 1 cwt. superphosphate + 1½ cwt. ground rock phosphate per acre . .	2.64	2.64	3.78	3.02	24.6	19.9	28.3	24.3
D. 1 cwt. superphosphate + 3½ cwt. ground rock phosphate per acre . .	2.67	3.13	3.21	3.00	20.6	21.5	29.4	23.7
E. 1 cwt. superphosphate + 3½ cwt. ground rock phosphate per acre . .	2.87	3.36	2.98	3.07	25.9	24.8	30.0	26.9

Routine application of fertiliser to these areas is now under way.

As mentioned in the previous report, one of the Department's officers is engaged in work on the nutrition of *Pinus taeda* under a Services Canteens Trust Fund Scholarship. Using a pot culture technique, and with phosphorous as a basal fertiliser, deficiencies in nitrogen and copper have been demonstrated for Loblolly Pine on a lateritic podsollic soil from Beerburum. When applying nitrogen fertilisers, care must be taken to avoid the build-up of a high nitrate level, as this is associated with depressed germination, higher mortality and reduced growth of both Loblolly and Caribbean Pines. As well as measuring the growth response of seedlings, the extent of mycorrhiza development has been examined, in an attempt to correlate this with added nutrients or yield.

Field trials have also been established using in general a factorial design, because of the demonstrated importance of nutrient interactions in pasture establishment on the soils concerned.

The main emphasis has been on Loblolly Pine, but some preliminary work has been done with Hoop Pine. If this high-quality native softwood could be grown successfully on the coastal lowlands it would prove an even more attractive plantation proposition than the exotics.

A further tending was applied to the compartment on which coppice was sprayed with 2,4,5-T in May, 1954, as mentioned in previous reports.

Costs to date in this experiment are as follows :

(a) Compartment treated with 2,4,5-T :

	£	s.	d.	
Spraying—May, 1954 .. .. .	2	13	0	per acre.
Tending—January, 1956 .. .. .	1	17	0	per acre.
February, 1957 .. .. .	1	5	8	per acre.
Total costs to date .. .. .	£5	15	8	per acre.

(b) Average of 7 adjacent untreated compartments :

	£	s.	d.	
Tending—April to July, 1955 .. .. .	1	17	9	per acre.
January, 1956 .. .. .	2	5	3	per acre.
March, 1957 .. .. .	1	13	3	per acre.
	£5	16	3	per acre.

Without the addition of overheads to the costs of labour, costs on treated and untreated areas are now equal, and the effects of the original 2,4,5-T treatment are still being reflected in lower tending costs.

The further large scale trials established in April, 1956, were very successful as regards control of unwanted vegetation, particularly in areas of dense wattle, but, as yet, a comparison of costs with untreated areas is not possible.

Experiments established over the last five years have demonstrated that eucalypt and wattle coppice on planting areas can be effectively controlled with 2,4,5-T at costs comparable with normal hand methods, but a practical difficulty lies in the impossibility of covering the large areas involved by ground spraying in the short time available after coppice has developed sufficiently, and before planting commences. Aerial spraying offers a possible solution, and, in June, 1957, an initial trial of aerial application of 2,4,5-T to eucalypt coppice was established in conjunction with Timbrol Ltd. and Aerial Agriculture Pty. Ltd. The co-operation of these two organisations in this work is greatly appreciated.

Ground spraying is a practical method of dealing with coppice on firelines, and a small scale cost trial was established in March, 1957, on a new fireline at Beerwah. The area carried a heavy growth of eucalypts, banksia, &c., which required 23 gallons of 1 per cent. 2,4,5-T per acre for complete coverage. Overall costs were £6 5s. per acre, equivalent to 28s. per chain of fireline. Observations to date indicate that an almost complete kill has been achieved, and extension of this work is proposed.

The control of persistent coppice in older plantations has also received attention, the principal approach being the application of 2,4,5-T to cut stumps after brushing. For this purpose the amine salt in water has proved superior to ester formulations with either oil or water as carrier. The necessity for careful and thorough application of the arboricide has also been demonstrated. Brush Box (*Tristania conferta*) presents a special problem because of its tendency to form thickets and to reproduce by means of root suckers. A basal bark application of 2,4-D or 2,4,5-T will kill the above ground parts of individual stems, but is not translocated to adjacent stems on the same rootstock. Ammate, which is readily translocated to all parts of the plant, shows considerable promise for the control of this species.

Damping-off losses of *Pinus patula* seedlings in Pechey nursery led to the trial of a number of fungicides, applied prior to sowing. Survival figures 90 days after sowing were :—

Treatment.	Survival as percentage of Laboratory Germination Capacity.
Control untreated .. .. .	24
Thiotox .. .. .	87
Captan .. .. .	64
Dibenzothioephene .. .. .	40
Cheshunt .. .. .	23

The fungus involved was identified as *Pythium species*.

The improvement in survival is quite spectacular in the case of Thiotox and further work along these lines is in progress. The benefits obtained from the use of an efficient soil fungicide could be of great importance when dealing with special seed collections from selected trees.



(c) *Hoop Pine*.—During the year, a general review of the results of Hoop Pine thinning experiments was undertaken. Over the range of data available (up to 25 years) it was found that basal area increment could be predicted adequately in terms of standing basal area and age. Seasonal conditions have a marked influence on both the maximum basal area increment which can be obtained in any year, and the standing basal area with which this maximum is associated. However, by transforming the data on a percentage basis, and smoothing the results graphically, suitable average values were determined. The trends disclosed in this study were tentatively extrapolated to 60 years and used to develop a variety of possible thinning schedules. By considering these schedules in terms of values, the most suitable management procedures for this species may be arrived at.

While this study has made full use of existing data, the results cannot be considered as final, and will be subject to review as information on the behaviour of older stands is accumulated. In addition, valuable information has been obtained as to the lines along which future thinning research should be directed. For example, it was found that in some of the heavier thinning schedules very high girth increments resulted in the latter half of the rotation. As a check on such calculations, it is essential that information is available as to the maximum possible increments of individual stems at various ages. To obtain this data, Free Growth experiments are being continued, and in one of these experiments plots were reduced to 24 stems per acre last year at age 14 years. Basal area increments obtained in this experiment over the past two years are shown on the graph facing page 14. The relationship between standing Basal Area and increment, and the influence of climatic conditions, are clearly indicated.

Free Growth experiments have proved particularly valuable in this work since they cover a far greater range of stand conditions than are normally entertained in thinning experiments.

Observations on the natural regeneration of Hoop Pine resulting from the 1953 seedfall at R. 169 St. Agnes have been continued on those plots located in the transition forest type, where survival has been satisfactory. Losses during the year have been small and most seedlings now appear to be reasonably well established. On several plots, undergrowth has been brushed in order to determine the stage at which liberation of the seedlings may be carried out safely. Earlier observations indicated that during the initial establishment period brushing is detrimental to the survival of Hoop Pine.

A further good seedfall is anticipated at the end of 1957, when a new series of regeneration experiments will be established.

Experimental underplanting of the rain forest with Hoop Pine, both in brushed lines and along secondary snig tracks, now covers a period of four years. Survival has, in general, been quite satisfactory, but wallaby damage has occurred in all cases. Animal repellants have not afforded any protection in trials established to date.

An experiment dealing with the use of 2,4,5-T to control rain forest species in the liberation of established underplants or regeneration indicates that the ester in oil gives the most satisfactory kill, applied either to cut stumps or as a basal bark treatment. Winter proved to be the best season for stump applications. In other seasons the basal bark treatment gave equally as good or better results.

(d) *Coastal Hardwoods*.—In the two prescribed burning experiments in the Maryborough district, a further burn has been effected in each case. At R. 958 Gundiah, annual burns have now been carried out for five years. After a rapid decline in the percentage of the area burnt for the first three years, the last two burns reveal an upward trend :—

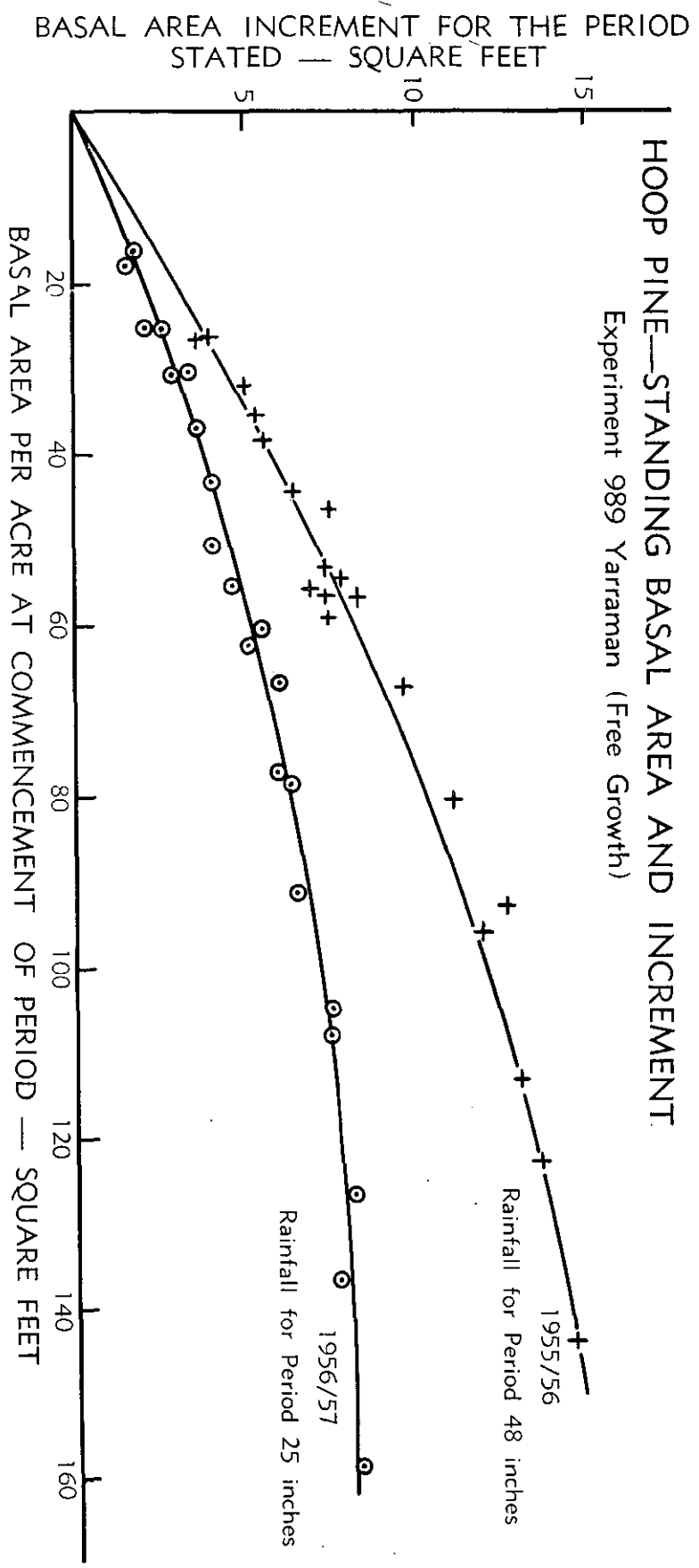
Year.	Percentage of Area Burnt.
1952 .. .. .	90
1953 .. .. .	65
1954 .. .. .	45
1955 .. .. .	55
1956 .. .. .	63

After the first burn, which was carried out after six years of complete protection, the proportion burnt each year has been a function of current seasonal conditions, which determine the amount of fuel present and the extent to which it is cured.

Girth increments for the principal species during 1956-57 were :—

Species.	G.B.H. Increment 1956-57—Inches.	
	Unburnt.	Burnt.
Spotted Gum .. .. .	.21	.32
Grey Ironbark .. .. .	.28	.51
Red Ironbark .. .. .	.26	.36

As in previous years, the burnt area shows an advantage in G.B.H. increment, although in both areas increments are low, a result of dry conditions during the growing season.



Height increments on the smaller stems for the same period were :—

Species.	Height Increment 1956-57 (feet) for Height Classes as shown.							
	0-10 feet.		10-20 feet.		20-30 feet.		30-40 feet.	
	Unburnt.	Burnt.	Unburnt.	Burnt.	Unburnt.	Burnt.	Unburnt.	Burnt.
Spotted Gum .. .. .	0.34	-0.31	0.74	0.42	1.13	1.18	0.90	1.31
Grey Ironbark .. .. .	0.23	0.07	0.62	0.57	1.33	1.30	1.40	2.07
Red Ironbark .. .. .	0.00	-0.50	1.00	0.50	1.25	1.50	1.20	1.75

In previous years, height increments on these stems have, in general, been somewhat lower on the burnt area, and this trend is again present in the case of the 0-10 and 10-20 feet classes. However, in the 20-30 feet class, increments are about equal and in the 30-40 feet class the burnt area shows a distinct advantage. It is thought that this is an effect of reduced competition from weed species, which has been accentuated by the dry conditions during the past year. In the case of the smaller stems, this effect has been more than counteracted by fire damage.

Girths of Spotted Gum were again measured at 15 feet to check on increment differences between the burnt and unburnt areas. Comparative figures for 1956-57 are set out in the table below :—

	Girth Increments 1956-57 (Inches) by G.B.H. Classes as shown					
	0-12 Inches.	12-24 Inches.	24-36 Inches.	36-48 Inches.	48-60 Inches.	60 Inches +.
At Breast Height—						
Unburnt .. .. .	.12	.14	.17	.29	.50	.47
Burnt .. .. .	.23	.19	.39	.38	.56	.52
At 15 feet—						
Unburnt .. .. .	.12	.14	.14	.21	.20	.18
Burnt .. .. .	.20	.15	.27	.22	.21	.17

Again the figures suggest that the increased G.B.H. increment on the burnt area is due, in part at least, to increased butt swell. These observations have now been extended to Grey Ironbark, which has shown even greater differences in G.B.H. increment than Spotted Gum.

At R. 57 St. Mary, a second burn was carried out in September, 1956. Since 1952, when the area was first burnt, logging and silvicultural treatment have been carried out as part of a system envisaging several burns and a period of protection during each cutting cycle. Damage to smaller stems as a result of the 1956 burn was, overall, somewhat more severe than in the case of the original burn in 1952. Comparative figures for percentages of stems in various categories after the two burns are :—

	Percentage of Stems in each Category for Height Classes and Years as Shown.							
	0-10 Feet.		10-20 Feet.		20-30 Feet.		30-40 Feet.	
	1952.	1956.	1952.	1956.	1952.	1956.	1952.	1956.
Not burnt .. .. .	2	5	5	2	..	2	..	12
Burnt but undamaged .. .. .	5	7	11	30	73	29	60	24
Minor fire damage <sup>1</sup> .. .. .	6	5	28	20	23	55	32	58
Top killed <sup>2</sup> .. .. .	87	83	56	48	4	14	4	6
Mechanical damage .. .. .	..	..	..	..	..	..	4	..

<sup>1</sup>Minor damage includes partial scorching of crown, epicormic shoots, bark cracks &c.

<sup>2</sup>Most stems in this category will produce coppice shoots.

The extensive damage in the 1956 burn can be attributed, in part, to the fuel accumulation resulting from four years' protection, together with the debris from logging. This area will receive further silvicultural treatment when the effects of the burn are clear, followed by complete protection until the commencement of the next cutting cycle.

A preliminary investigation of the possibility of enrichment planting in high-quality coastal hardwood forests was commenced during the year. Plots were established in heavily cut over areas at R. 318 Maroochy and R. 393 Woondum to cover a range of species and sites. Damage by wallabies has been severe, but those plants which have escaped attack have grown well, and should be able to maintain a lead over the returning undergrowth.

e) *South-West Queensland*.—Four one acre detailed yield plots were established in relatively pure stands of Spotted Gum at R. 4 Braemar in 1936 and 1940. These plots have been remeasured regularly, and provide growth figures for this species in treated stands of this species in the Dalby District.

(i.) Average annual girth increments to 1956—

Plot.	Stems Per Acre.	Annual G.B.H. Increment by Girth Classes—Inches.						
		0-12".	12-24".	24-36".	36-48".	48-60".	60-72".	All Classes.
1 .. .. .	43	.79	.66	.70	.50	.31	.20	.63
2 .. .. .	79	.47	.52	.52	.41	.46	..	.50
3 .. .. .	106	.27	.41	.39	.27	.49	..	.36
4 .. .. .	63	.38	.46	.53	.76	.45	.91	.48
All plots ..	73	.39	.49	.53	.47	.40	.40	.47

These increments indicate a rotation of 150 years for a final crop of 66" G.B.H., the present cutting limit.

(ii.) Basal Areas—

Plot.	B.A. per Acre 1956—Square Feet.			Average Annual B.A. Increment.	
	Original Stand.	Recruits.	Total.	Original Stand.	Total.
1 .. .. .	28.0	11.2	39.2	.73	1.30
2 .. .. .	26.8	11.7	38.5	.80	1.40
3 .. .. .	32.2	14.0	46.2	.69	1.58
4 .. .. .	25.9	16.0	41.9	.54	1.55

(iii.) Volumes—

Plot.	Gross Merchantable Volume per Acre 1956—Super Feet Hoppus.			Average Annual Volume Increment.	
	Original Stand.	Recruits.	Total.	Original Stand.	Total.
1 .. .. .	4,132	327	4,459	113	130
2 .. .. .	3,282	138	3,420	116	123
3 .. .. .	3,991	191	4,182	115	127
4 .. .. .	3,536	424	3,960	102	129

About 75 per cent. of the recruitment is in the form of coppice from stems removed in treatment. The development of coppice following silvicultural treatment is a problem of considerable importance in many western areas. Wide spacings are essential if reasonable growth rates are to be achieved, but rapid growth of coppice will often nullify the effects of treatment in a short time. Experiments to determine effective means of controlling unwanted coppice are in progress.

A similar problem exists in the case of Cypress Pine, where a dense understory of Bull Oak (*Casuarina luehmannii*) often develops to the detriment of increment of the select stems. The effect of this understory on a young stand of Cypress is clearly shown in the results of an experiment established in 1955 at R. 134 Bringalilly. In the treated plots, the oak understory was removed in addition to normal thinning. Increments for 1955-56 were :—

	Untreated.		Treated.	
	Plot 1.	Plot 3.	Plot 2.	Plot 4.
Average G.B.H. 1956—Inches .. .. .	7.3	5.1	9.3	7.8
Increment 1955-56 .. .. .	0.3	0.3	1.3	1.1
Average height 1956—feet.. .. .	19.6	17.2	21.1	19.5
Increment 1955-56 .. .. .	1.0	0.3	1.0	0.8

A rapid and marked response to treatment is indicated. Bull Oak also coppices freely, and its control is being investigated.

