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QUEENSLAND.

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ANNUAL REPORT

OF THE

SUB-DEPARTMENT OF FORESTRY

FOR THE

YEAR 1952-53.

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PLANTATION OF HOOP PINE (*Araucaria Cunninghamii*) AGE 23 YEARS.

This is the major species in the reforestation programme. Over 30,000 acres of hoop pine have been planted. During 1952-53 4,648 acres of softwood species were established.

# Report of the Director of Forests for the Year ended 30th June, 1953.

## INTRODUCTION.

The past year has been a period of readjustment, at the end of which the timber industry had settled down to near-normal trading. With a return to a buyer's market business is competitive demanding, for existence, efficient utilisation, careful sawing, proper seasoning, correct immunising when necessary and careful grading to specification.

Complete stability in the industry, with efficiency a major requisite for successful operation, will be most welcome. An encouraging sign towards this goal is the improvement in the labour position, as evidenced by the Department's experience in its own works, where the labour turnover has dropped from the 140 per cent. of two years ago to 58 per cent. in 1952-53.

It is to be expected that a large number of the small, inefficient sawmills established by post-war licenses to operate private timber will be unable to meet the competition, and, in fact, a substantial number of these mills ceased operations during the year. Many others, which, in the first place, did not have control of private log supplies adequate to warrant establishment, are certain to make representations for Crown logs in an effort to continue in operation.

However, Crown log resources are far from sufficient to maintain total supplies to the previously established mills which, having purchased Crown logs, are now regarded as having priority to remaining supplies. It would be unsound to disorganise the major part of the industry in an endeavour to support some of the post-war private timber mills. In those rare cases where the local position has permitted timber sales allowing the admission of new mills to Crown timber supplies, competition at the auctions has been keen.

It is a matter of regret that such a large number of mills were granted licenses to operate after the war, as it is doubtful whether this mushroom growth did, in fact, achieve much more than established industry could have done. Rather did it have an unsettling effect on the labour and material position to the detriment of the Industry generally, thus offsetting any small advantage in production output. It is certain that the inevitable closing down of many of these mills will leave behind it the tribulations of all short-term undertakings.

Changing markets and the increasing need to substitute other timbers, chiefly hardwood, for the dwindling supplies of natural pine, have necessitated constant watch on log pricing. The Department has kept the whole position under close observation and, where necessary and possible, has adjusted log prices in the interests of sustaining the industry on a sound basis.

Whilst the total cut of mill logs from Crown lands was well below that of the record cut of last year, it was one of the highest yet. The production of Hoop and Bunya Pine was up 3,000,000 super. feet whereas, in view of the small remaining resources, it would be preferable that the cut reduce progressively rather than increase. There was a reduction in the hardwood cut of 8,000,000 super. feet, an indication that back-lag of building is being overtaken. The drop of 10,500,000 super. feet in utilization of plantation thinnings was a reflection of depression in the wooden box and case market due, in part, to the inroads made by the fibre board box—another form of forest product. The log consumption of miscellaneous species has fallen by 15,000,000 super. feet, no doubt due to a restricted and more selective market. The strong demand, at high prices, from New South Wales and the buoyant Western Queensland market were responsible for the maintenance of the Cypress Pine log output. The New South Wales demand has complicated efforts by this Department to ensure an adequate supply of sawn Cypress to Queensland users at reasonable prices.

Private lands in Queensland still supply the greater part of the hardwood mill logs. In the Brisbane District i.e., south of Gympie to the border and east of the Range, there is by far the greatest concentration of mills in Queensland and this area is the greatest market in the State for sawn timber. The cut of private hardwood in this area must soon diminish and the Crown lands are incapable, for the present, of providing an increased annual cut. It follows, therefore, that the Brisbane market must look further afield for its additional requirements. With increasing transport costs by road and rail, the price of building timber in Brisbane must increase because of the growing cost of freighting supplies from more distant areas.

The cost of transporting timber is so great that it is apparent that, if cheap timber is to be supplied in the future, it must be grown adjacent to the consuming market.

In the planning of reforestation works the Forest Service has had this consideration constantly in mind and has concentrated its efforts on areas as close as possible to the markets. The production of timber on areas more remote from markets can be justified only if the areas have high growth capacity and timber of high quality is produced.

In its plantation procedure the Department has concentrated on the production of the maximum quantity of high quality wood in the shortest rotation with the minimum sacrifice of volume production.

In this connection, the excellent growth of Kauri Pine in South Queensland in the last few years has drawn special attention to this outstanding species. Because of this recent rapid growth and the remarkable degree of natural pruning of this species, there can be no coniferous species capable of producing such a high volume per acre of high quality wood per annum. It is proposed to establish as large an annual area of planting of this species as seed and planting sites will permit.

Towards the end of the year very dry weather was experienced and at several centres the planting of Exotics, which normally is commenced in May, had not been started by June 30th.

Over 50,000 acres of softwood plantations have now been established. At the present rate of planting of nearly 5,000 acres per annum, the Department's objective of 200,000 acres will not be achieved in less than 30 years.

#### REFORESTATION.

During the year 1952-53 there were good rains in late winter and spring which resulted in a mild fire season and good conditions for the 1952 winter planting of Exotics and the summer planting of Hoop Pine. The late summer rainfall approached record figures and ensured good survival from plantings, with a return to average growth after the drought of the previous year. However, from the end of April until late winter no useful rain fell and unless there is early relief another bad fire season will surely be experienced. This winter drought has seriously interfered with the 1953 planting of exotics throughout the State; less than half the projected area had been planted by the end of June and completion of the programme awaits serviceable rains.

In spite of an enforced reduction from 1,810 to 1,450 in the average number of men employed on reforestation the work performed compares quite favourably in quantity with that of the previous year. This will be apparent from the following figures:—

	1951-52.	1952-53.
	Acres.	Acres.
Area of natural forests treated .. .. .	36,727	33,881
Area of plantations established .. .. .	4,565	4,648
Area covered in pruning .. .. .	8,412	10,919
Area tended .. .. .	32,306	39,351

Two factors which have helped to make this possible are the reduced expenditure on protection and the fact that the labour position has improved considerably. The number of new men employed, (1,062), was less than half that of the previous year, (2,439).

Possibly the worst feature of the year was the sharp decline in demand for plantation thinnings. The year's cut from plantations fell from the record figure of 15,666,081 superficial feet in 1951-52 to 5,120,799 superficial feet; as a result there will be a lag in the time of thinning stands which are in urgent need of that treatment. Hoop and Kauri Pine planted at 9' x 8' have shown outstanding ability to recover from long periods of severe competition and with them this delay is not as serious as with the Exotics, considerable areas of which were planted at 7' x 7' and which do not respond so well to thinning after long periods in the suppression zone. Towards the end of the year the demand for thinnings had improved but it was decided to apply an unmerchantable first thinning to 7' x 7' stands of Slash and Loblolly Pine planted in 1947, 1948 and 1949. This thinning to 400 per acre is justified on silvicultural grounds and experiments in which such thinning has been done indicate that, with the present price differential based on size of thinnings, the cost of this treatment will be recouped. This type of thinning has been applied to 7' x 7' *Pinus patula* at Peehey for the past three years and it was decided to extend its application to young 8' x 8' stands. Experiments have shown that the earliest age at which a reasonable selection can be made is at four years. By this stage 7' x 7' stands have just entered the suppression zone and the thinning can be done at a lower cost than at a later stage.

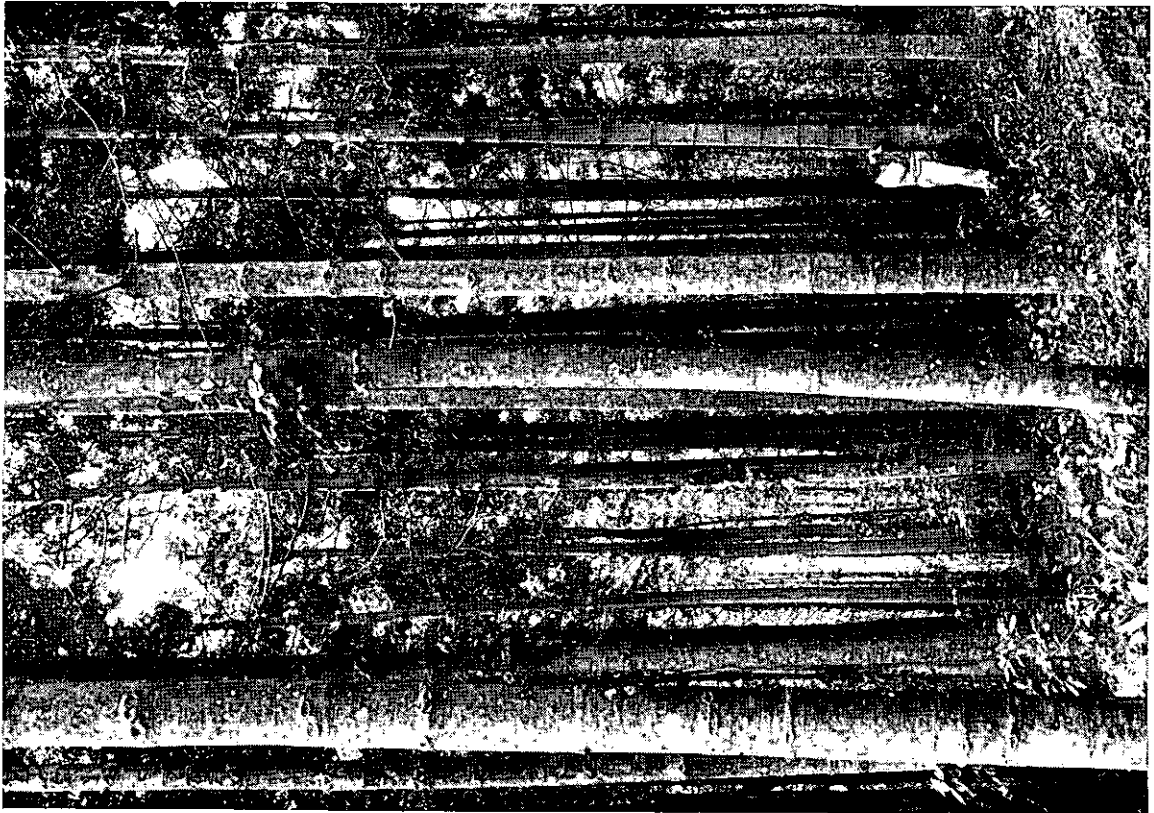
It was not possible to embark on a housing scheme for married men with their families living on the job, but by the end of the year nearly all other employees were housed in the 194 barracks which have been completed. An additional 5 barracks are in course of construction. A new ranch was built at Tuan to provide for the increasing numbers desiring to make use of the facilities thus available.