**Protection.**

Details of firebreak construction and maintenance work carried out during the year are as follows :

CLEARED BREAKS—PLANTATIONS.								Miles.
Construction—								
Temporary Breaks	..	..	..	..	..	..	..	42.4
Clear	..	..	..	..	..	..	..	106.8
Rotary Hoe	..	..	..	..	..	..	..	23.6
Grade	..	..	..	..	..	..	..	74.7
Scrub Break Improvements	..	..	..	..	..	..	..	27.9
Maintenance—								
Chip	..	..	..	..	..	..	..	142.6
Burn	..	..	..	..	..	..	..	156.3
Rotary Hoe	..	..	..	..	..	..	..	187.3
Grade	..	..	..	..	..	..	..	575.7

CLEARED BREAKS—WESTERN FORESTS.								
Construction—								
Cut and Grub	..	..	..	..	..	..	..	164.0
Improvements—								
Grub Roads	..	..	..	..	..	..	..	45.4
Grade	..	..	..	..	..	..	..	122.0
Stump	..	..	..	..	..	..	..	226.0
Green Strips	..	..	..	..	..	..	..	131.5
Maintenance—								
Sucker and Burn	..	..	..	..	..	..	..	636.6
Grade	..	..	..	..	..	..	..	772.0
Rotary Hoe	..	..	..	..	..	..	..	392.3

GREEN BREAKS—COASTAL HARDWOOD AREAS.								
Construction—								
Fell Dangerous Trees	..	..	..	..	..	..	..	10.7
Stack and Burn	..	..	..	..	..	..	..	7.7
Improvements	..	..	..	..	..	..	..	46.3
Roads	..	..	..	..	..	..	..	61.9
Maintenance—								
Chip and/or Plough	..	..	..	..	..	..	..	1,471.8
Burn	..	..	..	..	..	..	..	767.4
Roads	..	..	..	..	..	..	..	38.2
Grade	..	..	..	..	..	..	..	136.5

**Capital Improvements.**

The chief improvements constructed during the year were as follows :

Item.	Completed 1956-57.							
Barracks (8 man)	..	..	..	..	..	..	..	2
Barracks (6 man)	..	..	..	..	..	..	..	5
Barracks (4 man)	..	..	..	..	..	..	..	1
Married Quarters	..	..	..	..	..	..	..	15
Garages	..	..	..	..	..	..	..	8
Ranch	..	..	..	..	..	..	..	1
Fire Lookout Towers	..	..	..	..	..	..	..	2
Explosive Magazines	..	..	..	..	..	..	..	4
Fire-tank Gantries	..	..	..	..	..	..	..	25
Sheds	..	..	..	..	..	..	..	14
Bridges	..	..	..	..	..	..	..	8
Culverts and Grids	..	..	..	..	..	..	..	21
Galley-Shower-Laundries	..	..	..	..	..	..	..	5
Telephone Lines	..	..	..	..	..	..	..	26 miles.

**Expenditure and Labour.**

Expenditure on reforestation works was £1,369,395, a decrease of £157,434 on that for 1955-56.



### ACQUISITION OF LAND.

During the year 1956-57, an amount of £6,577 3s. 5d. was expended on the acquisition of land for Forestry purposes, as follows:

	£	s.	d.
Purchase of land .. .. .	3,521	16	8
Compensation paid for Resumptions .. .. .	561	9	0
Survey and Real Property Fees .. .. .	2,112	1	11
Miscellaneous .. .. .	381	15	10
	<u>£6,577</u>	<u>3</u>	<u>5</u>

Six properties, covering an area of 762 acres 2 roods 18.6 perches, were purchased and an area of 6 acres 26 perches was resumed for National Parks purposes.

### FIRES.

During the year, 140 fires were reported as on or threatening forest reservations. Below is a summary of the magnitude of these fires:—

½ acre or less.	½ acre to 10 acres.	10 acres to 100 acres.	Over 100 acres.	Unknown.
8	32	39	32	29

*Causes*—In 71 cases cause unknown, 21 cases deliberate burning, 8 cases fire spread from adjoining properties, 7 cases from burning logs or stumps, 6 cases from lightning, 5 cases sparks from passing trains, 4 cases from camp fires, 4 cases from grass fires, 4 cases from burning rubbish, 3 cases from dropped cigarette butts, 3 cases sparks from burning firebreaks, 2 cases sparks from tractors, 1 case by burning bark flying from co-operative burn, and 1 case from a dropped match; total 140.

### FOREST SURVEYS.

Seven fully equipped camps operated during the year, while ten smaller camps were also occupied with miscellaneous district surveys almost continuously.

The advantages of the Survey Trainee Scheme became apparent when four trainees completed their three-year course and were appointed Survey Overseers in North Queensland, Gympie, Dalby and Monto Districts. These trainees, together with other first and second year appointees, attended a two months' school organised to round off their training, and, early this year, a shorter course was conducted to assist younger Survey Overseers in standard forest survey technique.

Total expenditure for survey work amounted to £37,848 3s. 2d., of which £22,535 7s. 7d. was chargeable to Harvesting and Marketing projects and the balance, £15,312 15s. 7d., against Reforestation projects.

As a result, 98,244 acres were assessed (Class 2); 36,241 acres were subjected to either firebreak, compartment or soil survey; 84,798 acres were covered by forest inventory survey, entailing the establishment of 549 plots; 45 plots were remeasured, whilst 627,984 acres were closely inspected (Class 1, Survey).

Mileage completed was:—

	Miles.	Chains.
Theodolite and chain .. .. .	45	69
Compass and chain .. .. .	878	1
Strip Survey .. .. .	1,140	16
Old Boundaries .. .. .	35	2
Road investigation and survey .. .. .	32	35

Briefly, operations in each district were:—

**Atherton.**—Under different officers in charge, one camp operated throughout the year and was engaged mainly in the re-establishment of reserve boundaries on State Forests R. 557 and R. 607, Cairns and Dinden, plus National Park R. 226, Sophia, shifting to Cooktown towards the end of September. Road location was carried out in both the Mount Poverty and the China Camp, Bloomfield, areas. Field work here was completed in early December and camp transferred to R. 1071, Danbulla, where surveys of compartments, roads and firebreaks were put in hand over that cleared area recently acquired in connection with the Tinaroo Dam inundation.

Camp then shifted to the Koombooloomba Dam (Culpa) where road investigation and the clearing and brushing of the inundation level is still being done.

A new camp was organised late in June with headquarters in Tully, and field work commenced on a vegetation survey on R. 345 Ellerbeck and Meunga.

**Mackay.**—The Duaranga assessment survey of spotted gum stands in the parishes of Alberta, Eastbrook, Coomoooolaroo and Nulalbin, was completed by early November when, under a new officer in charge, similar work was carried out in the parishes of Wright, Heathland, Charlevue, Wallbury and Duaranga. This area was completed in June and camp shifted for the assessment of Goomally Holding and adjacent areas. Instructions covered a total area of 200,000 acres in this large unit.

A second camp continued the cypress pine assessment of portions 1 to 4 and R. 24, Nulalbin, in the Baralaba area, completing this project. A traverse with cross sections of part of the road proposed to give access to the Blackdown Tableland was effected, and, in October, camp shifted to R. 20, Maryvale, where firebreak and miscellaneous surveys were completed early in May. Camp was then transferred to Coorada, 55 miles west of Theodore, where forest inventory and finally strip survey are still being carried out. Lack of water and access roads have considerably hampered field work.

**Maryborough.**—At Tuan (R. 915), soil survey of 10,282 acres, of which 2,227 acres were re-stripped under the present prescription, was carried out during the first part of the financial year. Other work included compartment survey, access roads through new areas, control lines, felled overlaps and experimental areas. In addition, a number of plantable and unplantable areas has been checked and amended. A further 5 miles 35 chains of theodolite control was run and marked.

The small district camp carried out scrub-falling survey at R. 97 and R. 99, Kilkivan, and also at Gallangowan, plus strip survey, road location, levels on contour drainage at Tuan and regeneration count on forest inventory plots at R. 12, Gungahlin. In addition, a timber estimate was completed, on behalf of the Valuer-General's Department, of an area of 14,704 acres in the parishes of Boomba, Doongul, Glenbar, Teebar and Woocoo. A theodolite connection of approximately 3 miles was also carried out on R. 27, Woocoo.

**Gympie.**—Camp organised in early February commenced firebreak and compartment survey on the southern section of R. 135, Cambroom, previously stripped in the Coonoon Gibber catchment.

A second small camp operated mainly on the location of thinning roads in plantations on the same reserve from April, whilst a third camp in the Gympie section effected miscellaneous surveys at Toolara and R. 124, Glastonbury. An additional 3 miles 9 chains of theodolite control was run at Toolara and a further 2 miles 21 chains at Imbil.

**Dalby.**—In April, a new camp commenced forest inventory survey on R. 180, Yandilla. By the end of report period approximately 37 miles of compartment boundaries had been run and 30 plots established.

**Warwick.**—Forest inventory survey of R. 134, Bringalily, was completed in October and camp shifted to R. 79, Whetstone and Sands. To date, 238 plots have been established on R. 79 and a further 84 plots marked to complete R. 134. Theodolite control on R. 79 totalled 14 miles.

A two unit camp operated in the Stanthorpe group from October to May, covering Reserves 263, 321, 316 and 327. Plantations on R. 263, 321 and 316 have been corrected for boundaries, species, rock areas, &c., while compartment and soil surveys were completed on R. 327, Stanthorpe. Officer in charge was then transferred to Tully.

**Murgon.**—Both external and internal scrub firebreaks were completed on Mill and Eastern Logging Areas (R. 137, Yabba) with required compartments. Survey of constructed access roads in Mill, Eastern and Tungi was also carried out, together with rat damage assessment on Foxlowe and Scotchman Logging Areas. On R. 207, survey of frost areas, scrub-falling blocks, experimental plots and predominant heights was completed and rat damage assessed on Winch, Davies and Occupation Logging Areas. Survey of graded roads and other miscellaneous work was carried out as required.

**Brisbane Valley.**—Approximately 767 acres in nine separate units were surveyed for scrub-falling on R. 120, R. 283, R. 379 and R. 299 plus 28 miles of new roads. Miscellaneous surveys of frosted areas, overburns, firebreaks and species were also completed. A total of 15 miles 62 chains of theodolite control was run on R. 283 and R. 299.

**Brisbane.**—Main work carried out by the survey camp stationed at Beerburum was the compartment survey of 1,000 acres of new planting area on R. 611, Beerwah, 200 acres on R. 561, Bribie, and 300 acres on R. 700, Canning. Other miscellaneous surveys included boundary surveys and inspections.

Forest survey was carried out at Emu Vale of an area of 757 acres on behalf of Hancock and Gore, Ltd., while an area of 600 acres of plantation was completed for Queensland Industries Pty. Ltd.



The forest inventory camp completed R. 173, Durundur—46 plots—and, in July, started the survey of R. 370, Durundur. By the end of the report period over 14,000 acres had been dealt with and 125 plots established. The technique of plot installation was changed in that one acre plots were cut into four with brushed lines. The plots already completed on the previous system and found inaccurate were re-measured. These totalled 45.

**Monto.**—In February, a small camp commenced operations, work being confined to R. 95, Kalpowar, where scrub breaks, scrub-falling and thinning road surveys were carried out as required.

In June, timber reconnaissance of Redbank Holding was commenced.

**General.**—Throughout the year, investigations mainly on remote cypress pine stands in the Cunnamulla and St. George areas were completed by officers of the Harvesting and Marketing Branch as opportunity offered. Although this work was not carried out by or costed to Survey Camps, a list has been compiled under Class 1 Surveys, giving details for future reference.

### NATIONAL PARKS.

The sum of £45,540 was expended on National Parks in 1956–57 bringing the total expenditure on such areas to £470,114.

Work was carried out on the following Parks :

#### South Queensland:

Lamington, Springbrook, Tamborine, Montville, Mount Glorious, Bunya Mountains, Noosa Heads, Burleigh Heads, Cunningham's Gap, Ravensbourne, Numinbah Natural Bridge, Killarney and Cougal.

#### Central Queensland.

Eungella, Finch Hatton, Hayman Island, Lindeman Island, Long Island and South Molle Island.

#### North Queensland.

Magnetic Island, Lakes Eacham and Barrine, Palmerston, Tully Falls, Millstream Falls, The Crater, Dunk Island and Green Island.

Mindful always of the obligations of the Department to control and administer National Parks in the national interest, expenditure has been confined to work in which nature, in the form of scenery, natural vegetation and geological features, would be interfered with as little as possible.

Work on internal access continued, 4 miles 69 chains of new track being constructed, bringing the total track system to 237 miles 64 chains. A number of appropriate causeways and bridges, to harmonise with the natural surroundings, were built across watercourses. The existing tracks were maintained and, in some instances, improved. Special attention was paid to the provision of toilet conveniences at main picnic places.

The drive made in recent years to improve entrances to the National Parks, frequented by the people, was continued. Further direction signs were erected and name plates placed on specimen trees growing alongside the tracks. This is a feature very much appreciated by the public. Concrete platforms with safety fences were erected at several main lookouts allowing all visitors to enjoy, in safety, the magnificent views available.

The Overseer at Burleigh Heads reports that koalas are not as numerous as in former years. With the progressive reduction in extent of their feeding grounds, due to expansion of residential areas, the koalas are necessarily more nomadic and some, while crossing the highway, have been run over and killed. An appeal is made to motorists to keep a lookout for these animals when passing alongside this Park.

Appreciation is recorded of the co-operation extended by several Shire Councils in maintaining and improving entrance roads to National Parks.

There was an increase in the number of visitors to National Parks, most notable individual increases being at Mount Glorious, Springbrook, Tamborine and Numinbah. This increase represented day visitors, reflecting the greater increase in the number of private motorists.

Good all-weather roads have been the greatest contributing factor to the increased number of visitors to many areas. On the other hand, the beautiful Bunya Mountains National Park, with its unique interest and individual charm, is badly in need of improved access. Attention to about 6 miles of gravelled road would make this "Nature's Own Wonderland" more readily available to the many thousands of Toowoomba and Darling Downs residents.

The Overseers on the various Parks are unanimous in recording expressions of appreciation by visitors, particularly Southern tourists, of the facilities provided on the National Parks. The Southern visitors are most impressed with the graded walking tracks. Extracts from letters printed below are indicative of the commendation received on National Parks administration in this State.

From Mr. A. N. Burns, Curator of Insects, National Museum of Victoria—under date 7th March, 1957—

"My work as Curator of Insects at the National Museum of Victoria takes me over many parts of Australia seeking insects and studying their life histories, &c., and, of all the Australian States, Queensland is far ahead in preserving its natural forests and areas of biological interest."

From Mr. J. F. Stevens, a resident of North Tamborine for many years—under date 1st February, 1957—

**"NORTH TAMBORINE NATIONAL PARK.**

"Now that the above Park is approaching completion in its present form, I feel that I would just like to express my deep appreciation of the very excellent work that has been done by all.

"I think that Mr. Gresty has shown great good taste as well as professional skill in the layout, and I can vouch for the strenuous work done by the men composing the gang, all of whom I know well."

"I know that I speak for many folk on the Mountain in this matter, and I would like the men to know that their hard work is appreciated."

Public reaction to the firm control on National Parks is increasingly good and there has been a decrease in vandalism. The Honorary Rangers, particularly those who take part in the patrols, have had a considerable influence for good on the large number of visitors with whom they have come in contact.

One offender was convicted and fined £10 for defacing an ornamental sign whilst another was prosecuted and fined £3 for removal of flora.

It is most pleasing to record the munificent gift of the late Mr. S. Pegg who bequeathed, for National Park purposes, approximately 8 acres of land at Burleigh Heads conservatively valued at £25,000. This area will be added to and administered with the adjoining Koala National Park. Present and future generations, as they enjoy this area, will revere the name of "Pegg." The inspiration for this most generous gift came from the National Park itself.

Donations of land for National Parks purposes were also made to the Crown by Mrs. M. Davidson, Southport, Mrs. W. J. Bardsley, Nundah, and Messrs. R. J. Harding and R. H. Brown of Springbrook, viz. parts of portions 80 and 81, parish of Numinbah (Springbrook).

This land will make possible the provision of suitable access to Bilbrough's Lookout, an area of outstanding scenic value from which magnificent and extensive views can be obtained of the surrounding country. The Department acknowledges with appreciation the public-spirited action of these persons.

### HARVESTING AND MARKETING.

**General.**—Logging operations were carried out under ideal weather conditions throughout most of the year over the southern part of the State, and were maintained at a steady rate.

A falling off in the demand for sawn timber, which has been attributed to a lack of ready finance for building, and to the competition of imported timbers, was reported in the last six months of the year. Nevertheless, the total cut of 221,366,000 superficial feet of log timber for the State approached, within one per cent., that of the previous year.

In some cases the efforts of sawmillers to maintain organisation and production have resulted in an accumulation of stock on hand, and the immediate future is viewed by them with some concern.

Although logging conditions in North Queensland were the reverse of those experienced in the south, and although many of the species available are subject to competition in interstate markets, the cut of 56,980,000 superficial feet of North Queensland timbers, which has not often been exceeded, helped to maintain the overall cut referred to above.



**HOOP PINE AFTER THIRD THINNING. AGE 29 YEARS.**  
Over 20,000,000 super. ft. of plantation thinnings were cut last year.



**KAURI PINE—20 YEARS OLD.**  
An area of 5,317 acres of softwood was planted during the year.

The preference shown at all times for species of highest quality becomes more pronounced in periods of restricted demand, despite the premium rates that apply for quality.

The cut of naturally grown Hoop and Bunya Pine increased by 7,000,000 superficial feet. Forest hardwoods and Cypress Pine showed little change.

Cabinet woods, 2,000,000 superficial feet down, scrub hardwoods, 2,700,000 superficial feet down, and miscellaneous species, down 2,300,000 superficial feet, are logged together as they occur in the stands and the cut reflects, to a large extent, a decrease from North Queensland's record log cut of last year. The lesser quantity of Kauri Pine logged (decrease 1,800,000 superficial feet) is accounted for by the fact that mature stands of this species are depleted.

Plantation timbers logged amounted to 20,280,000 superficial feet as compared with 19,740,000 superficial feet in the year ended 30th June, 1956. Under the conditions of trade which applied, this result is satisfactory but further improvement is hoped for. As referred to in previous reports, it is desirable to operate plantation thinnings to the fullest possible extent if the plantations are to produce a maximum of high quality timber in the final crop.

Log prices were adjusted from 1st August, 1956, on account of increases in freight on log and sawn timber. A variation of the Timber Felling and Timber Getting Award—State, published on 18th March, 1957, resulted in an increase of approximately 6 per cent. in the cost of felling log timber and an increase of approximately 9 per cent. in the cost of haulage of logs by motor truck. Appropriate adjustments were made in Key Market and Depot log prices.

Log prices of Cypress Pine and of Hoop and Bunya Pine were increased in order to effect a better relationship between sawn product and log timber.

Subsequently, adjustments were made in the depot rates for Cypress Pine at Thallon, St. George and Dirranbandi after mill studies had demonstrated local disabilities.

The movement of log prices during the year is shown in Appendix E of this Report.

Constructional timbers were in heavy demand, supplies of sleepers, girders and piles showing a considerable gain. The increase in the number of sleepers obtained is due to a number of causes, including the more attractive rates offered for the work, an increasing number of sawmills actively engaged in sawing sleepers, and drought conditions causing those affected to seek stop-gap work.

An increase in the supply of girder logs to rail for dressing from 509,878 superficial feet in 1955-56 to 766,413 superficial feet in 1956-57 is due, to some extent, to greater logging activity in virgin stands of suitable species in inland areas. Purchasers of mill logs are required to deliver the girder logs met with in the course of their operations.

License fees were adjusted to present currency values during the year. These fees had remained unchanged for many years.

Cost of fire fighting and patrol, &c., and protection against rodents to prevent damage to mature and growing timber amounted to £77,000 during the year.

The programme of construction of new roads to open up timbered areas for exploitation was curtailed by restriction of loan funds. As logging operations proceed to the rougher and more remote areas which now remain for harvesting, the road costs necessary to provide access to sufficient standing timber increase because of the mileages and the terrain involved. The road building programme must be sustained if the sawmilling and building industries are to secure adequate raw material.

**Mill Logs Cut—Crown and Private Lands.**—This table shows logs cut by all mills in the State, annually, for the periods indicated.