**Plantations.**—Appendix I. shows, by districts and species, the areas planted from 1st April, 1952, to 31st March, 1953. The total area planted for the year was 4,648.6 acres, made up as follows:—

	Acres.
Native Conifers (chiefly Hoop Pine) .. .. .	1,886.3
Exotic Conifers (mainly Slash Pine, Loblolly Pine, <i>P. patula</i> , <i>P. radiata</i> ) .. .. .	2,756.3
Broadleaved Species .. .. .	6.0
	<hr/>
	4,648.6

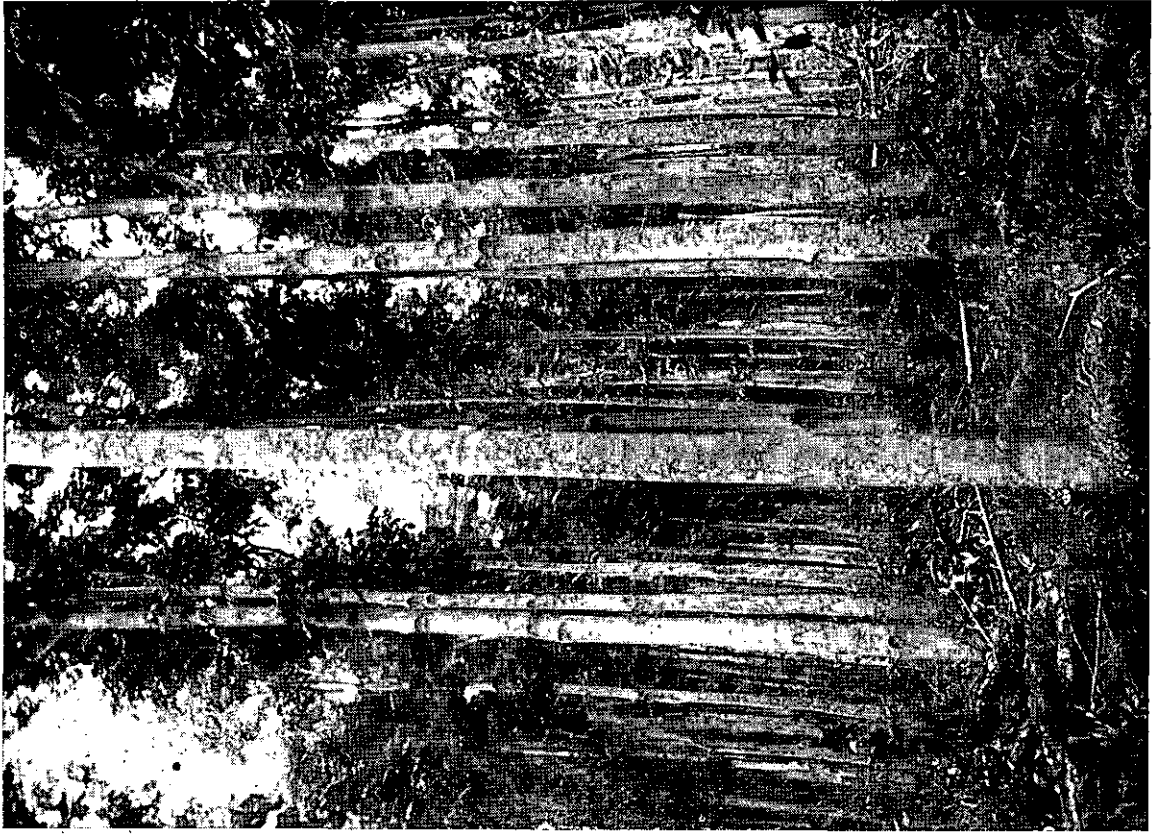
This is an increase of 83 acres on the 1951-52 figure.

QUALITY WOODS



KAURI PINE (*Agathis robusta*) 20 YEARS OLD.

The remarkable degree of natural pruning of this species gives maximum production of high quality wood at an early age.



QUEENSLAND MAPLE (*Flindersia brayleyana*) 21 YEARS OLD.  
SOUTH QUEENSLAND.

In addition to the area of new plantations established considerable refilling was necessary in both Hoop Pine and Exotic areas which had been hit by the 1951 drought with its attendant ravages by rats, bandicoots and scrub turkeys. This refilling has been highly successful and the areas on which it was needed are now effectively stocked.

One of the most pleasing features of the development of plantations in South Queensland has been the general improvement that has become apparent in the stands of our native Kauri Pine. Both *A. palmerstoni* and *A. robusta* are represented in the plantings concerned and both exhibit the same improvement. Some indication of the increase in rate of growth is afforded by the following figures taken from representative yield plots at Imbil and Amamoor.

Location.	Plot No.	Age.	Stocking.	Av. G.B.H.		Basal Area/acre.
				Inches.	Feet.	
R. 135 Cpt. 13A Derrier Logging Area ..	59	11	465	15.8	..	65
	..	13	465	18.0	43	84
	..	15	465	19.9	49	111
	182	11	440	15.4	37	58
R. 435 Cpt. 6A Zachariah Logging Area ..	..	13½	440	19.0	47.5	88
	187	11	460	18.0	44	82
	..	13½	460	21.3	50	116

Considering Basal Area it is seen that the mean annual increment for the first eleven years ranged from 5.3 to 7.5 sq. ft. for the plots dealt with. From that age the average annual increment for the three plots is 11.3 sq. ft., 12 sq. ft. and 14 sq. ft.

These current increments compare favourably with current increments of Hoop Pine on similar sites over the same period and represent volume increments of from 300 to 400 c. ft. per acre per year. In the drought year 1951-52 growth rates of Kauri were not as severely depressed as those of Hoop Pine.

Kauri Pine has one big advantage over other conifers handled in this State, namely, its natural pruning habit, which results in individual stems clearing themselves to heights of 50 ft. and more at spacings which permit of satisfactory rates of girth growth. It is considered that no conifer of any other genus is capable of producing as much clean timber per year of highest quality without a very expensive artificial pruning technique. This is a most important fact because of the high proportion of lower grade material that will be produced in plantations even with the application of current pruning prescriptions to other conifers. With Hoop Pine approximately 40 per cent. of the final crop merchantable volume will be in the pruned section of the stem. Kauri should more than double this figure and the effect of its natural pruning will be apparent in all thinnings, becoming increasingly important with age.

The poor early growth in plantations is caused largely by Thrip attack and whilst there is no reason to expect that future plantings will not be similarly retarded Kauri will be planted, in future, to the extent that seed and suitable sites are available.

In general, *A. robusta* prunes itself better than does *A. palmerstoni* but there is marked variation between the behaviour of individual stems in this regard. This suggests a fruitful field for the tree breeder and work has been extended to embrace this species.

The position regarding pruning and tending was further improved during the year, despite the fact that the good spring and summer rains caused a prolific growth of weeds in the Hoop areas and tending costs, in many cases, were very high. The position regarding lantana inside plantations is steadily improving, but it will be many years before the satisfactory condition which had been achieved prior to the second world war will be again attained.

The areas pruned were as follows :—

First operation .. .. .	Acres.
Second operation .. .. .	2,024
Third operation .. .. .	3,878
Final operation .. .. .	3,848
	1,169
	<u>10,919</u>

The low figure in the area first pruned is associated with the wartime break in planting programme. It is expected that this will increase greatly in the 1954-55 period.

The total area tended was 39,351 acres.

As stated earlier, the cut of plantation thinnings declined sharply from the previous year's record figure. The year's cut was 5,120,799 superficial feet (Hoppus) made up by :—

	S. ft.
	(Hoppus)
Native Conifers .. .. .	3,650,353
Exotic Conifers .. .. .	1,464,350
Other Species .. .. .	6,096
Total .. .. .	<u>5,120,799</u>

Total cut from plantations is now 57,607,314 superficial feet. Excluding the current year's figures the return to the Crown through royalties on plantation thinnings has been £151,310.

The manner in which the reduced cut was distributed between native and exotic conifers is of interest. The Exotics dropped by 6,410,000 superficial feet, whilst Native Pines dropped by 3,460,000 superficial feet.

**Nurseries.**—The number of nurseries in production at the end of the year was 29. The nursery at R. 220 Kilkivan has gone out of production but a new nursery has been opened in the Department's property at Rocklea. This nursery has been made necessary by the increasing public demand for shade and ornamental trees, which could not be met satisfactorily from nurseries whose prime purpose is to raise stock for the Department's planting programme.

Plants on hand on 30th June, 1953, totalled 6,940,000. During the year 4,100,000 were transferred to the field and 3,863,000 of these were planted by the Department.

The quality of Exotic stock produced was entirely satisfactory, though the heavy autumn rainfall and late arrival of winter frosts were responsible for a high percentage of blue-tops. This was particularly noticeable at R. 611 Beerwah (Beerburrum).

The Hoop Pine stock was particularly good in the Kilkivan nurseries but in some of the Brisbane Valley nurseries and at Jimna growth was unsatisfactory. Experiments indicate that inadequate manuring is the reason for the Yarraman results and it is considered defective tilth is the trouble at Jimna. The better quality of drill sown stock at this centre has led to the decision to accept a lower nursery capacity by raising drill sown root-wrenched seedlings instead of transplants.

**Regeneration Treatment of Natural Forests.**—During the year an area of 33,861 acres was afforded standard silvicultural treatment and this represents a drop of 2,866 acres on last year's figures.

The following figures are taken from Appendix L :—

	First treatment.	Other than First treatment.	Total.
	Acres.	Acres.	Acres.
Hardwoods .. .. .	4,776	19,645	24,421
Cypress Pine .. .. .	6,342	2,983	9,325
Other Species .. .. .	25	90	115
<b>Totals .. .. .</b>	<b>11,143</b>	<b>22,718</b>	<b>33,861</b>

The areas of "Other species" shown represent a resumption of treatment of rain forest in North Queensland. The 25 acres were accorded first treatment consisting of (a) planting of Red Cedar in burnt tree heads and along snig tracks to improve the representation of high quality species and to provide seed trees for the future and (b) the liberation of suitable stems of the better class species. Assessment after treatment showed approximately 150 stems per acre and 84 square feet B.A. retained in stems 20 feet + in height, and of these 110 were better class species. The 90 acres of later treatment represent the liberation of areas treated in 1948-49 on Juara Logging Area, R. 185 Danbulla, where excellent regeneration of high quality species (principally Ash) has been obtained. It is proposed to increase this work substantially in the coming year.

**Seed Collection :** (1) *Araucaria cunninghamii*.—No collection of Hoop Pine seed was made during the year but a heavy crop is indicated for the coming season and stocks will then be replenished. A total quantity of 19,000 lb. from the 1950-51 collection is held in the Department's cold store, and in view of the drop in L.G.C. recorded last year further germination tests were carried out in February-March, 1953. An average drop of only about 5 per cent. was apparent, over the twelve month period, in most seed batches. Seed on hand will be adequate for 1953 sowings only.