Year.	Queensland Grown.							Imported.	Total.
	Hoop and Bunya Pine.	Kauri Pine.	Plantation Thinnings.	Cypress Pine.	Hardwood.	Cabinet Woods.	Miscellaneous.		
(1,000 superficial feet.)									
1951-52	56,416	7,741	15,319	46,167	271,222	22,263	62,334	5,778	487,240
1952-53	64,374	6,327	6,322	52,834	275,491	24,913	37,148	2,735	470,144
1953-54	62,289	5,825	11,117	59,067	259,764	29,315	45,878	6,628	479,883
1954-55	48,894	5,159	14,266	54,334	250,743	26,911	49,588	14,002	463,897
1955-56	39,238	6,235	20,054	48,411	255,023	31,361	58,990	17,829	477,141
1956-57 (estimated).	45,000	3,100	20,280	42,000	255,000	30,000	58,620	16,000	470,000

**Mill Logs—Crown Lands.**—The following are the annual quantities of logs obtained from Crown Lands as from 1945-46 :

1945-46 .. .. .	super. ft.	190,000,000	1951-52 .. .. .	super. ft.	238,000,000
1946-47 .. .. .	220,000,000	1952-53 .. .. .	206,000,000		
1947-48 .. .. .	204,000,000	1953-54 .. .. .	240,000,000		
1948-49 .. .. .	208,000,000	1954-55 .. .. .	224,000,000		
1949-50 .. .. .	202,000,000	1955-56 .. .. .	223,000,000		
1950-51 .. .. .	187,000,000	1956-57 .. .. .	221,000,000		

A comparison of quantities of the various species of log timber cut from Crown forests during the past five years is illustrated hereunder :—

Year.	Hoop and Bunya Pine.	Kauri Pine.	Cypress Pine.	Forest Hardwoods.	Scrub Hardwoods.	Cabinet Woods.	Miscellaneous.	Plantation Timbers.
(1,000 superficial feet.)								
1952-53 .. ..	60,755	5,577	25,151	62,063	10,228	19,385	17,728	5,121
1953-54 .. ..	60,269	5,821	31,259	71,251	12,258	24,914	23,510	11,455
1954-55 .. ..	44,984	4,799	28,129	76,090	9,455	21,185	25,712	14,111
1955-56 .. ..	35,540	4,660	22,483	76,249	11,463	24,507	28,896	19,740
1956-57 .. ..	42,638	2,851	21,701	76,165	8,781	22,374	26,576	20,280

### The Timber Business.

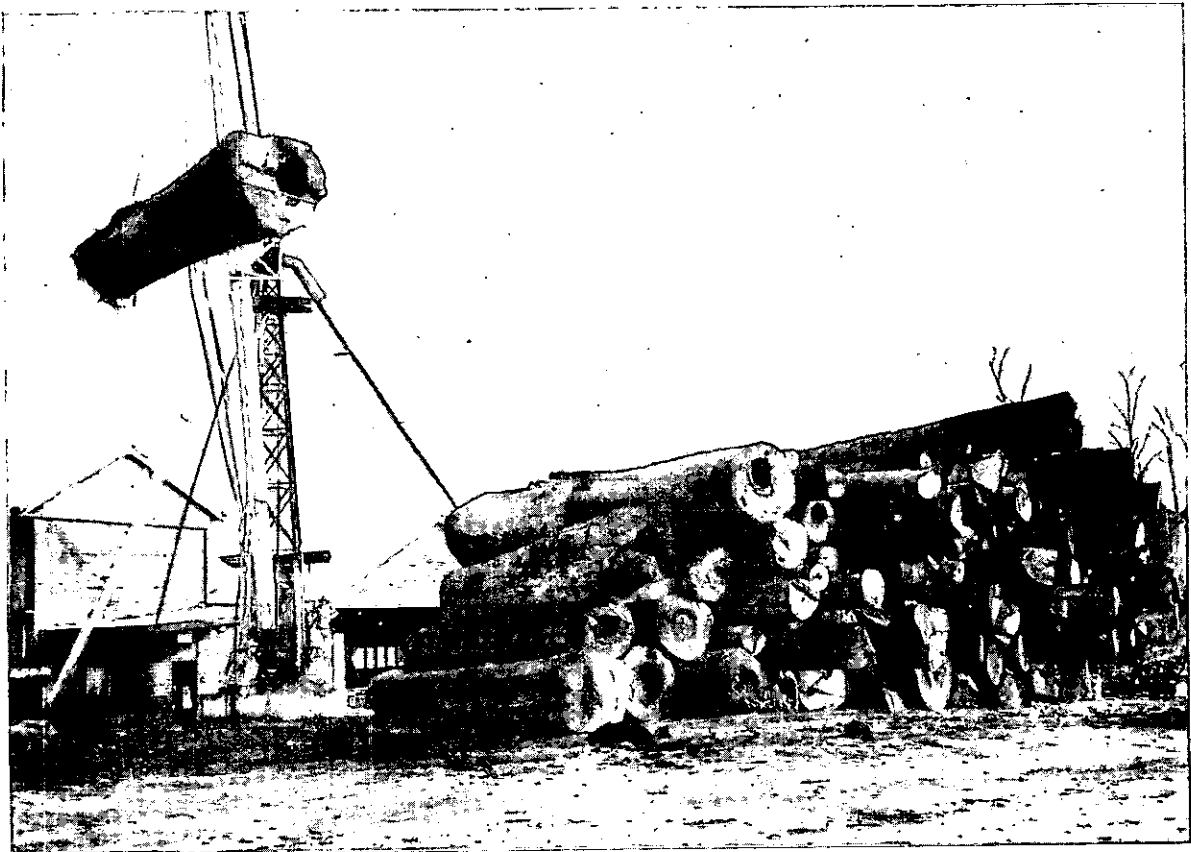
	1955-56.	1956-57.
<b>(a) Mill Logs—</b>		
Hoop and Bunya Pine ..	35,540,000 super. feet	42,638,000 super. feet
Forest Hardwoods ..	76,249,000 super. feet	76,165,000 super. feet
Scrub Hardwoods ..	11,463,000 super. feet	8,781,000 super. feet
Cypress Pine .. ..	22,483,000 super. feet	21,701,000 super. feet
Kauri Pine .. ..	4,660,000 super. feet	2,851,000 super. feet
Cabinet Woods ..	24,372,000 super. feet	22,265,000 super. feet
Miscellaneous Species ..	28,896,000 super. feet	26,576,000 super. feet
Plantation Timbers ..	19,740,000 super. feet	20,280,000 super. feet
Stumps and Fitches ..	135,000 super. feet	109,000 super. feet
<b>Total Crown Mill Logs ..</b>	<b>223,538,000 super. feet</b>	<b>221,366,000 super. feet</b>
<b>(b) Construction Timbers—</b>		
Headstocks, Transoms, Crossings, Braces, &c.	509,811 super. feet	465,673 super. feet
Sleepers .. ..	760,261 pieces	1,063,036 pieces
Girders, Corbels, Piles, Sills and Girder Logs	97,600 lineal feet 509,878 super. feet	140,797 lineal feet 766,413 super. feet
Poles .. ..	584,208 lineal feet	406,604 lineal feet
House Blocks .. ..	222,949 lineal feet	189,754 lineal feet
Mining Timbers .. ..	348,266 lineal feet	294,803 lineal feet
Mining Timbers .. ..	80,391 pieces	45,724 pieces
Gross Receipts from Timber Sales .. ..	£1,866,436	£2,426,077
Net Revenue .. ..	£1,091,959	£1,382,954

**Logging.**—During 1956-57 the following quantities were hauled by, and payment made to, contractors to the Department :

Class.	Quantity.	Expenditure.	
	Super. feet.	£	s. d.
<b>South Queensland—</b>			
Hoop and Bunya Pine .. ..	22,272,256		
Forest Hardwoods .. ..	876,713		
Scrub Hardwoods .. ..	102,809		
Miscellaneous .. ..	261,787		
Cedar .. ..	7,646		
	23,521,211	217,293	10 0
<b>North Queensland—</b>			
Kauri Pine .. ..	4,012		
Cabinet Woods .. ..	3,529,717		
Forest Hardwoods .. ..	473,524		
Scrub Hardwoods .. ..	523,924		
Miscellaneous .. ..	1,902,746		
Cedar .. ..	97,117		
	6,531,040	69,106	12 10
<b>Totals .. ..</b>	<b>30,052,251</b>	<b>286,400</b>	<b>2 10</b>



**RECLAIMING FAILED FARM LAND.**  
Rose Gum (*E. grandis*) planted 14 months.



**INTENSIVE UTILISATION.**  
Tree marking is standard practice in all Forest Service sales. All logs which can be economically operated must be utilised.

**Rosewood.**—The following figures show the position regarding supply and sale of Rosewood during the year :

	Tons	Cwt.	Qrs.
In stock at 1st July, 1956 .. .. .	109	0	3
Purchased during year .. .. .			
	109	0	3
Exported to Hongkong .. .. .	35	6	3
On hand at 30th June, 1957 .. .. .	73	14	0

No Sandalwood was purchased or exported during the year.

**The Plywood Industry.**—Manufactured deliveries from plywood and veneer mills for this year, as compared with the previous twelve months, were as follows :

	1955-56.	1956-57.
	Square feet.	Square feet.
Through the Southern Board .. .. .	76,154,901	70,506,711
Through the Northern Board .. .. .	64,185,327	54,988,101
	140,340,228	125,494,812

**Timber Felling and Timber Getting Award—State.**—During the twelve months under review the basic wage under the above Award was varied as follows :

	£ s. d.	£ s. d.
On 23rd July, 1956 .. .. .	11 19 0	to 12 3 0
On 29th October, 1956 .. .. .	12 3 0	to 12 7 0
On 18th March, 1957 .. .. .	12 7 0	to 12 14 6
On 29th April, 1957 .. .. .	12 14 6	to 12 12 6

**Hewn Timber Prices.**—No price change was made during the year.

**Constructional Timbers—Departmental Contracts.**—A comparison of supply of constructional timbers from Crown lands with the two previous years is given hereunder :—

Class of Timber.	1954-55.	1955-56.	1956-57.
Sleepers .. .. .	412,742 pieces	457,659 pieces	680,132 pieces
Crossings .. .. .	115,805 super. feet	193,614 super. feet	225,325 super. feet
Transoms .. .. .	125,058 super. feet	113,154 super. feet	129,493 super. feet
Bridge timber (round) .. .. .	37,259 lineal feet	34,685 lineal feet	38,979 lineal feet
Bridge timber (square) .. .. .	31,086 super. feet	51,330 super. feet	39,522 super. feet

#### Logging Roads—1956-57.

Expenditure by Main Roads Department :—

	£
Construction .. .. .	52,357
Maintenance .. .. .	36,551

Forestry Department road programme for the year constituted 84 miles of construction. Location and working surveys covering 159 miles were carried out.

Expenditure from Forestry votes was as follows :

	£
Construction .. .. .	92,274
Maintenance .. .. .	34,253
Subsidies to Shire Councils .. .. .	22,933
Workers' Compensation .. .. .	2,082
Pay-roll Tax .. .. .	1,341
Investigation Surveys .. .. .	2,970
Fares and Freights .. .. .	101
	155,954

### SAWMILLS LICENSING.

During the year mills continued a rate of operation similar to that of recent years.

The policy of carefully examining all applications has been continued, particularly in the case of those for new licenses or for increased capacity, as the granting of such applications can only be justified where investigation discloses that surplus supplies are available.

It has been possible to make more frequent inspection of mills with the object of ensuring that operations are not being conducted beyond license capacity, and it has been necessary, in a few individual cases, to warn against breaches in this respect.

Some improvement has been achieved in the submission of quarterly returns, but there are still defaulters against whom action will have to be taken in accordance with the provisions of the Act.

It is pleasing to record, however, that the majority of sawmillers are co-operating with the Department in the administration of the Act, which has for its objective the stabilisation of the industry.

The following table sets out the position with regard to sawmill licenses as at 30th June, 1957 :—

Number of Licenses at 30-6-56.	Sawmill Classification.	New Licenses Issued.	Licenses not Renewed.				Current Licenses at 30-6-57.	Total 30-6-57.
			Refused.	Relinquished.	Under Consideration.	Working—No Application.		
958	General mills ..	5	21	59	91	7	785	883
27	Case mills ..	..	1	4	7	..	15	22
39	Sleeper mills ..	2	..	1	5	..	35	40
19	Other restricted ...	2	1	..	5	..	15	20
58	Resaw and dressing	7	..	1	..	..	64	64
			23	65				
1,101	..	16	88		108	7	914	1,029

### OFFENCES.

During the year ended 30th June, 1957, officers reported on 214 cases of breaches of Acts and Regulations administered by the Department.

Proceedings were successfully instituted against 19 persons. Of these 9 were proceeded against for unauthorised cutting or removal of timber, 4 for breaches of the Sawmills Licensing Act, 2 for unauthorised ringbarking, 1 for defacing a sign on a National Park, 1 for unauthorised removal of flora from a National Park, and 2 for breaches of the Timber Users' Protection Act. Fines totalling £496 were imposed.

In addition, the Police instituted proceedings against one person for stealing a Pine tree and a fine of £5 was imposed.

In 77 cases of unauthorised timber operations, where it was considered offences did not warrant proceedings, the value of the timber was collected and warnings issued.

In 12 cases of unauthorised ringbarking appropriate action was taken.

As a result of action in all cases an amount of £5,087 was recovered by the Crown in timber revenue.

The number of complaints received from householders under the Timber Users' Protection Act in respect of the use of lyctus susceptible timber again showed a decrease in the previous year's figures, 58 cases being investigated by officers of the Department as against 72 cases in the previous year and 81 for the year 1954-55.

The Department continued its policy of endeavouring to get the builder to remedy the position and in 15 of the complaints investigated the defects have been attended to.

In 2 cases it was necessary to take proceedings and fines totalling £75 were imposed.

In 11 cases it was found that complaints were either of a minor nature, out of time for action to be taken, or not within the scope of the Act. The remaining cases are receiving attention.

### FOREST PRODUCTS RESEARCH.

The problem of "selling" to industry the practical and beneficial results to be secured by greater use of better methods already established by research, again occupied a considerable proportion of the energies of the Branch.

Greater progress in the research field was limited by the failure to obtain qualified staff to fill vacancies made by officers who left the Branch to fill responsible positions in the Timber industry. In this respect the Branch has acted as a training ground for industry.



Assistance was supplied in plymill manufacturing methods, sawmill economics and practice, and in timber seasoning, preservation, identification and general utilisation of wood in various industries. Special attention was given to wood structure in relation to physical properties and growth conditions in species now forming a major proportion of the Department's plantations. To this end one officer spent three months with the Division of Forest Products, C.S.I.R.O., Melbourne, to study the latest research methods.

The fullest co-operation has been maintained with the Division of Forest Products, C.S.I.R.O., other Government Departments, both State and Federal, and with the Standards Association of Australia. The ready assistance given by these organisations, together with timber trade associations and individual sawmillers, is gratefully acknowledged.

### I. Engineering and Sawmill Economics.

Research and trade assistance in this field was again severely limited by unfilled staff positions requiring the services of specially trained officers. To enable urgent sawing studies to be made trained officers from other sections had to be drawn upon with consequent disorganisation of programme.

**Sawmill Studies.**—Nine sawing studies were completed to secure necessary data regarding sawn yield and mill efficiency for log pricing and research purposes. The studies covered seven species, viz.:

Cypress Pine (*Callitris glauca*).  
Satinash (*Eugenia* sp.).  
Spotted Gum (*E. citriodora*).  
Southern Silver Ash (*F. schottiana*).  
White Mahogany (*E. acmenoides*).  
Forest Red Gum (*E. tereticornis*).  
Hoop Pine (*A. cunninghamii*).

### II. Seasoning and Timber Physics.

Work in this section was again directed primarily to the urgent problem of investigating the physical properties and growth of those coniferous species which now form the major proportion of the State's plantations.

**1. Seasoning.**—During the year 1,650 moisture content tests were made for research and trade purposes.

Although the greater part of the year was favourable to air drying it was noted that 43 per cent. of the samples of machined timber tested, most of which was in T. & G. flooring, showed a moisture content in excess of the equilibrium moisture content. This high proportion of inadequately seasoned material shows not only the need for closer contact with the timber industry in the seasoning field to call attention to defective methods, but the need for industry itself to substantially improve its practice.

Several new, modern-type seasoning kilns are under construction in the near North Coast area, which are expected, by competition, to raise the standard of seasoned flooring in this district. A recent seasoning school held in Brisbane by officers of the Division of Forest Products, at the request of industry, is an indication of recognition by industry of its shortcomings.

**2. Timber Physics.**—In conjunction with the Department's tree breeding programme, determination of the physical properties of plantation grown trees again was given priority in research planning. The species tested were:—

Hoop Pine (*Araucaria cunninghamii*).  
Kauri Pine (*Agathis palmerstoni*).  
Slash Pine (*P. elliotii* var. *elliotii*).  
Caribbean Pine (*P. caribaea*).  
Loblolly Pine (*P. taeda*).  
Red Cedar (*Cedrela australis*).

Brief highlights of the year's work are:—

#### Hoop Pine.—

From analysis of basic density observations for a group of 25 plantation stems from a plus stand at R. 135, Brooloo, the following points are of interest:

- (1.) The trees were of the same age with widely varying (17.2" to 35.3" g.b.h.o.b.) rates of growth.
- (2.) Mean basic density for the basal sample discs (1' from G.L.) was independent of G.B.H.O.B.
- (3.) A linear relation existed between the mean basic density of the basal disc and that of sample discs taken at intervals up the stem.

This relation was present in all but two trees which proved to be an exception in all other characters examined and could be regarded as representing a different population. In general, basic density decreases with increasing height in the stem.

Analysis of the results from a further group of 10 plantation trees from S.F.R. 435, Amamoor, is in progress.

**Kauri Pine.**—Twenty-seven trees from the oldest plantation of *Agathis palmerstoni* in North Queensland were received. These have been sawn and studies of distortion, &c., in seasoning are in progress.

**Slash Pine and Loblolly Pine.**—Observations on development of compression wood in leaning trees of these two species have been continued. Basic density, shrinkage and seasoning observations on 10 trees from the oldest plantations of these two species at S.F.R. 561, Bribie, have been completed and await analysis.

**P. Caribaea.**—Basic density and shrinkage observations on four trees of this species have been completed. This species is of interest because of the very narrow bands of latewood of relatively low density so far produced under Queensland conditions.

**Red Cedar.**—Five trees from the oldest plantation of this species in North Queensland were received and have been sawn. Studies of distortion, &c., in seasoning, basic density and shrinkage have been completed and await analysis.

During the year results of observations of basic density and shrinkage of macro ( $4" \times 1" \times \frac{1}{2}"$ ) and micro ( $1" \times 0.25" \times 0.05"$ ) specimens were compared and results appear to be comparable. The maximum moisture content method of determining basic density of micro samples was checked and arrangements made to purchase a special comparator and slip gauges for measurement of shrinkage on these small samples.

### III Wood Anatomy and Utilisation.

**1. Utilisation.**—A total of 918 enquiries for information upon the properties and uses of native and imported timbers slightly exceeded that of last year (900), although the number of wood specimens received for identification and report fell from approx. 4,000 in the previous year to 2,490.

Two hundred and thirty-three botanical specimens, many of which were added to the Branch reference herbarium, were received from nine forestry districts for identification by the Government Botanist, whose services are again gratefully acknowledged.

A further survey of millable rain forest trees on the Eungella Range was made.

Co-operation with the Standards Association of Australia in the preparation of timber specifications was continued. In flooring there is an urgent need for revision of specifications to include defect free immunised sapwood in the top grades of hardwoods and brushwoods for indoor use.

Work has commenced on compiling data for a field classification key for rain forest trees, using major identification factors.

The majority of enquiries in the utilisation field concerned the names, qualities and uses of timber, and methods used to preserve timber from the effects of decay, insects and marine borers.