(2) *Pinus Species*.—The total quantity of *Pinus* seed collected during the year was 230 lb. and is considerably less than the previous year's collection. This can be attributed to the facts that the seed crop was very poor on most of these species and collections were therefore confined almost entirely to select seed trees, and that a double collection of seed of Slash Pine and Loblolly Pine was made in the previous year and sufficient stocks are held to meet expected requirements. Details of collections are shown by species—

Slash Pine—149 lb.—including 50 lb. from select seed trees.  
*Pinus taeda*—21 lb.—including 17 lb. from select seed trees.  
*Pinus patula*—40 lb.—all from final crop trees.  
*Pinus radiata*—20 lb.—all from selected trees.  
*Pinus insularis*—4 lb.

Some thinning has been carried out around select seed trees of Slash Pine in an effort to promote greater cone development, and additional seed trees have been selected in younger stands.



(3) *Eucalyptus Species*.—Demand for Eucalypt seed has continued and overseas orders increased following the F.A.O. Eucalypt Study Tour in 1952. However, seed crops have, in general, been light; collection totalled 13 lb. 13 oz. comprising 12 principal species. Stocks held at 30th June, 1953, totalled 81 lb.

(4) *Miscellaneous Species*.—Again seed of numerous species was obtained for production of ornamental shade and fodder plants for departmental and public use. This seed was obtained from departmental collections, Brisbane Botanical Gardens, and the Brisbane City Council, as well as from other Forest Services and through National Parks staff.

**Supply of Trees to Public.**—Sales to the public during the year totalled 237,087, distributed as follows:—

By Species—				By Purchasers—			
Slash Pine .. .. .			57,502	Farmers .. .. .			167,315
<i>P. taeda</i> .. .. .			78,705	Schools .. .. .			10,575
<i>P. patula</i> .. .. .			11,682	Government Departments ..			6,210
<i>P. radiata</i> .. .. .			522	Private .. .. .			52,987
Hoop Pine .. .. .			31,773				
Miscellaneous .. .. .			56,903				
			237,087				237,087

Returns from sale of trees amounted to £3,229 7s. 6d.

There is no doubt that a further 200,000 Exotics would have been sold had the usual winter rains been experienced. Substantial orders have been deferred or cancelled because of the unfavourable season (1953) experienced for planting of open root stock.

**Research.**—Staff was maintained at all centres at the same level as in the previous year.

#### North Queensland.

One of the first research jobs in North Queensland was to lay down a series of plots to provide growth data for cut-over rain forests over the range of forest types and climates. Plot sites were selected to represent average conditions for the types they sampled. On each type covered three plots were established—one untreated, apart from logging to girth limits, the other two afforded silvicultural treatments of differing intensities. To date ten different localities have been covered. It is hoped to obtain useful information from these plots after the 1953 measurement when, for some plots, observations will cover a five-year period.

*Trial Plantings.*—The main object of trial plantings in the North is to find a softwood suitable for poor forest types on the coastal plain. During the year, school plots in the region were inspected and the most important indications obtained from these and from the Department's own plots were:—

- (i.) On rain forest and better open forest types the most promising species are Kauri Pine and Maple (species from the rain forests of the north) and Hoop Pine.
- (ii.) On poorer open forest types, where drainage is reasonable, the best results to date have been given by *Honduras caribaea*, but further work is warranted with Slash Pine and *P. insularis*.

During the year a further three plots were established just north of Cardwell and *Pinus occidentalis* was added to the list of species under test.

*Treatment of Rain Forests.*—With the object of improving the representation of the most valuable cabinetwoods a start was made on experimental interplanting of Red Cedar in openings made in the rain forest by logging operations, together with the destruction of undesired species and stems from the surrounding forest. Observation plots were established and these showed that an average basal area of 84 sq. ft. per acre was retained in 148 stems over 20 feet in height and 360 per acre less than 20 feet.

Hormones have not been promising when used in frilling stems or as a spray against coppice regrowth. Excellent results were obtained, however, when freshly brushed stems were swabbed with hormone solutions at 1 per cent. acid equivalent.

*Root Rot.*—Fungi causing root rot in Hoop Pine in plantations were isolated and cultures and successful inoculations made. Identification awaits the development of fruiting bodies.

*Red Cedar.*—Work with this species was extended during the year. Twig borer damage is still the main problem and underplanting is the most promising method of control. Extensive trial underplantings were made in rain forests and considerable success achieved in the use of "Stumps" prepared from wildings by pruning root and shoot so that about 8 inches of each is retained. It appears that vegetative reproduction of Red Cedar will be relatively easy. Preliminary trials with cuttings from old trees have given a satisfactory take in North Queensland and at Beerwah.

The visit of Mr. R. Barnard of the Malayan Forest Service gave a stimulus to the work and was productive of many useful suggestions.

### Central Queensland.

The most important aspects of work at Bowenia are the performance of *Honduras caribaea* and the utilization of poorly drained soil types. *Honduras caribaea* continues to show up well in comparison with Slash Pine and its use will be extended to this centre, to the extent that seed is procurable. Ploughed plots fertilized with Nauru phosphate have given uniformly good growth with Slash Pine and, though only young, justify a large-scale experiment, which is being initiated during the 1953 planting season.

Trial plantings have been made with *P. tropicalis* and *P. occidentalis*.

### South Queensland.

(1) *Exotic Pines—Tree Breeding.*—The end of this year saw the departure of the officer in charge of this work for America, where he will spend a year at Duke University specializing in Genetics. Provision has been made for continuance of the work during his absence overseas.

The visit of Dr. Duffield from Placerville, U.S.A., during the spring of 1952, was of great assistance in planning future work and in appraisal of work so far done. The main problem in the work on Slash Pine continues to be establishment of a satisfactory technique for the vegetative reproduction of old trees.

Work done to date shows that grafts are more promising than cuttings; that the autumn is the best season for grafting; that bottle grafts are the most promising type of graft, and that control of temperature and humidity is highly desirable. To assist in this work a glass-house was constructed with automatic sprinklers built in.

The ultimate survival from the 397 grafts made from old trees in April, 1952, was 31 or 7.8 per cent. The successful grafts were all from elite trees and have been put into the seed garden on R. 108. Cuttings from old trees were a complete failure.

During the period when pollen was flying and cones receptive a series of observations was made to determine whether the seed garden site, 3 miles from the nearest plantation, is adequately isolated. Pollen counts under a stand at 200 stems per acre and in the seed garden showed that, if the seed garden produced pollen to the same extent as the plantation, the number of foreign pollen grains on the seed garden would be fewer than 1 per cent. The observations will be repeated over a number of years.

To obtain an indication of the spacing which should be adopted to give maximum seed production, counts were made of cones on plots in Free Growth experiments with Slash and Loblolly Pine. In a poor seed year a spacing of 16 feet to 20 feet gave maximum production of cones at age 12 to 13 years. It is to be expected that, with increasing age, maximum seed production will be given by fewer stems per acre.

Assessment of progeny was continued to the stage that all progeny established up to 1947 has now been covered. It is proposed to publish the results in the near future. Meanwhile, it is apparent that a considerable improvement in straightness of stem has been achieved by selection of female parents and that this is accentuated when both parents are selected for outstanding form. In general it has been found that the superior phenotypes have shown up best in assessments of progeny.

With the assistance of C.S.I.R.O. a start has been made on the determination of the wood qualities of Elite stems.

Work with *P. radiata* is being continued with the co-operation of the Commonwealth Forestry Bureau at Canberra.

Arrangements are in hand to obtain from the New Zealand Forest Service cuttings from some of the best trees located.

(2) *General.*—At Tuan the first 50 acres of an area of 150 acres proposed for a large-scale drainage experiment were prepared and planted in May-June, 1953. Drainage was provided by contour drains at about 5-chain intervals, between which differing treatments of soil disturbance and fertilizing were applied. Up to completion of planting, costs per acre are lower than on average planting sites where heavier stands of timber have to be cleared.

On R. 589 Beerwah a marked response was obtained to the application of phosphate to areas of shallow soil showing symptoms of needle fusion and where the original  $P_2O_5$  determinations were above the minimum regarded as necessary for normal growth of *P. taeda*.

Location.	Increments, 1952-53.			
	G.B.H.		Height.	
	Control.	Treated.	Control.	Treated.
	In.	In.	Ft.	Ft.
Cmpt. 3 Tibrogargan Logging Area .. .. .	.44	.74	1.2	1.3
Cmpt. 12 Tibrogargan Logging Area .. .. .	.04	.34	0.9	1.35
Cmpt. 6 Tibberowuccum Logging Area .. .. .	.63	1.15	1.4	2.35



**EXPERIMENTAL PLOT, RAIN FOREST, NORTH QUEENSLAND.**

Intensive research work is being conducted to determine the best technique of stand improvement and regeneration in the North Queensland rain forest types.



**A PROMISING NEWCOMER.**

Honduras pine, 4 years old, doing well on poor coastal land in tropical Queensland.

The plots in compartment 12 are on a very poor site with less than 12 inches of soil over heavy clay, and the response is surprising. There is also a marked improvement in colour and depth of crown in the treated plots.

Preliminary trials with hormone weedkillers to control Eucalypt coppice in plantations have given most promising results. A 1 per cent. solution of 2·4·5T (butoxy ethanol ester) in power kerosene, applied as a basal spray to persistent Eucalypt coppice under a 20-year plantation of Slash Pine, resulted in an 87 per cent. kill. Coppice was 15–20 feet high and 2–3 inches diameter. An area felled in June, 1952, and burnt in December, 1952, was treated in May, 1953, with 1 per cent. and  $\frac{1}{2}$  per cent. aqueous solutions of 2·4·5T applied as a foliage spray. Both treatments resulted in almost a complete kill and the plots will be observed for resprouting in the spring.

In the nursery, promising results in weed control have been obtained with white spirits, both as a pre-emergence and post-emergence spray. At Beerwah, application, towards the end of September, of 50 gallons of white spirit per acre, late on a cloudy afternoon, almost completely eradicated a heavy and well-established weed crop without injuring Slash Pine seedlings 2–3 inches in height and carrying only juvenile foliage.

Improved growth of Hoop Pine from a 1926 planting on compartment 1 Blue Gum Logging Area has led to the establishment of a number of plots in which Hoop has been planted in thinned stands of Slash Pine and in fresh burns.

### (3) Hoop Pine—Yarraman and Imbil.

*Seed.*—To date success has not attended efforts to induce early flowering. Treatments applied were strangling, root-pruning, girdling, and fertilizing. Observations in free growth experiments indicate a response to additional space, similar to that recorded with Slash and Loblolly Pine. One tree 31 inches g.b.h. and 56 feet in height, in a plot at 100 stems per acre, carried 588 cones which will ripen in 1953.

*Nursery Weeding.*—Cost of weeding in nurseries has stimulated work on the use of selective weedicides and the most promising is white spirit. In its use after the germination of the Hoop Pine seedlings good control of weeds was achieved but some treatments caused damage to the Hoop. Further work is proposed.

*Hoop Pine and Frosted Sites.*—It has been shown that Hoop Pine can be established in plantations on frosted rain forest sites under a cover crop. To date, *E. grandis* is the most satisfactory nurse. As early as 1941 experiments had shown that Hoop Pine could be so established and, since then, work has continued to determine the best procedure for removal of the cover crop. The problem is to promote the growth of the Hoop Pine whilst still maintaining adequate protection against frosting.