Full tree and timber descriptions of seven lesser known species, with notes on seven closely related timbers, were compiled to extend the use of these woods, particularly in North Queensland. A specification was prepared for timber required in large quantities, in the near future, for use in the new copper smelter at Townsville.

Forest Service Pamphlet No. 2 "South Queensland Building Timbers and Specifications for Their Use" was revised and brought up to date in draft form.

The first part of the trade pamphlet "Queensland Timbers for Joinery and Mouldings" containing data on 147 local species was published in "Queensland Building Year Book, 1957," for the use of the trade.

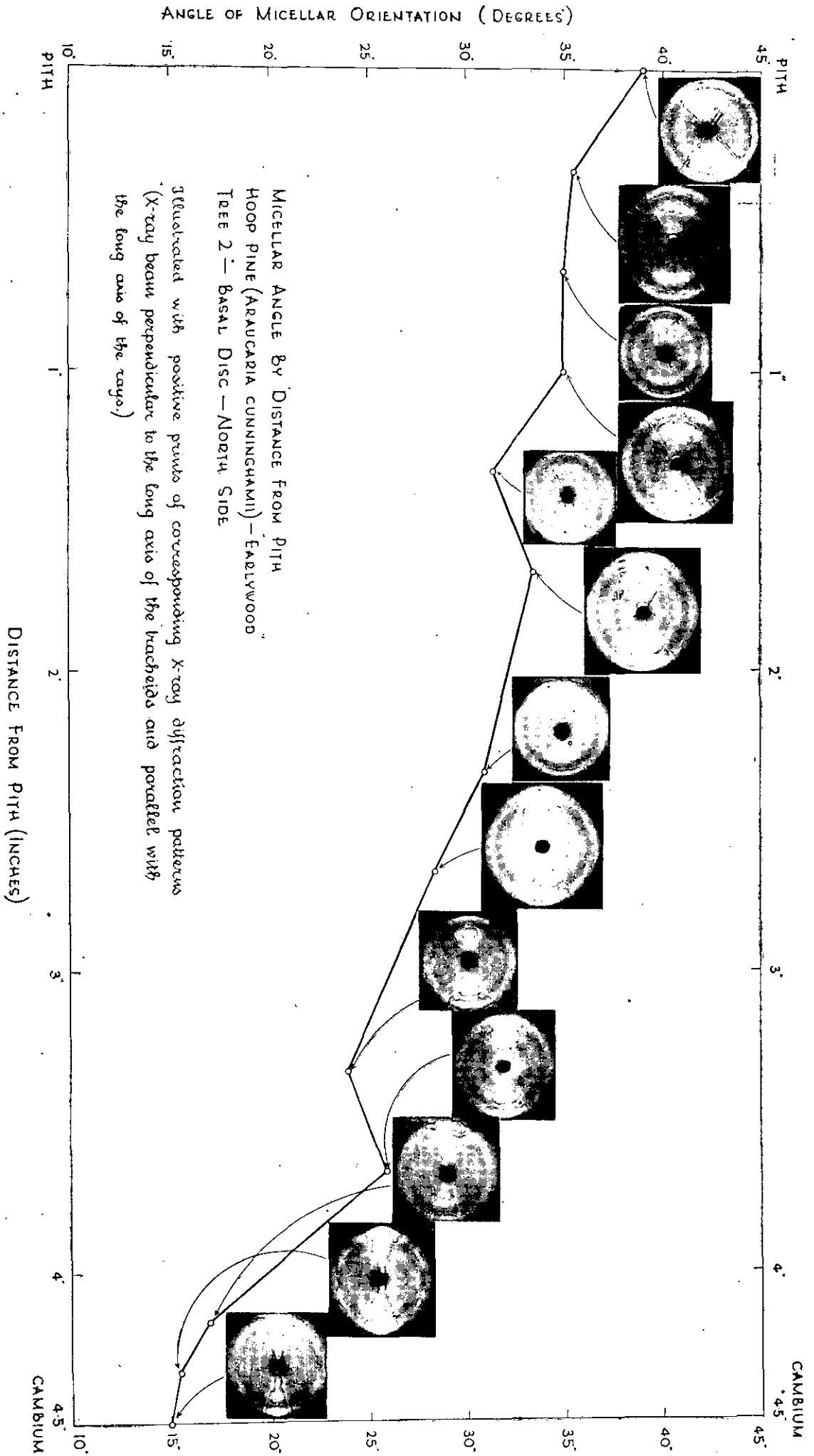
The survey of the quantity and location of sawmill wood waste suitable for building board manufacture was continued and figures are now available for all mills from the Brisbane area westward to the Dividing Range and northward to Gladstone.

**2. Wood Anatomy.**—*Investigation of Wood Structure in Relation to Growth Conditions.*—Further work in *Pinus elliotii* var *elliotii* this year has confirmed the undesirability of using tracheid/ray pit apertures for measurement of angle of micellar orientation, which is now preferably gauged by the angle of inclination of striations, seasoning checks and/or lines of mechanical cleavage or by the angle of inclination of tracheid/tracheid pit apertures where these other indicators are not present or cannot be induced. These microscopic means of measurement must be used at present in the absence of equipment necessary for application of the much more rapid X-ray diffraction technique.

Results indicate the desirability of measuring on tangential rather than radial cell walls.

Work on *P. elliotii* var *elliotii* has confirmed or established indications of relationships between:—

- (a) tracheid length and micellar angle ;
- (b) micellar angle and distance from pith at a particular level in a particular stem ;
- (c) tracheid length and distance from pith at a particular level in a particular stem ;
- (d) fibre length and ring width ;
- (e) micellar angle and ring width ;
- (f) micellar angle and longitudinal shrinkage.



During the year, the Division of Forest Products, C.S.I.R.O., most generously offered to provide facilities to enable an officer of the Branch to spend three months in that Division investigating the relationships between various anatomical features and physical properties of Hoop Pine (*Araucaria cunninghamii*) and the technique and equipment used. During this period, seven Hoop Pine select stems from a special thinning of an even-aged stand were studied with a view to investigating relationships of micellar angle, tracheid length, longitudinal shrinkage and basic density—both within the one stem and between stems.

Micellar angle and tracheid-length measurements were taken from pith to bark—at several different levels up three stems, and on both sides of the basal disc from four additional stems. To obtain some indication of trends up the tree within the same growth ring, measurements were also taken at several levels from as close as practicable to the cambium in all seven trees on opposite sides at each level. The last-formed growth ring in each tree is the only one which can be traced upward with any certainty, since this species does not form easily separable earlywood/latewood bands.

Average micellar angle measurements were obtained for 330 separate specimens using the X-ray diffraction technique and the length of 18,700 individual tracheids (representing 374 separate specimens) measured by means of a projection microscope and electronic measuring device, in the course of this project. Plate opposite page 30 illustrates the measurements of micellar angle obtained by this technique.

Although the results are still being analysed, the following general indications are apparent :

- (a) the average micellar spiral becomes steeper (i.e. micellar angle decreases) from pith towards bark at all levels in the stem ;
- (b) average tracheid length increases from pith to bark at all levels in the stem ;
- (c) there is a definite relationship between micellar angle and tracheid length ;
- (d) within one growth zone micellar angle decreases up the stem to a minimum at a variable height above ground level in different stems, maintains that minimum for a variable distance, and then increases with increase in height above ground.

Further analysis is proceeding and it is hoped that it will be possible for measurement of a single anatomical feature (either tracheid length or micellar angle) to be a sufficiently reliable indicator, directly or indirectly, through relationship with other anatomical and physical features to enable rapid assessment of the wood qualities of genotypes already selected for high quality seed production.

#### IV. Wood Chemistry and Preservation.

**1. Preservation.**—(a) *Lyctus control.*—Further demand for technical assistance by the Timber Industry has followed the installation of new equipment and more stringent demands on quality by markets.

To date, 77 anti-Lyctus treatment plants have been approved under "The Timber Users' Protection Acts, 1949 to 1955," having an annual capacity of 30 million super. feet in sawn timber. In the field of plywood production approximately 50 per cent. of all veneer now undergoes treatment.

During the year, two further preservatives were approved for this purpose : Tanalith and Boliden Salts. Interest was also shown in sodium fluoride and three North Queensland veneer mills are now using this preservative for treatment of veneer for interstate trade only. Due to technical difficulties in its use and associated requirements in health precautions, this Department has not been prepared to recommend its use for immunisation against Lyctus in this State.

(b) *European House Borer.*—The Committee representing the Forestry Department, Queensland Housing Commission and Department of Agriculture and Stock continued its investigations into the extent and possible extension of the attacks of the European House Borer (*Hylotrupes bajulus*).

Inspections were extended to housing groups outside the Brisbane area where similar infestation was noted. To date, no definite evidence of reinfestation in any building has been found.

(c) *Control of Fungi.*—Interest in fungicides and pressure plants is growing because of the reduced supply of durable timber for exterior use and the necessity to restrict sapwood treated with Boron salts to interior structures. There is a growing appreciation of the value of an "all-round" preservative.

Further inspections of 644 test sleepers under heavy traffic conditions have given strong indications that simple hot-and-cold creosote/oil treatments have extended the service life. To date 35 unserviceable sleepers have been removed, including 31 of Apple Box (*Angophora woodsiana*) which appears to be unsatisfactory under such conditions of treatment.

360 Sleepers of Satinay (*Syncarpia hillii*), Turpentine (*Syncarpia laurifolia*), Rose Gum (*Eucalyptus grandis*) and Brush Box (*Tristania conferta*) were forwarded to the Division of Forest Products, C.S.I.R.O., for high pressure impregnation and return to this State for exposure tests in service.

The marketing advantages of timber free from sapstain, locally called "blue stain", in softer timbers is becoming better appreciated in the timber trade and seven Queensland mills are now using anti-stain treatment.

(d) *Marine Borer Research*.—Research Note No. 6 entitled "The Effect of Stream Flow in Salinity and Destruction of Turpentine Piling by Marine Borers on the Brisbane River" was issued in roneod form for the assistance of local harbour engineers. The paper demonstrates an effective method of anticipating, from measured freshwater stream flow, the probable extent of marine borer damage to unprotected Turpentine piling in the lower river wharves.

**2. Wood Chemistry.**—(a) *Plywood Industry*.—Although plywood production has been reduced by lack of demand, requests for technical assistance have increased. Detailed investigations at one major plymill enabled suitable recommendations for improved methods to be made.

A pleasing feature has been the marked improvement in the technical aspects of plywood manufacturing processes, including the control of veneer moisture content and the installation of mechanical and C.S.I.R.O. screen dryers.

Assistance in lathe operation was given to a North Queensland mill commencing veneer manufacture, and action was taken towards securing satisfactory supplies of casein through the revision of specifications.

(b) *Laminated Timber*.—Work in this field was continued and advice given for the construction of large scale laminated arches for a church.

Physical tests were completed on laminated *Pinus spp.* beams and the results are being statistically examined. Similar tests on the gluing properties of hardwoods were continued and results indicate that high pressures will be needed for satisfactory adhesion.

(c) *Chemical Laboratory*.—Working under difficulties with inadequate equipment and limited space, every effort has been made to meet the demand for increased chemical work from other branches of the Department and the Timber Industry.

Tests and determinations have included—

- (a) phosphates in soils ;
- (b) physical and chemical soil determinations ;
- (c) plant material examinations for phosphates and minor elements ;
- (d) analyses of treated timber and preservative solutions ;
- (e) moisture content tests for research and trade purposes ;
- (f) mechanical tests on plywood and veneer.

Laboratory tests for the year totalled 6,174, including Preservation 538, General Chemistry 452, Soils, Plant Materials, &c., 1,289, Plywoods and Veneers 2,245, and Moisture Content Tests 1,650.

**3. Timber Users' Protection Acts.**—As a result of the activities of the Inspector under the above Acts, sawmillers and builders now are much better informed of the problems and expense which can arise from the sale and use of *Lyctus* susceptible timber. Some mills are still selling weather and chamfer boards containing *Lyctus* susceptible sapwood which is a breach of the standard grades.

The Inspector's activities included investigation of 58 formal complaints under the Acts, 116 other inspections and 211 routine inspections of buildings in progress.

#### V. Timber Research Yard, Ipswich Road.

Valuable assistance was rendered by the research yard during the year. Except for a period for maintenance and repairs, the kiln drying and planing equipment was kept fully occupied. During time not occupied on research projects timber for the Public Works Department was handled ; charges for this service reduced the overall yard costs. The sawmill equipment was improved for working conditions by the provision of concrete floors round the saw benches.

Sawn timber totalling about 3,140 super. feet was sold by the Fancywoods Section from material left over from research projects. No other stocks were reported.

#### STAFF.

At 30th June, 1957, there were 324 salaried officers on the staff, 12 more than at the same time in 1956. The number of wages men decreased from 1,985 to 1,480.

There were thirty resignations of salaried officers during the year, including that of K. J. White, Assistant Forester, Atherton, who resigned to take up duties with the Department of Territories, as Plant Ecologist and Assistant Botanist, at Lae in New Guinea.

Two officers retired after long and meritorious service—Mr. A. F. Euler and Forest Ranger P. G. R. Dutton. Mr. Euler worked for 24 years in the Kilkivan district on general field duties before coming to Brisbane. Mr. Dutton served all his official career in North Queensland, principally on the Atherton Tableland. He had risen to the rank of Forest Ranger Division I., Townsville, at date of his retirement on 31st December, 1956. We wish both officers many years of health and happiness.

It is with deep regret that the death is recorded of L. S. Steinke, who was killed in an accident on 12th August, 1956. Mr. Steinke, who was stationed at Imbil, was one of the promising young officers of the Department.

#### ACKNOWLEDGMENT.

I desire to express my thanks to all members of the staff for their loyal efforts during the year.

V. GRENNING,  
Director of Forests.

## Appendices.

## APPENDIX A.

## Return of Timber &amp;c., Removed from Crown Lands during the Year ended 30th June, 1957.

Species	Quantity.	
	Super. feet.	Super. feet
<b>Milling Timber—</b>		
<b>Hoop and Bunya Pine—</b>		
Ply .. .. .	5,873,840	
Logs .. .. .	20,000,050	
Tops .. .. .	16,763,697	
		42,637,587
Kauri Pine .. .. .	2,851,102	
Cypress Pine .. .. .	21,700,599	
Forest Hardwoods .. .. .	76,165,365	
Scrub Hardwoods .. .. .	8,780,602	
Cabinet Woods .. .. .	22,264,862	
Miscellaneous Species .. .. .	26,576,553	
Limb Logs, Head Logs, Stumps and Flitches .. .. .	109,420	
		158,448,503
<b>Plantation Thinnings—</b>		
Hoop Pine .. .. .	13,832,087	
Bunya Pine .. .. .	29,663	
Kauri Pine .. .. .	1,282,393	
Slash Pine .. .. .	2,703,140	
Loblolly Pine .. .. .	1,148,812	
Maple .. .. .	19,678	
Silky Oak .. .. .	14,955	
<i>Pinus patula</i> .. .. .	1,032,249	
<i>Pinus radiata</i> .. .. .	130,092	
<i>Pinus spp.</i> .. .. .	14,376	
<i>Cedrela mexicana</i> .. .. .	8,106	
<i>Callitris spp.</i> .. .. .	64,329	
		20,279,880
		221,365,970
Expressed as Superficial Feet (Hoppus) Log Measure.		
<b>Other Classes—</b>		
Sleepers .. .. .	643,269 pieces	22,966,982
Sleeper Blocks (as sleepers contained) .. .. .	419,767 pieces	15,111,612
Sleeper Edgings .. .. .	447 pieces	4,470
Transoms, Crossings, Headstocks, Longitudinals .. .. .	447,970 superficial feet	716,752
Girders, Corbels, Piles, Sills, Kerb Logs .. .. .	140,797 lineal feet	2,534,346
Girder Logs .. .. .	766,413 superficial feet	766,413
Poles .. .. .	406,604 lineal feet	2,846,228
House Blocks, Round Posts .. .. .	189,754 lineal feet	1,138,524
Fencing Material—Split .. .. .	371,527 pieces	3,343,743
Fencing Material—Round .. .. .	201,284 lineal feet	503,210
Mining Timber—Split .. .. .	45,724 pieces	182,896
Mining Timber—Round .. .. .	294,803 lineal feet	589,606
Hewn and Bridge Timbers .. .. .	17,703 superficial feet	28,325
		50,733,107
Fuel .. .. .	61,351 tons	
Charcoal .. .. .	978 bags	
Trees and Plants (Number) .. .. .	187,640	
Sand, Gravel, Soil, &c. .. .. .	162,134 cubic yards	
Rosewood .. .. .	35 tons	
Lawyer Cane .. .. .	26 tons	
Shell Grit .. .. .	195 tons	
Staghorns and Forns .. .. .	439 pieces	
Peat .. .. .	94 bags	
Mulga Wood .. .. .	80 tons	

## APPENDIX B.

## Annual Cut—Pine—Financial Year ended 30th June, 1957.

Forestry District.	Ply.	Logs.	Tops.	Total.
	Super. feet.	Super. feet.	Super. feet.	Super. feet.
Brisbane .. .. .	32,105	357,140	252,957	642,202
Brisbane Valley .. .. .	3,957,875	9,112,402	8,689,320	21,759,597
Gympie .. .. .	137,368	1,668,211	936,698	2,742,277
Mackay .. .. .		144,706	165,419	310,125
Maryborough .. .. .	444,802	1,432,953	1,524,745	3,402,500
Monto .. .. .	591,287	1,613,597	1,440,290	3,645,174
Murgon .. .. .	703,699	4,903,504	3,316,154	8,923,357
Warwick .. .. .	6,704	767,537	438,114	1,212,355
<b>Total .. .. .</b>	<b>5,873,840</b>	<b>20,000,050</b>	<b>16,763,697</b>	<b>42,637,587</b>

## APPENDIX C.

## Receipts under the State Forests and Timber and Quarry Regulations for the Year ended 30th June, 1957.

DISTRICTS.	TOTALS.		
	£	s.	d.
Group 1—South Queensland (Brisbane, Bundaberg, Gympie, Maryborough, Monto, Toowoomba, Yarraman)	1,227,983	17	8
Group 2—Goondiwindi, Inglewood, St. George, Stanthorpe, Warwick	84,727	8	2
Group 3—Dalby	127,729	2	4
Group 4—Charleville, Cunnamulla, Roma, Quilpie	121	18	8
Group 5—Barcaldine, Blackall, Jundah, Longreach, Muttaborra, Stonehenge, Winton, Aramac, Isisford, Jericho	993	2	5
Group 6—Clermont, Emerald, Springsure	4,702	6	4
Group 7—Gayndah, Gladstone, Taroom, Theodore, Mundubbera	2,052	8	0
Group 8—Rockhampton	8,606	19	9
Group 9—Mackay	23,892	2	11
Group 10—Bowen	1,684	4	0
Group 11—Townsville	16,547	16	4
Group 12—Charters Towers, Ravenswood	431	2	9
Group 13—Hughenden	328	1	6
Group 14—Cloncurry, Boulia, Kynuna, Mackinlay	148	16	3
Group 15—North Queensland (Atherton, Herberton, Cooktown, Port Douglas, Cairns, Innisfail, Ingham)	583,829	14	5
Group 16—Burketown, Coen, Croydon, Georgetown, Normanton, Thursday Island	103	19	0
	<b>£2,083,883</b>	<b>0</b>	<b>6</b>
Receipts—Forestry and Lumbering	320,319	5	7
Sale of Plants, Material, &c.	15,057	18	3
Licenses† (See note after Appendix D)	2,785	17	5
Rents and Grazing Dues	7,849	14	10
	<b>£2,429,895</b>	<b>16</b>	<b>7</b>
Less Treasury Refunds	3,819	0	4
	<b>£2,426,076</b>	<b>16</b>	<b>3</b>