*Free Growth Experiments.*—With the 1952 measurements the original series of free growth experiments fulfilled their principal purpose of determining the zone of free growth with Hoop, Slash, and Loblolly Pine. There still remains to be finalised, in this regard, a more recently commenced experiment with *P. patula*. The following table shows the numbers of stems per acre no longer free growing at various ages for the three species:—

Species.	Number of Stems per acre not free growing.							
	Age.							
	4 years.	5 years.	6 years.	7 years.	8 years.	9 years.	10 years.	11 years.
Loblolly Pine ..	800	500	400	250	160	100	..	65
Slash Pine ..	..	800	400	320	180	..	80	..
Hoop Pine—								
Yarraman ..	..	..	550	350	250	160	100	..
Hoop Pine—Imbil ..	..	..	550	350	250	..	160	..

The figures quoted are average for a number of experiments in each case. It will be noticed that Hoop Pine enters the zone of suppression at a later age than do the two exotics. Compared with South African published data the figures quoted for Slash and Loblolly Pine indicate a later entrance to the zone of suppression, but they support the fact that the zone is entered at a very early age with normal planting spacings of 8 feet x 8 feet or 9 feet x 8 feet as applied to Exotics and Hoop Pine respectively in Queensland.

These experiments are being maintained with the object of affording a check on the production of quality timber at various spacings, branch size, and other points such as cone production.

*Vegetative Reproduction.*—It has been shown that leading shoots of young Hoop Pine can be struck as cuttings with over 90 per cent. take. The first of these were transferred to the field during the year and, so far, they have behaved as normal seedling stock. With older trees results are not promising with branch or leader cuttings and work has extended to embrace root cuttings. Kauri Pine has also been brought into the programme.

(4) *Coastal Hardwoods.*

*Prescribed Burning.*—The experiments on prescribed burning, mentioned in last year's report as proposed for establishment in the Spotted Gum-Red Ironbark type in the Maryborough district, were commenced in the winter of 1952. Conditions were favourable for burning and the burn was particularly successful in the case of the compartment on Reserve 435, Gundiah, which is listed for burning as frequently as can be done without undue damage. It is too early for reliable figures on growth to be obtained, but average girth increments for the principal species in 1952-53 were as follows:—

Species.	Burnt.	Unburnt.
	In.	In.
Spotted Gum .. .. .	.12	.12
Grey Ironbark .. .. .	.60	.50
Red Ironbark .. .. .	.57	.89

Damage to stems over 10 feet in height appeared to be very slight, but all stems less than 5 feet in height were burnt back to the ground. Most of these have coppiced and their future history will be fully recorded. Unfortunately, no natural regeneration resulted, on observation plots, from the seedfall following the burn. As it is on the behaviour of the regeneration that the system, ultimately, will stand or fall, a planting of *E. maculata* tubed stock was made in July from a February sowing. This will be subjected to the second burn during the winter of 1953.

*E. pilularis—Thinning Experiments.*—Figures were taken out for a series of three experiments in even-aged Blackbutt now 29 years old. These showed that over the 10 years period 1942-52 maximum volume increment was on spacings from 13 feet x 13 feet to 16 feet x 16 feet, with the wider spacing showing a substantial advantage in growth of the individual stems. Over the last two years of the period the 20 feet x 20 feet plots have put on volume increment very close to maximum, and it appears that the basal area carried by those plots is near to optimum for Blackbutt on this site. Figures for Experiments A, B, and C during 1950-52 are shown in the following table:—

	25 feet x 25 feet.			20 feet x 20 feet.			16 feet x 16 feet.		
	A	B	C	A	B	C	A	B	C two plots.
B.A. per ac. 1952 (sq. ft.)	114	106	110	122	117	135	153	132	166 121
B.A. inc. 1950-52 (sq. ft.)	8.4	8.8	7.8	9.2	9.2	8.4	9.4	9.0	10.4 8.6
Av. g.b.h. 1952 (ins.)	53.5	50.0	53.2	46.1	44.1	48.6	40.7	37.8	42.5 38.5
Vol. inc. 1950-52 (c. ft.)	258	282	252	320	328	292	328	334	374 328

These experiments support present routine prescriptions for the thinning of Blackbutt stands.

*South-west Queensland.*

(a) *Shade and Ornamentals.*—Experimental planting has been carried out over the past 8 years at Brookstead on the Darling Downs, on the property of Mr. F. K. Thomas, who has co-operated with the Department in this work.

The soil is of the heavy black type which is typical of the Downs and for which recommendations for suitable trees are frequently sought. Species which have proved most promising are:—*Tamarix aphylla* (Athel Tree), *Cupressus forbesii* (Tecate Cypress), *Cupressus arizonica* (Arizona Cypress), *Eucalyptus sideroxylon* (Mugga Ironbark), *Brachycton populneum* (Kurrajong), *Celtis sinensis* (Chinese Elm or Portuguese Elm), *Acacia pendula* (Weeping Myall), *Melia azederach* (White Cedar), *Gleditschia triacanthos* (Honey Locust), *Schinus molle* (Pepperina).

It has been shown that, for successful establishment, it is necessary to plough or rotary hoe the site prior to planting, and desirable to space the plants so that mechanical cultivation is possible, for a few years, until the plants are well established. Planting should be carried out in the spring to allow the plants to be better established before the incidence of the first winter, which is a critical period.

(b) *Thinning Experiments—Cypress Pine.*—During the year all Cypress Pine thinning plots in the Dalby district were remeasured and work on the data collected is progressing. It is hoped to deal fully with this next year. Meanwhile, increments for two experiments are quoted below.