## COMPARISONS WITH TOTALS OF PREVIOUS YEARS.

1952-53.	1953-54.	1954-55.	1955-56.	1956-57.
£2,541,904	£2,513,058	£2,046,786	£1,866,437	£2,426,077

## APPENDIX D.

## Proceeds of Sales of Timber, &amp;c., for the Period 1st July, 1953, to 30th June, 1957.

Groups.*	1953-54.		1954-55.		1955-56.		1956-57.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Group 1	1,362,611	3 2	1,110,093	13 4	898,363	11 7	1,227,983	17 8
Group 2	60,107	9 8	74,412	3 8	74,194	17 5	84,727	8 2
Group 3	44,163	14 11	73,585	13 9	86,942	1 10	127,729	2 4
Group 4	712	3 2	287	3 10	376	17 9	121	18 8
Group 5	508	9 3	728	16 6	560	15 7	993	2 5
Group 6	3,750	7 4	4,123	14 7	4,543	12 2	4,702	6 4
Group 7	39	13 8	774	1 11	596	7 7	2,052	8 0
Group 8	1,937	16 2	1,664	7 2	5,136	6 4	8,606	19 9
Group 9	7,206	7 4	10,535	14 1	11,867	18 11	23,892	2 11
Group 10	4,637	9 8	3,142	17 3	1,933	19 2	1,684	4 0
Group 11	14,317	14 8	3,964	12 6	12,673	6 5	16,547	16 4
Group 12	137	19 11	236	14 5	296	18 4	431	2 9
Group 13	120	15 6	95	9 2	111	0 5	328	1 6
Group 14	211	10 4	202	19 1	170	17 7	148	16 3
Group 15	705,698	2 7	538,278	6 4	505,706	1 2	583,829	14 5
Group 16	..	..	4	4 0	2	1 6	103	19 0
	<b>2,206,160</b>	<b>17 4</b>	<b>1,822,130</b>	<b>11 7</b>	<b>1,603,476</b>	<b>13 9</b>	<b>2,083,883</b>	<b>0 6</b>
Receipts—Forestry and Lumbering	289,912	3 2	197,526	17 2	237,202	18 6	320,319	5 7
Sale of Plants, Material, &c.	10,920	8 4	19,165	15 7	20,225	16 9	15,057	18 3
Licenses†	2,374	8 5	2,186	14 3	2,390	7 11	2,785	17 5
Rents and Grazing Dues	6,426	0 5	6,934	16 5	7,275	2 10	7,849	14 10
	<b>2,515,793</b>	<b>17 8</b>	<b>2,047,944</b>	<b>15 0</b>	<b>1,870,570</b>	<b>19 9</b>	<b>2,429,895</b>	<b>16 7</b>
Less Treasury Refunds	2,735	9 11	1,159	1 6	4,134	5 8	3,819	0 4
Total	<b>2,513,058</b>	<b>7 9</b>	<b>2,046,785</b>	<b>13 6</b>	<b>1,866,436</b>	<b>14 1</b>	<b>2,426,076</b>	<b>16 3</b>

\* For districts within the groups see Appendix C.

† Includes the following license fees :—Fuel, Quarry, Royalty, Brand, Sawmill, Apiary, Forest Products.

## APPENDIX E.

The following Schedule illustrates the market price of logs during the year 1st July, 1956, to 30th June, 1957:—

Species—Standard Trade Names. (Botanical Names in Brackets.)	Log Class.	Delivery. F. O. R.	Price per 100 super. feet (Hoppus measure).			
			As at 1-7-56.	As at 1-8-56.	As at 24-11-56.	As at 4-5-57.
Red Tulip Oak ( <i>Argyrodendron peralatum</i> )	8 ft. plus .. ..	Cairns .. ..	s. d. 36 2	s. d. 39 10	s. d. 39 10	s. d. 41 4
		Townsville .. ..	36 2	39 10	39 10	41 4
Red Cedar ( <i>Cedrela toona</i> )	8 ft. plus .. ..	Cairns .. ..	66 2	69 10	69 10	71 4
	6 ft. plus .. ..	Brisbane .. ..	74 1	76 7	76 7	77 1
North Queensland Kauri Pine ( <i>Agathis palmerstoni</i> )	8 ft. plus .. ..	Cairns .. ..	56 2	59 10	59 10	61 4
Queensland Walnut ( <i>Endiandra palmerstoni</i> )	8 ft. to 8 ft. 11 in.	Townsville .. ..	56 2	59 10	59 10	61 4
		Cairns .. ..	47 1	50 9	50 9	52 3
		Townsville .. ..	47 1	50 9	50 9	52 3
Northern Silky Oak ( <i>Cardwellia sublimis</i> )	8 ft. plus .. ..	Cairns .. ..	56 2	59 10	59 10	61 4
Queensland Maple ( <i>Flindersia brayleyana</i> )	8 ft. to 8 ft. 11 in.	Townsville .. ..	56 2	59 10	59 10	61 4
		Cairns .. ..	61 2	64 10	64 10	66 4
		Townsville .. ..	61 2	64 10	64 10	66 4
Black Pine ( <i>Podocarpus amara</i> )	8 ft. plus .. ..	Cairns .. ..	46 2	49 10	49 10	51 4
		Townsville .. ..	46 2	49 10	49 10	51 4
Silver Silkwood ( <i>Flindersia acuminata</i> )	8 ft. plus .. ..	Cairns .. ..	56 2	59 10	59 10	61 4
		Townsville .. ..	56 2	59 10	59 10	61 4
White Beech ( <i>Gmelina leichhardtii</i> ) ( <i>Gmelina fasciculiflora</i> )	8 ft. plus .. ..	Cairns .. ..	56 2	59 10	59 10	61 4
		Townsville .. ..	56 2	59 10	59 10	61 4
	6 ft. plus .. ..	Brisbane .. ..	59 1	61 7	61 7	62 1
Hickory Ash ( <i>Flindersia iflauriana</i> )	8 ft. plus .. ..	Cairns .. ..	46 2	49 10	49 10	51 4
Northern Silver Ash ( <i>Flindersia pubescens</i> )	8 ft. plus .. ..	Cairns .. ..	56 2	59 10	59 10	61 4
		Townsville .. ..	56 2	59 10	59 10	61 4
Queensland Silver Ash ( <i>Flindersia bourjotiana</i> )	8 ft. plus .. ..	Cairns .. ..	56 2	59 10	59 10	61 4
		Townsville .. ..	56 2	59 10	59 10	61 4
Bolly Silkwood ( <i>Cryptocarya oblata</i> )	8 ft. plus .. ..	Cairns .. ..	36 2	39 10	39 10	41 4
		Townsville .. ..	36 2	39 10	39 10	41 4
Satin Sycamore ( <i>Ceratopetalum succirubrum</i> )	8 ft. plus .. ..	Cairns .. ..	36 2	39 10	39 10	41 4
		Townsville .. ..	36 2	39 10	39 10	41 4
Yellow Walnut ( <i>Beilschmiedia bancroftii</i> )	8 ft. plus .. ..	Cairns .. ..	36 2	39 10	39 10	41 4
		Townsville .. ..	36 2	39 10	39 10	41 4
Hardwoods .. .. .	6 ft. plus .. ..	Brisbane .. ..	34 2	39 2	39 2	39 8
Hardwoods .. .. .	6 ft. plus .. ..	Warwick .. ..	31 2	32 4	32 4	32 10
Hardwoods .. .. .	6 ft. plus .. ..	Maryborough, Bundaberg	30 8	33 0	33 0	33 6
Hardwoods .. .. .	6 ft. plus .. ..	Rockhampton ..	35 4	40 7	40 7	41 0
Hardwoods .. .. .	6 ft. to 6 ft. 11 in.	Townsville .. ..	33 8	37 4	37 4	38 10
Hardwoods .. .. .	6 ft. plus .. ..	Mackay .. ..	33 11	38 5	38 5	38 11
Hoop Pine Ply .. .. .	7 ft. plus .. ..	Brisbane .. ..	82 6	88 1	103 4	103 10
Hoop Pine "A" Quality Logs .. .. .	7 ft. plus .. ..	Brisbane .. ..	66 10	72 5	87 8	88 2
Bunya Pine Logs .. .. .	7 ft. plus .. ..	Brisbane .. ..	65 4	70 11	86 2	86 8
Hoop Pine "C" Quality Logs .. .. .	7 ft. plus .. ..	Brisbane .. ..	43 7	45 10	54 2	54 8
Hoop Pine "D" Quality Logs .. .. .	7 ft. plus .. ..	Brisbane .. ..	41 3	43 6	43 6	44 0
Bunya Pine Tops .. .. .	7 ft. plus .. ..	Brisbane .. ..	41 3	43 6	43 6	44 0
Cypress Pine—1st Class .. .. .	28 in. plus .. ..	Brisbane .. ..	35 4	43 6	43 6	43 6
		Gympie, Mary- borough, and Bundaberg.	32 4	40 6	40 6	40 6
South Queensland Scrubwoods—						
Case and Building Timbers Group (a) ..	6 ft. plus .. ..	Brisbane .. ..	34 4	36 10	36 10	37 4
Common Cabinetwoods Group (b) ..	6 ft. plus .. ..	Brisbane .. ..	36 3	38 9	38 9	39 3
Special Purpose Timbers Group (c) ..	6 ft. plus .. ..	Brisbane .. ..	38 2	40 8	40 8	41 2
Plantation Timbers—	G.B.H.O.B.					
Hoop Pine .. .. .	38 in. .. ..	Imbil .. ..	26 0	26 11	26 11	27 5
Slash Pine .. .. .	38 in. .. ..	Beerwah .. ..	26 0	27 3	27 3	27 9

The following are the most common species included in the respective groups:—

## (a) Case and Building Timbers Group—

Southern Satinash (Red Apple) (*Eugenia brachyandra*)  
Blush Coondoo (*Planchonella laurifolia*)  
Rose Satinash (Watergum) (*Eugenia francisii*)  
Mararie (Marara) (*Pseudoweinmannia lachnocarpa*)  
Pink Poplar (Blush Cudgerie) (Maiden's Blush) (*Euroschinus falcatus*)  
Tulip Plum (Burdekin Plum) (*Pleiogynium cerasiferum*)  
White Evodia (*Evodia micrococca*)

Brown Tulip Oak (Crowsfoot Elm) (*Argyrodendron trifoliolatum*)  
Rose Walnut (Domatia Tree) (*Endiandra discolor*)  
Blush Walnut (Hard Bolly Gum) (*Beilschmiedia obtusifolia*)  
Red Almond (Red Ash) (Sarsparilla) (*Alphitonia excelsa*)  
Bennett's Ash (*Flindersia bennettiana*)  
Southern Penda (Luya's Hardwood) (*Xanthostemon oppositifolius*)

## (b) Common Cabinetwoods Group—

Brown Alder (Roseleaf Marara) (*Ackama paniculata*)  
Southern Silky Oak (*Grevillea robusta*)  
Brush Mahogany (Red Carrobean) (*Geissois benthami*)  
Silky Beech (Soap Box) (Churnwood) (*Chariessa moorei*)

Rose Mahogany (Rosewood) (*Dysoxylum fraserianum*)  
Miva Mahogany (Red Bean) (*Dysoxylum muelleri*)  
White Birch (White Cherry) (*Schizomeria ovata*)  
Blush Alder (Blush Carrobean) (*Sloanea australis*)  
Bollywood (Bolly Gum) (Brown Beech) (*Litsea reticulata*)

## (c) Special Purpose Timbers Group—

Crow's Ash (*Flindersia australis*)  
Ivorywood (*Siphonodon australe*)  
Yellowwood (*Flindersia xanthoxyla*)

Southern Silver Ash (Bumpy Ash) (*Flindersia schottiana*)  
Yellow Boxwood (*Planchonella pohlmanniana*)



## APPENDIX F.

## Constructional Timber supplied during Financial Year 1956-57 under Forestry and Lumbering Operations.

Class of Timber.	Quantity.	Sales Value.		
		£	s.	d.
Sawn Crossings .. .. .	981 superficial feet	42	0	3
Hewn Crossings .. .. .	224,344 superficial feet	10,835	5	7
Headstocks, Longitudinals and Braces .. .. .	39,522 superficial feet	1,985	3	0
Hewn Transoms .. .. .	126,879 superficial feet	6,199	13	3
Sawn Transoms .. .. .	2,614 superficial feet	125	2	9
Girders—Dressed .. .. .	9,187 lineal feet	6,347	13	0
Piles .. .. .	28,001 lineal feet	9,974	1	8
Sills .. .. .	11 lineal feet	5	9	1
Poles .. .. .	270 lineal feet	57	7	11
Round Posts .. .. .	61 lineal feet	9	11	0
Split Posts and Rails .. .. .	49,095 pieces	6,888	0	8
Hewn Sleepers .. .. .	42,364 pieces	26,757	17	9
Sawn Sleepers .. .. .	218,001 pieces	142,892	15	8
Sleeper Blocks (as sleepers contained) .. .. .	419,767 pieces	168,217	18	6
Girder Logs .. .. .	1,780 lineal feet	961	3	1
Total .. .. .	..	£381,299	3	2

## APPENDIX G.

## Comparative Statement of Expenditure for Years 1955-56 and 1956-57.

	1955-56.	1956-57.
	£	£
Revenue—		
Salaries .. .. .	282,639	291,173
Travelling Expenses and Incidentals .. .. .	36,767	33,502
Fares, Printing, Stores, &c. .. .. .	5,950	6,758
Cash Equivalent Extended Leave .. .. .	2,278	1,253
National Parks .. .. .	51,289	45,540
Loan—		
Reforestation .. .. .	1,486,481	1,255,468
Acquisition of Land for Forestry Purposes .. .. .	12,332	6,577
Access Roads .. .. .	152,962	98,210
Purchase of Plant .. .. .	67,504	45,940
Trust—		
Hardwood Supplies to Railway Department and Others .. .. .	233,431	360,097
Harvesting and Marketing Timber .. .. .	436,648	511,355
Access Roads—Maintenance and Subsidies .. .. .	64,051	57,744
Maintenance of Capital Improvements .. .. .	40,348	36,870
Minor Protection .. .. .	..	77,057
Total .. .. .	£ 2,872,680	2,827,544

APPENDIX H.

Summary of Reforestation Expenditure, 1956-57.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
BRISBANE WORKING PLAN AREA.														
Reserve 69	..	53 4 2	..	..	..	468 12 11	25 19 11	48 7 3	242 5 7	121 9 7	46 10 3	..	..	1,001 9 8
Reserve 215	..	..	..	..	17 2 6	449 15 2	52 6 0	17 15 1	15 8 4	100 17 3	3 5 0	..	..	646 5 9
Reserve 309	..	..	..	..	..	1,159 1 8	22 19 10	..	1,217 10 1	599 19 10	77 17 10	..	..	3,254 0 10
Reserve 321	..	..	..	..	..	155 5 10	..	..	..	..	..	..	..	155 5 10
Reserve 494	..	..	..	..	2 18 6	572 11 9	17 2 5	0 1 0	237 4 5	72 5 9	81 18 1	..	..	1,032 10 11
Reserve 571	..	144 15 1	..	..	16 12 11	1,250 10 10	13 6 9	..	798 12 1	328 18 8	..	..	..	2,762 14 10
Reserve 583	..	..	..	..	..	143 19 1	..	..	124 11 8	37 1 8	..	..	..	501 0 9
Reserve 667	..	416 17 8	..	..	6 16 10	224 7 4	..	..	300 0 0	191 8 7	..	..	..	1,140 9 11
Reserve 702	..	..	..	..	..	788 14 0	44 19 3	9 0 0	785 4 5	347 7 11	52 13 10	..	..	3,155 12 3
Reserve 727	..	189 1 9	..	..	..	229 16 8	..	..	52 19 0	102 16 2	..	..	..	574 13 7
Reserve 736	..	..	..	..	18 7 2	704 10 9	..	..	214 2 0	88 4 11	..	..	..	18 7 2
Reserve 1370	..	203 15 6	..	..	..	297 13 8	..	..	75 13 11	38 17 7	1 6 8	..	..	1,215 4 2
Reserve 1329	..	..	..	..	..	145 1 1	..	..	160 3 4	180 9 5	3 0 7	..	..	414 11 4
Reserve 1635	..	..	..	..	..	..	..	..	281 8 3	..	..	..	..	484 4 11
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	261 8 3
Firefighting and patrol	..	..	..	..	..	4,611 18 3	..	..	..	..	..	..	..	4,611 18 3
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	10 15 0
Drum Account	..	..	..	..	..	..	..	..	Cr. 1 3 6	..	..	..	..	Cr. 1 3 6
	195 8 9	1,878 12 0	..	10 15 0	61 17 11	11,201 19 0	176 14 2	70 3 4	4,463 19 7	2,209 16 11	286 12 3	693 11 0	..	21,229 9 11
KILCOY WORKING PLAN AREA.														
Reserve 370	..	195 15 4	..	..	2 14 1	1,977 16 10	52 18 7	63 4 1	720 7 4	344 19 9	43 4 0	298 0 6	..	3,399 0 6
Reserve 637	..	5,873 12 0	..	..	16 15 2	656 8 9	577 19 2	2,185 15 5	2,600 9 9	1,832 19 11	233 0 0	1,509 16 6	..	14,988 16 8
Reserve 893	..	407 13 11	..	..	..	1,056 15 2	15 4 2	51 5 4	784 9 9	417 6 8	198 7 0	298 9 0	..	3,808 6 2
Administration	..	..	..	..	..	..	..	..	69 19 0	..	..	..	..	3,899 19 2
Firefighting and Patrol	..	..	..	..	..	1,348 17 10	..	..	..	..	..	..	..	1,348 17 10
	5,954 7 2	603 9 3	..	..	10 9 3	4,737 18 7	646 1 11	2,300 4 10	4,175 6 7	2,595 6 4	474 11 0	2,104 6 0	..	23,611 0 11

APPENDIX H—continued.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.				
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Carts of Rations, &c.	Camping Allowance.						
															£	s.	d.	£
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
NORTH COAST WORKING PLAN AREA.																		
Reserve 60	..	..	..	..	..	1,218 16 6	224 10 2	..	..	143 19 3	308 3 3	..	..	10 6 8	..	..	..	2,045 1 9
Reserve 108	..	..	..	..	..	1,639 10 5	44 8 2	..	..	126 18 4	..	..	..	18 17 0	..	..	..	829 10 11
Reserve 173	..	..	..	..	..	1,340 9 7	633 17 9	33 18 1	..	820 12 6	311 9 0	89 11 7	..	74 8 6	..	..	..	3,318 16 9
Reserve 249/583	..	..	..	..	..	402 8 8	..	..	..	84 13 7	..	6 3 8	..	12 0 6	..	..	..	727 6 0
Reserve 313	..	..	..	..	..	238 13 1	6 12 10	..	..	95 19 7	80 7 9	0 18 4	..	39 0 0	..	..	..	511 11 7
Reserve 318	..	..	..	..	..	1,338 16 5	268 6 9	7 10 7	..	1,140 5 3	587 18 11	178 17 7	..	249 6 0	..	..	..	4,074 19 6
Reserve 442	..	..	..	..	..	1,215 14 6	..	..	..	237 4 2	94 14 11	..	..	126 5 0	..	..	..	1,673 18 7
Reserve 445	..	..	..	..	..	1,610 7 4	126 12 4	40 18 5	..	301 19 7	383 7 10	..	..	11 7 6	..	..	..	2,454 13 0
Beerwah State Forest	..	..	..	..	..	2,756 10 1	957 10 11	9,646 15 10	..	4,526 16 2	1,137 18 3	..	..	1,338 10 0	..	..	..	24,655 19 6
Beerburn State Forest	..	..	..	..	..	2,408 3 0	5,095 10 9	7,613 6 8	..	16,869 9 8	9,166 17 10	..	..	6,507 17 6	..	..	..	103,086 0 1
Reserve 700	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	103 5 6
Reserve 753	..	..	..	..	..	88 15 0	..	..	..	32 0 6	..	..	..	..	..	..	..	120 5 6
Portions 106/135/816, &c., Beerwah	..	..	..	..	..	1,555 16 8	..	..	..	598 5 7	88 16 4	..	..	271 13 0	..	..	..	3,644 10 6
Pay-roll Tax	..	..	..	..	..	..	..	..	..	1,368 18 1	..	..	..	..	..	..	..	2,631 10 3
Administration	..	..	..	..	..	10,787 13 10	..	..	..	..	..	..	..	..	..	..	..	1,368 18 1
Freighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10,787 13 10
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10,670 11 11
Miscellaneous Surveys	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4 2 10
	36,188	1 11	..	..	2,227 18 5	45,652 4 1	7,358 5 8	17,342 9 7	26,346 12 1	12,162 3 0	275 11 2	8,659 12 2	2,631 10 3	172,679 6 1	..	..	..	..
BRISBANE VALLEY WORKING PLAN AREA.																		
Reserve 120	10,206 12 0	..	..	..	266 9 0	4,519 14 6	86 8 5	140 14 8	4,691 10 1	1,116 18 1	162 6 9	..	..	349 7 6	..	..	..	59,941 18 4
Reserve 151	649 5 4	..	..	..	8 3 3	771 4 1	404 15 4	4 17 11	576 8 2	377 1 6	..	..	..	..	..	..	..	3,001 10 11
Reserve 257	13,368 5 2	..	..	..	58 7 3	3,395 1 3	297 8 4	710 12 0	7,921 0 10	3,549 7 7	3 15 4	..	..	3,137 8 6	..	..	..	34,085 18 16
Reserve 258	4,940 9 10	..	..	..	39 3 7	1,401 14 6	537 15 6	537 15 6	3,698 19 8	1,579 6 0	394 2 11	..	..	1,217 9 0	..	..	..	13,031 13 6
Reserve 283	19,927 0 5	..	..	..	524 3 2	6,440 18 6	5,577 0 1	170 16 4	12,263 17 0	6,159 4 5	85 4 0	..	..	4,569 19 6	..	..	..	55,094 1 0
Reserve 289	4,620 3 1	..	..	..	236 5 10	1,471 4 4	1,351 17 2	200 0 4	8,293 4 2	3,778 19 4	66 15 0	..	..	2,366 19 6	..	..	..	24,685 8 10
Reserve 299	11,129 12 5	..	..	..	143 17 7	3,189 19 8	1,396 8 10	736 14 11	4,928 8 10	2,428 13 6	88 4 0	..	..	2,288 2 6	..	..	..	24,685 8 10
Reserve 328/9/474	185 2 6	..	..	..	2 12 5	81 2 10	37 11 5	..	Gr. 901 2 5	29 9 5	16 7 6	..	..	..	..	..	..	Gr. 74 0 0
Reserve 379	4,463 14 11	..	..	..	15 18 2	1,875 3 1	..	..	1,209 6 1	258 4 0	..	..	..	..	..	..	..	7,822 9 3
Reserve 395	..	..	..	..	..	..	..	..	8 2 0	..	..	..	..	..	..	..	..	12,134 2 2
Reserve 509	3,007 5 2	..	..	..	42 5 5	2,615 8 9	353 19 8	124 13 9	2,592 0 11	1,953 4 7	12 11 0	..	..	160 15 7	..	..	..	3,184 10 5
Reserve 527/8/9	..	..	..	..	4 2 2	1,103 6 11	34 14 5	..	871 17 6	256 4 4	286 3 6	..	..	260 13 0	..	..	..	3,208 11 0
Pay-roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Freighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Drum Account	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	72,397 14 10	368 18 7	12,331 3 4	2,720 10 2	1,341 7 10	30,868 18 2	8,540 3 8	2,626 5 5	48,061 7 0	21,486 12 9	1,115 10 0	14,379 3 1	4,208 11 0	220,496 5 10	..	..	..	..

APPENDIX H—continued.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
DALBY WORKING PLAN AREA.														
Reserve 4	..	..	..	..	..	2,125 17 0	66 3 11	12 7 2	370 11 3	791 0 5	363 2 8	353 5 6	..	4,082 7 11
Reserve 16 (Hallon)	..	..	..	..	..	5,316 19 7	490 8 10	374 12 8	1,077 18 8	3,427 14 8	634 14 5	1,472 14 0	..	12,765 2 10
Reserve 16 (Malcolm)	..	..	..	..	..	6,460 7 10	661 5 2	4 17 9	1,342 14 7	3,321 4 5	669 16 1	1,673 9 6	..	15,805 7 2
Reserve 21	..	..	..	..	..	..	..	..	..	24 15 0	..	..	..	18,870 15 0
Reserve 75	..	..	..	..	..	3,872 16 11	119 6 4	270 3 1	1,517 11 6	3,663 15 1	627 11 0	1,340 12 6	..	4,716 19 3
Reserve 83/106	..	..	..	..	..	1,779 6 6	126 5 11	380 11 11	496 14 7	891 13 2	308 16 10	444 19 6	..	3,493 2 2
Reserve 98	..	..	..	..	..	1,307 2 7	52 9 10	7 13 11	408 11 10	1,031 15 3	198 3 2	338 19 6	..	1,090 3 2
Reserve 126	..	..	..	..	..	460 1 10	114 19 2	..	131 12 0	247 0 9	16 18 3	92 19 0	..	6,479 1 3
Reserve 150	..	..	..	..	..	3,328 15 6	136 10 11	116 10 0	522 0 4	1,318 6 3	118 14 8	803 14 6	..	12,105 1 3
Reserve 154	..	..	..	..	..	4,043 14 4	82 17 4	437 0 4	1,161 18 8	2,978 11 9	483 5 8	1,472 5 0	..	5,044 2 3
Reserve 155	..	..	..	..	..	2,604 5 11	..	98 8 7	1,479 19 1	677 11 3	207 10 6	97 3 6	..	5,591 17 3
Reserve 161	..	..	..	..	..	208 14 9	3 10 0	27 9 7	130 3 5	128 6 2	..	152 8 6	..	1,112 2 3
Reserve 389	..	..	..	..	..	616 3 0	..	..	..	202 17 1	..	..	..	1,656 12 5
Pay-roll Tax	..	..	..	..	..	..	..	..	..	471 0 0	..	..	1,656 12 5	..
Administration	..	..	..	..	..	7,365 13 5	..	..	..	..	..	..	..	471 0 0
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	7,365 13 5
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	1,304 17 2
Drum Account	..	..	..	..	..	..	..	..	..	Cr. 90 0 0	..	..	..	1,304 17 2
	..	6,709 10 3	..	..	..	39,489 19 2	1,853 17 5	1,779 15 0	7,777 0 0	19,085 1 3	3,528 12 10	8,663 15 0	1,656 12 5	91,849 0 6
GYMPE WORKING PLAN AREA.														
Reserve 82/242	6,429 12 4	..	901 8 0	..	205 11 8	1,589 18 1	105 19 11	2,108 17 9	1,978 19 7	4,422 17 10	238 0 4	1,573 6 6	..	19,614 12 0
Reserve 124	6,467 10 11	..	1,190 4 7	..	226 18 9	795 18 0	130 4 5	..	2,119 7 9	3,868 12 7	387 4 4	1,443 3 6	..	16,635 4 10
Reserve 234	..	308 6 11	..	..	..	1,813 10 3	19 13 11	..	358 17 11	1,054 8 5	3 16 0	183 19 0	..	3,742 12 5
Reserve 392	2,423 6 7	..	..	..	9 16 2	1,771 13 5	53 16 9	35 4 7	1,314 4 4	2,942 4 2	138 0 2	781 6 0	..	9,469 12 2
Reserve 393	..	386 3 8	..	..	..	1,227 12 8	9 3 8	1,495 17 6	1,695 18 1	2,081 7 7	137 0 2	510 11 6	..	6,513 14 10
Reserve 451	..	..	..	..	..	..	..	..	..	5 4 6	..	..	..	5 4 6
Reserve 502	328 7 10	..	..	..	..	1,571 8 10	24 4 5	292 12 2	748 11 3	1,960 2 9	79 10 0	609 1 0	..	5,523 18 3
Reserve 627	..	390 10 1	..	..	..	1,560 8 10	..	..	425 19 2	1,257 2 1	18 11 0	170 10 0	..	3,823 10 2
Reserve 700	..	..	..	..	..	..	..	..	..	2 3 0	..	..	..	2 3 0
Reserve 832	..	..	..	..	..	..	..	..	..	0 16 8	..	..	..	0 16 8
Reserve 952	..	..	298 1 5	..	1 18 0	2,842 6 11	132 16 7	52 7 10	830 18 4	1,648 13 9	5 12 9	110 3 6	..	5,921 1 1
Reserve 952	..	82 6 1	..	..	..	1,683 8 4	220 17 0	917 4 4	451 15 7	1,329 0 5	43 10 11	27 6 0	..	4,757 6 8
Reserve 963	..	..	..	..	..	545 8 11	13 5 7	..	34 0 6	200 15 7	..	..	..	4,793 10 7
Reserve 963	..	..	..	..	..	601 6 1	14 16 2	..	137 10 5	333 18 1	6 5 8	99 2 6	..	1,192 18 11
Reserve 983	..	..	..	..	6 8 11	1,189 4 10	3 19 8	171 18 0	206 3 11	467 15 7	12 2 2	170 19 0	..	2,835 6 3
Reserve 997	596 14 2	..	..	..	..	18,122 17 9	184 14 9	6,903 17 9	7,112 12 8	18,714 13 7	120 0 0	5,788 14 11	..	79,235 14 4
Reserve 1004	10,936 11 9	..	..	..	808 3 11	..	..	..	..	..	..	..	..	3,135 3 11
Pay-roll Tax	..	..	..	..	..	..	..	..	..	2,489 13 6	..	..	3,135 3 11	..
Administration	..	..	..	..	..	11,659 4 7	..	..	..	..	..	..	..	2,489 13 6
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	11,659 4 7
Experiments	..	..	..	..	..	..	..	..	..	230 7 6	..	..	..	673 14 3
Drum Account	..	..	..	..	..	..	..	..	..	..	..	..	..	230 7 6
	35,282 3 7	1,107 6 9	4,823 1 3	673 14 3	1,258 17 5	46,984 7 6	913 12 10	11,917 19 11	16,414 19 6	49,009 17 2	1,189 13 6	11,474 12 5	3,135 3 11	178,245 10 0

APPENDIX H—continued.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
MARY VALLEY WORKING PLAN AREA.														
Reserve 135	20,480 3 1	..	1,987 16 9	..	1,095 3 3	5,687 8 2	2,520 0 1	1,836 11 3	21,735 17 4	9,556 6 9	183 10 10	7,869 0 3	..	70,051 17 9
Reserve 135/274	13,211 3 7	..	1,214 7 3	..	..	1,420 4 6	843 1 8	129 10 11	6,474 16 6	3,257 1 2	..	3,193 0 0	..	29,775 5 7
Reserve 256	5,514 11 8	..	..	..	55 15 4	3,686 5 8	1,006 17 8	557 16 9	1,397 1 11	1,151 12 1	..	640 11 6	..	11,010 12 7
Reserve 455	10,216 15 3	..	1,354 3 9	..	156 7 9	3,330 4 1	701 15 3	250 18 1	10,121 13 5	4,314 19 11	333 8 9	3,679 19 0	..	34,430 15 3
Reserve 546	..	..	..	..	..	..	19 11 2	..	..	..	..	..	..	19 11 2
Reserve 736	..	..	..	..	..	8 2 11	..	..	..	..	..	..	..	8 2 11
Pay-roll Tax	..	..	..	..	..	..	..	..	1,011 17 0	..	..	3,436 1 6	..	3,436 1 6
Administration	..	..	..	..	..	4,002 7 0	..	..	..	..	..	..	..	1,011 17 0
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	4,002 7 0
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	4,403 4 9
	55,422 13 7	..	4,556 7 9	4,403 4 9	1,307 6 4	15,134 12 4	5,093 5 10	2,844 17 0	40,741 6 2	18,309 19 11	516 19 7	15,382 10 9	3,436 1 6	167,149 5 6
MACKAY WORKING PLAN AREA.														
Pay-roll Tax	..	..	..	..	..	..	..	..	132 4 5	..	..	..	0 6 11	0 6 11
Administration	..	..	..	..	..	6 4 4	..	..	..	..	..	..	..	132 4 5
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	6 4 4
Experiments	..	..	..	..	15 4 6	..	..	..	..	..	..	..	..	15 4 6
Miscellaneous Surveys	..	..	..	..	..	..	..	..	..	..	..	..	..	15 4 6
Drum Account	..	..	..	..	..	..	..	..	Cr. 8 8 0	..	..	..	..	15 4 6
	..	..	..	..	15 4 6	6 4 4	..	..	123 16 5	..	..	..	0 6 11	160 15 7
CLERMONT WORKING PLAN AREA.														
Reserve 117	..	..	..	..	..	540 4 0	..	19 2 6	198 12 3	69 19 4	37 17 2	86 5 2	..	952 0 5
Reserve 127	..	..	..	..	..	844 10 1	..	..	297 9 4	250 3 5	125 15 9	128 7 6	..	1,655 6 1
Pay-roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	59 2 9	59 2 9
Administration	..	..	..	..	..	..	..	..	15 11 0	..	..	..	..	15 11 0
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	15 11 0
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	59 14 7
	..	..	..	..	..	1,444 8 8	..	19 2 6	511 12 7	329 2 9	163 12 11	214 12 8	59 2 9	18 1 3
	..	..	..	..	..	..	..	..	..	..	..	..	..	2,750 16 1
ROCKHAMPTON WORKING PLAN AREA.														
Reserve 20	9,115 6 3	..	1,539 17 9	..	419 4 4	7,171 2 0	160 13 2	59 15 4	4,075 9 11	2,674 4 9	457 13 5	1,922 1 0	560 5 4	27,595 7 11
Pay-roll Tax	..	..	..	..	..	..	..	..	157 6 11	..	..	..	..	157 6 11
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	100 13 1
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	100 13 1
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	283 8 5
	9,115 6 3	..	1,539 17 9	293 8 5	419 4 4	7,370 15 1	160 13 2	59 15 4	4,282 16 10	2,674 4 9	457 13 5	1,922 1 0	560 5 4	28,806 1 8

APPENDIX H—continued.

Reserves.	Reforestation.			Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.		
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.					Forest Experiment.	Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.			Camping Allowance.	
MANY PEAKS WORKING PLAN AREA.															
Reserve 28	1,373 18 2			3,459 0 2	34 4 11	98 1 2	2,171 1 11	900 5 1	622 5 6	831 8 0		9,490 4 11			
Reserve 55	1,168 15 1		779 19 11	551 1 0	441 9 1	178 19 7	1,536 11 10	651 10 7	216 3 9	638 4 7		1 19 0			
Reserve 81	12,786 3 9		2,357 10 4	445 16 2	1,899 7 5	1,925 13 8	6,061 10 2	3,738 12 5	15 15 8	3,104 6 0		6,162 15 11			
Reserve 93						74 14 1						45 5 0			
Reserve 308												34,625 19 10			
Pay-roll Tax											985 18 1	147 15 11			
Administration							632 13 9					985 18 1			
Firefighting and Patrol												632 13 9			
Experiments												881 18 9			
Drum Account							18 0 0					68 15 4			
	13,954 18 10	1,373 18 2	3,137 10 3	445 16 2	6,793 6 10	2,543 4 5	11,019 17 8	5,290 8 1	854 4 11	4,573 18 7	985 18 1	53,081 6 6			
MARYBOROUGH WORKING PLAN AREA.															
Reserve 8	293 13 6			2,320 11 2	52 17 7	8 16 3	1,368 6 8	386 4 4	104 17 6	353 10 0		4,838 17 0			
Reserve 12	24 0 4			1,021 19 9	2 12 6	11 14 6	835 10 11	214 10 4	15 8 2	167 14 0		2,337 10 7			
Reserve 27	464 19 7			1,486 3 7	193 6 8	0 9 6	1,455 11 1	431 13 11	24 4 2	407 14 6		4,605 18 0			
Reserve 57	69 2 7			2,410 1 10	122 5 11	1,364 13 3	2,250 1 5	503 15 8	92 8 9	728 18 6		7,580 19 0			
Reserve 85/633				4 8 0								85 19 5			
Reserve 287												87 7 2			
Reserve 503												4,981 17 0			
Reserve 864				4,197 1 0	27 3 0	745 18 0	1,288 17 3	579 8 8	69 0 0	429 8 2		79,997 18 8			
Reserve 915	28,219 15 8		1,851 3 11	15,697 14 4	1,808 6 3	32 7 8	16,568 9 8	6,675 14 6	292 11 8	4,654 14 0		5,581 6 10			
Reserve 958							1,579 10 5	521 7 7	16 10 0			2,084 15 9			
Pay-roll Tax											2,064 15 9	4,237 14 6			
Administration							4,237 14 6					3,090 4 5			
Firefighting and Patrol												38 8 9			
Miscellaneous Surveys												1,950 0 11			
Experiments												178 1 6			
Drum Account															
	28,219 15 8	1,247 9 6	1,851 3 11	4,344 9 2	29,869 8 7	2,252 17 7	29,762 3 5	9,312 15 0	615 10 3	6,763 8 2	2,064 15 9	121,558 16 0			
BUNDABERG WORKING PLAN AREA.															
Reserve 80	5 13 8			2,134 11 3	51 9 2	1 19 7	1,057 2 10	381 9 4	68 6 6	404 19 0		4,105 11 4			
Reserve 169	22 10 1			1,564 12 7	203 18 6	1,971 17 2	1,337 2 5	404 2 17	83 9 11	406 13 6		6,094 4 11			
Reserve 278	303 10 1			1,778 8 4	47 10 9	8 18 0	651 19 5	199 8 7	50 15 0	269 8 6		2,310 0 8			
Reserve 892	582 18 11			1,446 2 2	26 11 11		1,412 10 10	475 14 4	97 8 0	408 0 0		4,513 4 11			
Pay-roll Tax											321 0 8	321 0 8			
Administration												656 13 2			
Firefighting and Patrol							656 13 2					1,491 11 10			
Experiments												507 6 0			
Miscellaneous Surveys												507 6 0			
	914 12 9			101 0 8	7,415 6 2	329 9 10	1,977 15 6	5,115 8 8	308 19 5	1,549 1 0	321 0 8	20,000 15 10			

APPENDIX H—continued.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements, &c.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
Reserve 3	..	308 6 6	..	..	15 11 3	3,151 11 1	2,187 11 3	1,152 9 4	2,873 2 7	982 12 11	271 7 0	1,332 13 0	192 15 1	12,085 4 11
Pay-roll Tax	..	..	..	..	..	..	..	..	229 9 9	..	..	..	..	182 15 1
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	229 9 9
Firefighting and Patrol	..	..	..	107 6 8	..	214 9 8	..	..	..	..	..	..	..	204 9 8
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	107 6 8
	..	308 6 6	..	107 6 8	15 11 3	3,366 0 9	2,187 11 3	1,152 9 4	2,902 12 4	982 12 11	271 7 0	1,332 13 0	192 15 1	12,829 6 1
FRASER ISLAND WORKING PLAN AREA.														
Reserve 137/207	17,198 8 9	..	2,392 19 11	..	973 13 3	4,333 18 8	2,509 12 5	7,949 18 2	10,543 8 7	5,938 10 9	1 6 6	6,405 0 6	..	58,236 17 6
Reserve 245	..	..	..	..	30 8 11	..	..	..	..	..	..	..	..	30 8 11
Reserve 487	..	..	..	..	69 8 11	..	..	..	..	..	..	..	..	69 8 11
Reserve 488	..	..	..	..	17 0 2	..	..	..	..	..	..	..	..	17 0 2
Pay-roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Firefighting and Patrol	..	..	..	23 0 4	..	415 9 3	..	..	474 16 2	..	..	..	..	1,201 3 9
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	415 9 3
	17,198 8 9	..	2,392 19 11	23 0 4	1,090 11 3	4,749 7 11	2,509 12 5	7,949 18 2	11,018 4 9	5,928 10 9	1 6 6	6,405 0 6	1,201 3 9	60,408 5 0
JIMNA WORKING PLAN AREA.														
Reserve 24	..	605 4 10	..	..	..	1,526 8 2	74 13 7	686 3 7	838 4 11	378 4 11	188 16 0	241 2 2	..	3,791 7 7
Reserve 67	..	..	..	..	7 1 11	1,189 7 7	247 5 7	71 6 2	1,541 4 5	1,255 11 6	255 10 3	1,077 14 6	..	10,987 7 4
Reserve 97/9	..	..	..	..	..	1,189 7 7	247 5 7	71 6 2	1,541 4 5	1,255 11 6	255 10 3	1,077 14 6	..	10,987 7 4
Reserve 138	..	..	..	..	5 12 7	1,573 1 5	96 12 0	68 4 1	2,377 7 7	1,722 1 11	142 15 5	1,173 10 0	..	1,425 18 6
Reserve 154	..	..	..	..	7 3 1	370 13 3	68 4 1	1,272 14 11	2,377 7 7	1,722 1 11	142 15 5	1,173 10 0	..	15,312 11 11
Reserve 220	..	..	..	..	..	295 3 6	72 16 2	8 13 1	1,154 5 5	765 13 1	189 0 6	385 0 9	..	6,084 7 0
Reserve 221	..	594 9 7	..	..	14 4 10	2,968 17 0	468 11 10	387 9 4	1,198 11 9	1,681 4 3	121 11 10	177 10 6	..	1,682 10 8
Reserve 298	..	..	..	..	..	311 19 3	4 7 3	201 13 2	7,772 0 2	3,907 17 10	566 9 10	3,963 15 0	..	33,057 9 8
Reserve 355	..	..	..	..	..	65 18 3	32 13 6	18 6 7	59 10 2	25 14 1	32 15 4	15 15 0	..	33,057 9 8
Reserve 424	..	..	..	..	..	61 9 8	212 1 5	448 10 1	34 16 8	6 9 1	85 6 3	27 7 0	..	507 13 8
Reserve 427	..	..	..	..	..	..	..	..	38 1 8	174 16 9	117 16 3	229 10 7	..	488 3 11
Reserve 505	..	..	..	..	..	..	..	..	..	..	..	..	..	2,439 17 1
Pay-roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	..	449 10 1
Administration	..	..	..	..	..	..	..	..	1,745 13 1	..	..	..	..	1,616 9 1
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	1,745 13 1
Maintenance	..	..	..	..	..	..	..	..	..	..	..	..	..	1,310 10 6
Office	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Experiments	..	..	..	69 10 4	..	..	..	..	..	..	..	..	..	5 7 0
Drum Account	..	..	..	..	..	..	..	..	..	..	..	..	..	69 10 4
	25,231.16 6	1,199 14 5	4,781 5 0	69 10 4	34 2 5	9,742 14 10	1,282 12 5	3,034 9 11	15,921 15 9	8,514 2 3	1,650 1 8	8,198 6 0	1,616 9 1	81,277 0 7
									Cr. 127 3 0					Cr. 127 3 0

APPENDIX H—continued.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
<b>NORTH QUEENSLAND WORKING PLAN AREA.</b>														
Reserve 99	1,026 6 11				5 11 2	59 1 7	26 9 11	16 1 6	639 17 10	60 15 10	242 10 8			2,685 6 5
Reserve 185	672 6 11		1,804 3 0		13 2 1	1,191 18 8	97 2 11	2,287 9 7	1,869 1 3	308 2 8	737 12 7			13,585 7 5
Reserve 191			671 6 1			68 1 2	Cr. 0 4 0	475 10 0	2,205 11 10	37 4 4	165 17 7			1,790 12 4
Reserve 310								119 0 8	501 10 9	43 15 8	3 17 4			19 1 4
Reserve 315	898 19 8					76 10 7	16 10 11		17 2 6		188 16 6			2,798 12 3
Reserve 344	5 10 0				1 16 0			277 17 7	74 16 1	178 2 8				532 12 4
Reserve 438	260 17 9				4 6 4		1 14 3	710 1 8	644 14 3	64 10 6				2,834 4 6
Reserve 481						535 0 7		8 13 8	217 11 2	194 11 2				1,053 4 10
Reserve 1073	53 14 4					14 14 5		37 12 11	63 10 7	23 12 2				487 7 11
Pay-roll Tax													502 7 6	502 7 6
Administration						736 18 6								1,321 3 5
Firefighting and Patrol														736 18 6
Experiments														3,184 12 3
Drum Account														62 2 6
	2,451 4 9	2,926 15 7	2,475 9 1	3,184 12 3	24 15 7	3,260 2 4	141 14 0	3,932 7 7	4,119 15 8	716 3 10	1,585 14 8	502 7 6	31,601 6 0	
<b>WARWICK WORKING PLAN AREA.</b>														
Reserve 263	2,477 6 7		1,026 12 6		704 12 10	2,250 1 4	184 0 9	12 0 0	1,342 12 4	108 0 0	877 3 6			10,697 16 9
Reserve 316	3,311 2 8				89 8 6	1,777 18 1	32 12 11	161 6 6	1,074 3 7	108 0 0	629 10 6			8,376 12 5
Reserve 322	613 10 1					1,676 5 10			243 1 4					2,843 2 3
Reserve 444					199 14 2	400 0 2	15 6 2	9 8 0	203 12 7	93 14 11				199 14 2
Reserve 574	26 16 2					77 3 3	9 8 8		279 13 8	75 19 7				893 6 1
Pay-roll Tax	628 12 7													1,375 13 7
Administration													518 17 9	518 17 9
Firefighting and Patrol						1,718 0 11								536 8 4
Experiments														1,718 0 11
Drum Account														286 8 2
	6,401 10 4	655 8 9	1,026 12 6	286 8 2	993 15 6	7,899 9 7	241 8 6	182 14 6	2,982 2 3	385 14 6	1,603 12 11	518 17 9	27,438 9 5	
<b>INGLEWOOD WORKING PLAN AREA.</b>														
Reserve 48					6 16 7	329 3 4	13 5 3	2 13 11	178 0 2	300 1 7	219 7 6			2,154 10 11
Reserve 79						3,060 9 2	4 16 1		379 14 7	338 5 0	184 13 6			2,470 8 2
Reserve 81						1,115 6 0	44 15 3	28 0 0	366 5 3	191 8 9	469 19 0			5,423 1 8
Reserve 101						1,162 15 2	29 16 4	9 4 7	146 13 4	144 17 10	144 7 8			2,205 4 1
Reserve 122						730 19 4			293 16 9	96 12 0	263 16 0			3,132 11 7
Reserve 134									284 1 1	133 13 2	263 8 0			2,665 7 4
Pay-roll Tax														325 17 0
Administration						875 15 1								587 17 0
Firefighting and Patrol														875 15 1
Experiments														62 10 9
					6 16 7	7,832 11 3	100 15 3	44 0 6	1,648 11 2	1,204 18 4	1,585 11 8	325 17 0	10,993 3 7	



APPENDIX H—continued.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Pay-roll Tax ..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,279 0 3
Experiments ..	..	..	..	5 12 8	..	..	..	..	..	..	..	..	..	18 12 3
Radio Equipment ..	..	..	..	..	835 11 4	16 18 5	..	..	..	..	..	..	..	18 12 3
Photo, Prints and Maps ..	..	..	..	..	40 8 4	..	..	..	..	..	..	..	..	825 18 4
Miscellaneous Surveys ..	..	..	..	..	728 11 4	..	..	..	..	..	..	..	..	40 18 4
Survey Trainees' School Salisbury ..	..	..	..	..	..	..	..	..	..	..	..	..	..	728 11 4
Depot Stock ..	..	..	..	..	..	..	Cr.	13,967 17 4	..	..	..	..	..	Cr. 13,967 17 4
Storeroom Expenses ..	..	..	..	..	..	..	..	3,482 17 10	..	..	..	..	..	Cr. 3,482 17 10
Nursery Plant and Seed Store ..	..	..	..	..	..	..	182 12 2	..	..	..	..	..	..	182 12 2
Firefighting Equipment ..	..	..	..	..	..	63 10 0	..	..	..	..	..	..	..	63 10 0
Maintenance Buildings ..	..	..	..	..	..	..	..	..	..	..	..	..	..	25 8 3
Totals ..	308,013 19 11	22,684 17 4	41,807 6 8	26,375 9 9	15,312 15 7	283,900 3 7	36,357 8 7	62,741 7 10	Cr. 10,514 19 6	124,208 19 2	13,997 3 1	97,091 10 7	2,279 0 3	Cr. 6,337 6 9
														Cr. 25,695 19 0
														1,328,877 14 4

MISCELLANEOUS.

SOURCE OF FUNDS.			
£	s. d.	£	s. d.
Loan Trust ..	..	1,255,467 19 2	..
	..	113,927 6 0	..
	..	<u>1,369,395 5 2</u>	..
	..	Administration ..	1,524 19 11
	..	Fares and Freights ..	9,316 15 2
	..	Workers' Compensation ..	27,437 18 0
	..	Collection and Storage of Seed ..	2,237 17 9
	..		<u>£1,369,395 5 2</u>

## APPENDIX I.

## Net Area of Plantation Established 1st April, 1956, to 31st March, 1957.

Species.	Brisbane.	Brisbane Valley.	Gympie.	Mackay.	Maryborough.	Monto.	Murgon.	North Queensland.	Warwick.	Queensland Totals.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
<i>Softwoods.</i>										
A. Native Conifers—										
Hoop Pine ..	56.5	715.0	366.5	..	..	143.1	299.2	74.0	..	1,654.3
Bunya Pine ..	0.5	15.1	..	..	3.5	..	..	..	..	19.1
Other Native Conifers ..	0.3	..	6.0	..	..	..	..	..	..	6.3
B. Exotic Conifers—										
<i>P. elliotii</i> ..	864.9	..	889.4	259.6	1,025.5	..	..	..	54.5	3,093.9
<i>P. taeda</i> ..	23.3	..	..	..	1.5	..	..	..	..	24.8
<i>P. patula</i> ..	..	146.9	..	..	..	..	..	..	2.0	148.9
<i>P. caribaea</i> ..	4.7	..	..	127.4	..	..	..	..	..	132.1
<i>P. radiata</i> ..	..	63.7	..	..	..	..	..	..	164.6	228.3
<i>P. palustris</i> ..	6.5	..	..	..	..	..	..	..	..	6.5
Others ..	..	0.5	..	1.4	..	0.1	..	..	..	2.0
C. Broadleaved Softwoods—										
Silky Oak ..	..	..	..	..	..	..	..	..	..	..
Maple ..	..	..	..	..	..	..	..	..	..	..
Red Cedar ..	..	..	..	..	..	..	..	..	..	..
Others ..	..	..	..	..	..	0.4	..	..	..	0.4
Total Softwoods	956.7	941.2	1,261.9	388.4	1,030.5	143.6	299.2	74.0	221.1	5,316.6
<i>Eucalypts.</i>										
<i>Euc. saligna</i> ..	..	..	..	..	..	..	..	..	..	..
Other Eucalypts ..	..	..	27.6	..	..	..	..	..	..	27.6
Total—Eucalypts	..	..	27.6	..	..	..	..	..	..	27.6
Total—All Species	956.7	941.2	1,289.5	388.4	1,030.5	143.6	299.2	74.0	221.1	5,344.2

N.B.—Jimna and Kilkivan Working Plan Areas have been removed from the Brisbane and Maryborough districts respectively, to form the new district of Murgon. Note also that Fraser Island Working Plan Area has been incorporated in Maryborough district.

## APPENDIX J.

## Net Area of Effective Plantation Classified into Forestry Districts to 31st March, 1957.

Species.	Brisbane.	Brisbane Valley.	Gympie.	Mackay.	Maryborough.	Monto.	Murgon.	North Queensland.	Warwick.	Queensland Totals.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
<i>Softwoods.</i>										
A. Native Conifers										
Hoop Pine ..	291.0	14,360.2	14,086.9	15.4	137.6	2,148.8	7,030.0	673.2	..	38,743.1
Kauri Pine ..	1.7	..	1,471.6	0.7	69.7	..	..	285.0	..	1,828.7
Bunya Pine ..	1.5	58.0	294.4	1.7	4.7	1.2	37.6	0.8	..	399.9
Others ..	5.2	0.4	51.4	0.6	1.7	..	..	0.6	..	59.9
B. Exotic Conifers										
<i>P. elliotii</i> ..	9,070.2	916.4	5,399.3	1,673.0	6,247.7	70.5	54.3	7.8	548.5	23,987.7
<i>P. taeda</i> ..	3,227.4	41.4	102.1	9.8	54.1	1.0	116.2	13.7	224.7	3,790.4
<i>P. patula</i> ..	18.7	2,636.5	22.2	7.6	8.1	25.2	123.9	43.6	669.3	3,555.1
<i>P. caribaea</i> ..	4.7	..	6.4	527.4	17.0	1.0	..	..	..	556.5
<i>P. radiata</i> ..	..	298.2	..	..	..	..	..	..	906.0	1,204.2
<i>P. palustris</i> ..	252.7	2.6	1.8	5.8	1.0	..	..	..	8.7	272.6
Others ..	82.2	23.9	13.0	55.7	16.2	2.7	1.7	8.1	25.8	229.3
C. Broadleaved Softwoods—										
Silky Oak ..	..	675.5	175.9	..	..	..	32.1	31.7	..	915.2
Maple ..	..	..	48.0	..	..	..	..	202.3	..	250.3
Red Cedar ..	..	..	12.5	..	..	..	..	29.2	..	41.7
Others ..	0.1	..	96.3	..	0.3	0.8	0.9	92.2	..	190.6
Total—Softwoods	12,955.4	19,013.1	21,781.8	2,297.7	6,558.1	2,251.2	7,396.7	1,388.2	2,383.0	76,025.2
<i>Eucalypts.</i>										
<i>Euc. saligna</i> ..	42.2	215.7	900.2	..	..	..	33.7	0.7	..	1,192.5
<i>Euc. paniculata</i> ..	229.2	459.3	216.2	..	..	..	76.4	35.6	..	1,016.7
<i>Euc. microcorys</i> ..	215.4	28.7	17.5	..	..	..	..	27.7	..	289.3
<i>Euc. pilularis</i> ..	160.9	..	..	..	..	..	..	0.2	..	161.1
Other Eucalypts	6.8	12.7	94.5	..	..	..	12.8	4.0	..	130.8
Total—Eucalypts	654.5	716.4	1,228.4	..	..	..	122.9	68.2	..	2,790.4
Total—All Species	13,609.9	19,729.5	23,010.2	2,297.7	6,558.1	2,251.2	7,519.6	1,456.4	2,383.0	78,815.6

N.B.—Jimna and Kilkivan Working Plan Areas have been removed from the Brisbane and Maryborough districts respectively, to form the new district of Murgon. Note also that Fraser Island Working Plan Area has been incorporated in Maryborough district.

## APPENDIX K.

## Net Area of Plantation Effective at 31st March, 1957, Classified into Five-yearly Establishment Periods.

(Calendar year planting includes areas established to 31st March of succeeding year.)

Species.	1920 and Earlier.	1921-25.	1926-30.	1931-35.	1936-40.	1941-45.	1946-50.	1951-55.	1956-57.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
<i>Softwoods.</i>										
A. Native Conifers—										
Hoop Pine ..	21.0	184.5	1,784.5	4,320.5	9,611.6	2,238.7	10,697.8	8,230.2	1,654.3	38,743.1
Kauri Pine ..	7.1	55.0	18.7	125.2	1,137.5	237.4	224.8	23.0	..	1,828.7
Bunya Pine ..	6.0	28.8	74.8	0.9	123.9	..	2.3	144.1	19.1	399.9
Others ..	..	3.7	42.6	2.4	4.6	..	..	0.3	6.3	59.9
B. Exotic Conifers—										
<i>P. elliotii</i> ..	..	6.7	48.1	1,991.6	1,130.8	506.5	3,683.4	13,526.7	3,093.9	23,987.7
<i>P. taeda</i> ..	..	..	32.5	561.3	550.1	453.0	1,234.7	834.0	24.8	3,790.4
<i>P. patula</i> ..	..	1.0	21.0	160.1	462.4	189.0	1,356.7	1,216.0	148.9	3,555.1
<i>P. caribaea</i> ..	..	..	..	..	..	..	2.1	422.3	132.1	556.5
<i>P. radiata</i> ..	..	0.4	67.8	151.9	1.9	..	131.5	622.4	228.3	1,204.2
<i>P. palustris</i> ..	..	..	0.2	23.1	108.7	44.1	45.8	39.2	6.5	272.6
Others ..	..	1.6	18.8	38.5	20.5	1.0	47.3	99.6	2.0	229.3
C. Broadleaved Softwoods—										
Silky Oak ..	..	3.1	538.8	236.7	86.6	..	14.0	17.5	..	915.2
Maple ..	0.8	11.9	49.1	93.6	63.4	..	..	..	..	250.3
Red Cedar ..	9.0	..	4.0	0.6	0.6	0.5	..	27.0	..	41.7
Others ..	0.7	14.7	106.0	35.1	5.7	8.8	1.7	17.5	0.4	190.6
Total Softwoods	44.6	311.4	2,806.9	7,796.5	13,308.3	3,679.0	17,492.1	25,269.8	5,310.6	76,025.2
<i>Eucalypts.</i>										
<i>Euc. saligna</i> ..	..	..	1.0	1.2	145.0	129.3	756.7	159.3	..	1,192.5
<i>Euc. paniculata</i> ..	..	..	1.4	532.1	402.1	77.3	1.8	2.0	..	1,016.7
<i>Euc. microcorys</i> ..	..	..	5.3	90.0	194.0	..	..	..	..	289.3
<i>Euc. pilularis</i> ..	..	..	0.2	97.9	56.9	..	6.1	..	..	161.1
Other Eucalypts	..	..	0.5	6.4	22.7	9.4	35.1	29.1	27.6	130.8
Total—Eucalypts	..	..	8.4	727.6	820.7	216.0	799.7	190.4	27.6	2,790.4
Total—All Species	44.6	311.4	2,815.3	8,524.1	14,129.0	3,895.0	18,291.8	25,460.2	5,344.2	78,815.6

## APPENDIX L.

## Areas of Natural Forest Treated.

## A.—Eucalypts.

Working Plan Area.	Reserve No.	Treated 1956-57.	First Treatment 1956-57.	Total as at 30th June, 1957.
		Acres.	Acres.	Acres.
Brisbane .. .. .	571	73	73	73
	69	27	..	1,535
	1,376	140	30	1,480
	215	..	..	925
	702	360	..	2,060
	494	..	..	934
	446	..	..	1,094
	667	235	..	914
	309/1526	..	..	3,508
1,355	..	..	1,625	
727	145	..	976	
<b>Total</b> .. .. .	..	980	103	15,124
Brisbane Valley .. .. .	283	..	..	1,881
	257	..	..	125
	299	..	..	50
	527/8/9	212	..	5,476
<b>Total</b> .. .. .	..	212	..	7,532
Bundaberg .. .. .	80	8	..	9,298
	723	..	..	564
	832/837	1,033	..	15,903
<b>Total</b> .. .. .	..	1,041	..	25,765
Clermont .. .. .	117	..	..	10,820
	127	..	..	19,284
<b>Total</b> .. .. .	..	..	..	30,104
Dalby .. .. .	93	..	..	18,998
	4	..	..	11,063
	83	..	..	4,876
	78	..	..	1,130
	34	..	..	1,270
	16B	..	..	2,004
	16M	..	..	6,576
106	..	..	1,275	
<b>Total</b> .. .. .	..	..	..	47,192
Fraser Island .. .. .	3/12	141	..	18,363
<b>Total</b> .. .. .	..	141	..	18,363
Gympie .. .. .	393	520	..	3,020
	234	100	..	1,730
	502	2	..	1,568
	627	254	62	2,485
	700	..	..	3,672
	124	..	..	770
	959	26	26	1,241
	950/1	..	..	1,160
<b>Total</b> .. .. .	..	902	88	15,646
Inglewood .. .. .	101	..	..	8,512
	81	..	..	7,490
	120	..	..	298
	132	..	..	207
<b>Total</b> .. .. .	..	..	..	16,507
Kilcoy .. .. .	370	68	68	3,496
	893	342	342	3,537
	637	..	..	1,168
<b>Total</b> .. .. .	..	410	410	8,201

APPENDIX L—*continued.*  
**Areas of Natural Forest Treated—*continued.***

A.—Eucalypts—*continued.*

Working Plan Area.	Reserve No.	Treated 1956-57.	First Treatment 1956-57.	Total as at 30th June, 1957.
		Acres.	Acres.	Acres.
Many Peaks .. .. .	28	1,003	893	9,113
	150	..	..	1,811
Total .. .. .	..	1,003	893	10,924
Maryborough .. .. .	958	496	..	15,926
	57	153	..	23,720
	12	37	..	5,426
	8	350	..	14,483
	27	135	..	7,124
	1	..	..	1,632
	191/864	..	..	13,155
Total .. .. .	..	1,171	..	81,466
Mary Valley.. .. .	135	..	..	159
Total .. .. .	..	..	..	159
Murgon .. .. .	12/24	750	750	16,731
	221	688	..	2,414
	424/27	..	..	80
Total .. .. .	..	1,438	750	19,225
North Coast .. .. .	318/583	65	65	9,025
	249	..	..	1,185
	60	46	46	1,601
	173	..	..	3,135
	108	..	..	1,772
	106	..	..	1,650
	442	..	..	200
	313	..	..	580
	531	..	..	340
	351	..	..	..
689	..	..	..	
Total .. .. .	..	111	111	19,488
North Queensland .. .. .	194	..	..	175
	243	..	..	1,457
	245	..	..	339
	343	..	..	200
	438	1,140	570	2,637
	461	..	..	1,328
Total .. .. .	..	1,140	570	6,136
Warwick .. .. .	444	40	40	4,551
	574	740	..	5,306
Total .. .. .	..	780	40	9,857
Total—Eucalypts .. .. .	..	9,329	2,965	331,689

B.—Cypress Pine.

Working Plan Area.	Reserve No.	Treated 1956-57.	First Treatment 1956-57.	Total as at 30th June, 1957.
		Acres.	Acres.	Acres.
Bundaberg .. .. .	278	200	100	1,254
	..	200	100	1,254
Dalby .. .. .	106	..	..	346
	93	65	..	2,291
	4	..	..	280
	78	2,349	1,879	61,385
	34	..	..	2,496
	150	110	110	6,454
	16M	993	993	32,284
	127	..	..	710
	126/135	28	7	3,747
	154	858	397	29,582
155	82	82	3,111	
Total .. .. .	..	4,485	3,468	142,686

## APPENDIX L—continued.

## Areas of Natural Forest Treated—continued.

## B.—Cypress Pine—continued.

Working Plan Area.	Reserve No.	Treated 1956-57.	First Treatment 1956-57.	Total as at 30th June, 1957.
	Acres.	Acres.	Acres.	Acres.
Fraser Island .. .. .	3/12	..	..	4,424
Total .. .. .	..	..	..	4,424
Inglewood .. .. .	79	302	..	31,824
	48	..	..	4,703
	81	110	110	5,525
	101	168	..	540
	122	513	..	18,300
	134	544	..	14,790
	120	..	..	515
Total .. .. .	..	1,637	110	76,197
Total Cypress Pine .. .. .	..	6,322	3,678	224,561

## C.—Rain Forest.

Working Plan Area.	Reserve No.	Treated 1956-57.				First Treatment 1956-57.	Total as at 30th June, 1957.
		Brushed.	Ring- barked and Thinned.	Logged under Tree- marking Conditions.	No. of Trees Interplanted.		
	Acres.	Acres.	Acres.			Acres.	Acres.
Natural Hoop Pine— Bundaberg .. .. .	169	..	..	..	1,750	..	9,902
Natural Rain Forest— Northern Queensland ..	99	22	73	..	..	..	868
	185	23	110	70	..	70	569
	191	..	..	..	..	..	113
	310	16	50	108	900	108	717
	315	..	..	..	..	..	50
	418	..	..	..	..	..	43
	452	..	..	..	..	..	20
	1073	..	20	20	..	..	..
Total .. .. .	..	61	253	198	900	178	2,380
Total—Rain Forest ..	..	61	253	198	2,650	178	12,282

Grand Total—	Acres.
Eucalypts .. .. .	331,689
Cypress Pine .. .. .	224,561
Rain Forest .. .. .	12,282
	<u>568,532</u>

## APPENDIX M.

## Summary of Forest Survey Work, Year ended 30th June, 1957.

Reserve or Portion.	Parish.	Area in Acres.
CLASS 1—INSPECTIONS OF VACANT CROWN LANDS AND TIMBER RESERVES.		
Redbank Holding .. .. .	Woodbank, Dyngie (proceeding) .. .. .	.. .. .
Portions 1 to 6 and 9 to 11 .. .. .	Wycombe .. .. .	17,278
Portions 8 to 11, C.R. 11 .. .. .	Wagoo .. .. .	44,591
Portions 3v, 18 .. .. .	Major .. .. .	20,404
Portions 1 to 3, 5, and R.9 .. .. .	Katoota .. .. .	29,569
Portions 3, 4 .. .. .	Weeyan .. .. .	36,010
Portions 2v, 4 .. .. .	Burgorah .. .. .	8,056
Portions 1 to 4, 5 .. .. .	Chippeway, Towtowri .. .. .	108,860
Portions 2, 3, 4 .. .. .	Whyenbah .. .. .	47,399
Portion 3 .. .. .	Kirk .. .. .	30,789
Portions 1, 2 .. .. .	Bullindgie .. .. .	47,741
Portions 1 to 4, 6v, 7, 12, R. 7 .. .. .	Thomby .. .. .	83,474
Portions 3, 4 .. .. .	Wondit .. .. .	30,811
Portions 8, 9, 11, 12, 16, R. 5 .. .. .	Mount Hutton .. .. .	22,516
Portions 39, 56, 57, R. 31 .. .. .	Broad .. .. .	4,066
Portions 7v to 13v, R. 47 .. .. .	Raglan .. .. .	25,178
Portion 5v .. .. .	Lake Learnmouth .. .. .	3,200
Portion 16 .. .. .	Don .. .. .	1,674
Portions 2v, 3v, 6v, 7v .. .. .	Bompa .. .. .	17,000
Portion 45 .. .. .	Selene .. .. .	3,313
Portion 1 .. .. .	Cloncoose .. .. .	8,602
Portions 10, 11, 12 .. .. .	Macartney .. .. .	16,141
Portion 13v .. .. .	Tilpal .. .. .	7,120
Portions 3v, 4v, 9 .. .. .	Werribee .. .. .	14,192
	Total .. .. .	627,984

CLASS 2—ASSESSMENT SURVEYS.		
Portions 9, 20 .. .. .	Wright .. .. .	16,852
Portions 1, 2, 8v, 9v, 29 .. .. .	Duaringa .. .. .	34,010
Portions 12v .. .. .	Charlevue .. .. .	2,721
Portions 9, 24 .. .. .	Heathland .. .. .	5,537
Portions 3, 4, 5 (part) .. .. .	Nulalbin .. .. .	39,124
Coorada (proceeding) .. .. .	Coorada .. .. .	.. .. .
Goomally (proceeding) .. .. .	Goomally &c. .. .. .	.. .. .
Portion 1 (Redcliffe Hold.) .. .. .	Little .. .. .	.. .. .
	Total .. .. .	98,244
	Total .. .. .	98,244

FOREST INVENTORY SURVEY.		
Reserve.	Parish.	Area in Acres.
134 .. .. .	Bringalily .. .. .	20,900
173 .. .. .	Durundur .. .. .	9,580
79 (part) .. .. .	Sands, Whetstone .. .. .	40,000
370 (part) .. .. .	Durundur .. .. .	14,318
180 (proceeding) .. .. .	Yandilla .. .. .	.. .. .
12 (recount) .. .. .	Gungaloon .. .. .	.. .. .
	Total .. .. .	84,798

COMPARTMENT, FIREBREAK AND SOIL SURVEY.			
Reserve.	Parish.	Type.	Area in Acres.
915 .. .. .	Cowra, Tahiti, Bidwell .. .. .	Soil .. .. .	10,282
611 .. .. .	Beerwah (part) .. .. .	Compartment .. .. .	1,000
561 .. .. .	Bribie (part) .. .. .	Compartment .. .. .	200
700 .. .. .	Canning (part) .. .. .	Compartment .. .. .	300
1,004 .. .. .	Toolara .. .. .	Soil .. .. .	900
180 .. .. .	Yandilla .. .. .	Compartment .. .. .	14,915
321 .. .. .	Marsh .. .. .	Compartment .. .. .	460
316 .. .. .	Pikedake, Drumsleed .. .. .	Compartment .. .. .	3,800
263 .. .. .	Pikedale, Marsh .. .. .	Compartment .. .. .	.. .. .
327 .. .. .	Stanthorpe .. .. .	Soil, Compartment .. .. .	2,269
137, 207 .. .. .	Yabba, Monsildale .. .. .	Scrub firebreak .. .. .	1,169
1,071 .. .. .	Danbulla .. .. .	Compartment .. .. .	139
637 .. .. .	Kilcoy .. .. .	Scrub-falling .. .. .	40
120, 283, 299, 379 .. .. .	Yarraman .. .. .	.. .. .	767
20 .. .. .	Maryvale .. .. .	Firebreak .. .. .	.. .. .
	Total .. .. .	Total .. .. .	36,241

## APPENDIX N.

## State Forests, Timber Reserves and National Parks at 30th June, 1957.

Land Agent's District.	State Forests.			Timber Reserves.			National Parks.		
	No.	Area.		No.	Area.		No.	Area.	
		A.	R. P.		A.	R. P.		A.	R. P.
Atherton .. .. .	15	68,106	0 3	7	46,469	2 26	7	3,574	2 27
Bowen .. .. .	1	35,860	0 0	7	55,020	0 0	36	118,587	0 0
Brisbane .. .. .	69	276,949	1 31	40	29,890	1 6	44	79,334	0 22
Bundaberg .. .. .	16	170,854	3 10	33	155,047	2 5	..	..	..
Cairns .. .. .	8	158,859	0 36	15	450,464	2 0	20	92,298	3 24
Charleville .. .. .	..	..	..	2	68,397	0 0	..	..	..
Charters Towers .. .. .	..	..	..	1	125,000	0 0	..	..	..
Clermont .. .. .	3	132,378	3 35	4	69,274	1 0	..	..	..
Clonecurry .. .. .	..	..	..	1	3,950	0 0	..	..	..
Cooktown .. .. .	..	..	..	8	623,460	0 0	7	10,691	0 0
Dalby .. .. .	25	1,034,444	2 4	4	16,359	0 0	1	13,145	0 0
Gayndah .. .. .	3	41,434	2 0	16	63,511	0 32	..	..	..
Gladstone .. .. .	6	37,317	2 0	26	86,706	1 14	4	127	0 0
Goondiwindi .. .. .	6	189,351	1 0	6	41,894	2 20	..	..	..
Gympie .. .. .	50	450,274	0 25	14	45,580	2 23·8	5	922	2 7
Herberton .. .. .	10	76,620	2 36	11	76,635	1 7	5	3,361	3 28
Ingham .. .. .	1	43,620	0 0	4	59,345	0 0	1	16,660	0 0
Inglewood .. .. .	15	185,942	3 35	5	9,758	0 8	..	..	..
Innisfail .. .. .	2	65,167	0 0	11	364,623	2 18	26	108,657	1 31
Ipswich .. .. .	32	178,100	1 27	24	65,980	2 13·2	4	5,589	0 0
Jundah .. .. .	..	..	..	1	25,600	0 0	..	..	..
Mackay .. .. .	1	19,855	0 0	19	147,778	3 0	53	149,085	2 29
Maryborough .. .. .	42	710,605	3 12	18	22,809	1 2	4	8,185	0 0
Monto .. .. .	11	207,465	0 20	11	75,042	2 32·6	..	..	..
Nanango .. .. .	32	223,119	2 38	13	8,182	2 26	2	11,116	1 18
Rockhampton .. .. .	9	208,718	1 0	15	114,873	2 22	15	2,597	0 0
Roma .. .. .	13	173,720	1 22	1	8,600	0 0	..	..	..
Springsure .. .. .	..	..	..	5	115,888	1 0	1	66,480	0 0
Stanthorpe .. .. .	4	13,733	2 36	..	..	..	6	12,604	3 0
Taroom .. .. .	3	22,186	0 0	5	46,462	2 0	1	11,400	0 0
Toowoomba .. .. .	21	260,222	0 2	16	31,270	1 15	5	3,214	3 0
Townsville .. .. .	1	23,123	0 0	2	17,199	1 31	3	70,520	0 0
<b>Total .. .. .</b>	<b>399</b>	<b>5,008,030</b>	<b>2 12</b>	<b>345</b>	<b>3,071,075</b>	<b>0 21·6</b>	<b>250</b>	<b>788,152</b>	<b>0 26</b>

	A.	R. P.
At 30th June, 1957—		
Total area reserved for—		
State Forests .. .. .	5,008,030	2 12
Timber Reserves .. .. .	3,071,075	0 21·6
National Parks .. .. .	788,152	0 26
<b>Total Reservations .. .. .</b>	<b>8,867,257</b>	<b>3-19·6</b>



## APPENDIX O.

## Reservations for the Year ended 30th June, 1957.

*State Forests.*—Six (6) new State Forests, with a total of 15,717 acres, were proclaimed during the year. These are as follows:—

Acres.		Land Agent's District.
8,100	Reserve 11, Hillside .. .. .	Roma
2,796	Reserve 220, Malmaison .. .. .	Gayndah
2,269	Reserve 327, Stanthorpe .. .. .	Stanthorpe
1,431	Reserve 201, Weranga .. .. .	Dalby
700	Reserve 552, Glenbar .. .. .	Maryborough
421	Reserve 529, Glenbar .. .. .	Maryborough

34,303 acres were added to existing reserves and 26 acres were released for roads. Thirty-six reserves were cancelled for inclusion in adjoining State Forests.

*Timber Reserves.*—At 30th June, 1957, the number of Timber Reserves was 345 compared with 353 at 30th June, 1956.

Two (2) areas, with a total of 6 acres, were reserved for Forestry purposes and 1,656 acres were added to existing reserves.

Ten (10) reserves, totalling 11,822 acres, were converted to State Forests and 2,694 acres were released.

*National Parks.*—One (1) new National Park of 18 acres was proclaimed during the year, 17 acres were added to existing reserves and 3 acres were released for roads.

## 1st JULY, 1956, TO 30th JUNE, 1957.

STATE FORESTS.				No.	A.	R.	P.
At 1st July, 1956	..	..	..	429	4,958,037	2	6
Proclaimed 1-7-56 to 30-6-57	..	..	..	6	15,717	0	6
V.C.L. added to existing reserves	..	..	..	..	34,302	3	27
				435	5,008,057	1	39
Reserves cancelled, areas released, recomputation of boundaries	..	..	..	36		26	3 27
Total at 30th June, 1957	..	..	..	399	5,008,030	2	12

TIMBER RESERVES.				No.	A.	R.	P.
At 1st July, 1956	..	..	..	353	3,083,029	1	32.8
Proclaimed 1-7-56 to 30-6-57	..	..	..	2		5	2 2.8
V.C.L. added to existing reserves	..	..	..	..	1,656	0	0
				355	3,085,590	3	35.6
Reserves converted to State Forests	..	..	..			11,822	0 38
Areas released	..	..	..			2,693	2 16
				10		14,515	3 14
Total at 30th June, 1957	..	..	..	345	3,071,075	0	21.6

NATIONAL PARKS.				No.	A.	R.	P.
At 1st July, 1956	..	..	..	249	788,119	1	32
Proclaimed 1-7-56 to 30-6-57	..	..	..	1		18	1 9
V.C.L. added to existing reserves	..	..	..	..		17	1 25
				250	788,155	0	26
Areas released for roads	..	..	..	..		3	0 0
Total at 30th June, 1957	..	..	..	250	788,152	0	26
Total reservations at 30th June, 1957	..	..	..	994	8,867,257	3	19.6

## APPENDIX P.

## Expenditure, Surveys, Year ended 30th June, 1957.

Particulars of Survey—	£	s.	d.	£	s.	d.
Harvesting and Marketing Project—						
Forest Inventory Surveys—						
Reserve 78, Dalby .. .. .	103	18	10			
Reserve 180, Dalby .. .. .	786	7	6			
Reserve 79, Inglewood .. .. .	892	5	9			
Reserve 134, Inglewood .. .. .	3,367	0	2			
Reserve 370, Kilcoy .. .. .	5,750	2	1			
Reserve 173, North Coast .. .. .	1,056	9	10			
Reserve 313, North Coast .. .. .	125	13	4			
Reserve 699, North Coast .. .. .	56	15	9			
Reserve 28, Many Peaks .. .. .	71	11	1 Cr.			
Maryborough .. .. .	26	6	9			
				12,093	8	11
Class II. Surveys—						
Baralaba .. .. .	1,063	19	10			
Duarina .. .. .	2,886	6	3			
Coorada .. .. .	341	12	9			
				4,291	18	10
Road Location Surveys—						
Reserve 106/146, North Queensland .. .. .	880	4	8			
Bartle Frere, North Queensland .. .. .	74	6	10			
V.C.L. Russell, North Queensland .. .. .	44	1	4			
				998	12	10
Boundary Surveys—						
Reserve 557, Dinden, North Queensland .. .. .	247	15	7			
Reserve 607, North Queensland .. .. .	951	17	3			
				1,199	12	10
Firebreak Survey—						
Reserve 1071, North Queensland .. .. .					587	6 2
Miscellaneous Surveys—						
Brisbane .. .. .	14	6	3			
Brisbane Valley .. .. .	29	9	9			
Bundaberg .. .. .	37	3	7			
Gympie .. .. .	7	4	1			
North Coast .. .. .	4	11	0			
North Queensland .. .. .	145	15	9			
Warwick .. .. .	39	3	0			
				277	13	5
Levels, Culpa, North Queensland .. .. .					1,511	4 5
Survey Camp Allan, North Queensland .. .. .					14	11 6
Survey Trainees' Schools .. .. .					725	7 3
Survey prints, maps and mountings .. .. .					835	11 5
				£22,535	7	7
Reforestation Projects—						
As detailed in Appendix H .. .. .					15,312	15 7
				£37,848	3	2

## APPENDIX Q.

## Distribution of Personnel, 30th June, 1957.

Salaried officers .. .. .	324
Other employees .. .. .	1,480
	1,804