(i.) *Experiment 20—R. 78 Yuleba.*—Established 1941 in a stand thinned to approximately 5 feet x 5 feet in 1931. Five plots were laid down—one unthinned (1,700 per acre), two thinned to 14 feet x 14 feet (220 per acre), two thinned to 20 feet x 20 feet (110 per acre). At establishment the average height of stand was 15-20 feet.

TABLE OF INCREMENTS.

Spacing.	G.B.H. (inches).				B.A. per acre (sq. feet).				Total Vol. U.B. per acre (cu. feet)			
	Total.	Annual.			Total.	Annual.			Total.	Annual.		
	1941-52	1941-48	1948-52	1941-52	1941-52	1941-48	1948-52	1941-52	1941-52	1941-48	1948-52	1941-52
Av. 20 feet x 20 feet ..	8.38	.75	.78	.76	11.21	.85	1.27	1.02	157.7	9.9	20.7	14.3
Av. 14 feet x 14 feet ..	6.88	.63	.61	.62	17.49	1.38	1.90	1.59	226.2	16.2	26.9	20.6
Unthinned ..	1.37	.12	.12	.12	17.96	1.53	1.78	1.63	161.1	13.2	16.7	14.6

It will be seen that the total volume increment in the 14 feet x 14 feet is superior to the other treatments, though the growth of the individual tree is greatest in the 20 feet x 20 feet and at .76 inch is quite satisfactory. Merchantable volume increments would place the unthinned well behind the other plots.

(ii.) *Experiment 2—R. 93 Nudley.*—Established 1940 with two plots—one thinned to 20 feet x 20 feet (110 trees per acre), the other to 30 feet x 30 feet (50 per acre).

At establishment average girth was approximately 12 inches and average height 32 feet.

TABLE OF INCREMENTS.

Spacing.	G.B.H. (inches).				B.A. per acre (sq. feet).				Total Vol. U.B. per acre (cu. feet).			
	Total.	Annual.			Total.	Annual.			Total.	Annual.		
	1940-52	1940-45	1945-52	1940-52	1940-52	1940-45	1945-52	1940-52	1940-52	1940-45	1945-52	1940-52
30 feet x 30 feet ..	11.85	1.41	.79	1.03	16.4	1.75	1.21	1.42	561.5	51.1	47.4	48.8
20 feet x 20 feet ..	10.04	1.20	.66	.87	26.9	2.88	1.96	2.34	797.2	69.1	69.5	69.3

The volume increment of 69 cubic feet per year over a period of 12 years is the highest so far recorded in experiments with Cypress Pine in the Dalby district.

**Protection.—(a) Fire.**—Following on last year's record expenditure on fire protection the current year saw a return to normal, with concentration of effort on maintenance and extension of the protection system. As a result a further 270 miles of firebreaks were added to the State's total.

Details of the work carried out on firebreak construction and maintenance are as follows:—

1. *Cleared Breaks (Western Forests)*—

	Miles.
<b>Firebreak Construction—</b>	
Cutting and grubbing .. .. .	139.5
Stacking and burning .. .. .	92.9
Cutting auxiliary roads .. .. .	..
<b>Firebreak Improvement—</b>	
Grubbing roads .. .. .	41.1
Grading .. .. .	193.5
Stumping .. .. .	98.5
Green strips .. .. .	218.8
<b>Firebreak Maintenance—</b>	
Suckering and burning .. .. .	691.9
Grading .. .. .	983.1
Rotary Hoe .. .. .	278.5

2. *Green Breaks (Coastal Hardwood Areas)*—

<b>Firebreak Construction—</b>	
Felling dangerous trees .. .. .	21.3
Stacking and burning .. .. .	16.4
Firebreak Improvement .. .. .	105.4
Roads .. .. .	78.6
<b>Firebreak Maintenance—</b>	
Chipping and/or ploughing .. .. .	1,687.5
Burning .. .. .	523.0
Roads .. .. .	229.6
Grading .. .. .	232.3

3. *Cleared Breaks (Plantations)*—

<b>Firebreak Construction—</b>	
Temporary breaks for scrub burning .. .. .	73.6
Clearing .. .. .	116.9
Rotary hoe .. .. .	53.7
Grading .. .. .	96.7
Scrub break improvements .. .. .	81.0
<b>Firebreak Maintenance—</b>	
Chipping .. .. .	126.2
Ploughing .. .. .	..
Burning .. .. .	142.7
Rotary Hoe .. .. .	256.6
Grading .. .. .	445.3

(b) *Disease*.—No serious disease was reported during the year.

Action was taken to control an occurrence of case moths on *P. radiata* planted in 1946. Badly infested trees were thinned and burnt and the remaining trees sprayed with arsenate of lead. This treatment has greatly reduced the population of case moths and it is thought that a further spraying will clear the affected area.

**Capital Improvements.**—The number of barracks completed during the year ensures that, in all important centres of employment, adequate accommodation of this type is now provided. The programme of construction has, therefore, been tapered off. At the end of the year only five barracks were in course of construction and when these are completed only such construction as is entailed by commencement of operations in new centres will be necessary.

Major items of construction are listed as follows :—

Item.	Completed 1952-53.
Cottages .. .. .	1
Barracks .. .. .	32
Bathrooms .. .. .	6
Galleys .. .. .	11
Lavatories .. .. .	13
Tent rigs .. .. .	23
Laundries .. .. .	1
Bathroom—laundry—galley combinations .. .. .	4
Ranches .. .. .	1
Offices .. .. .	2
Garages .. .. .	8
Sheds, toolrooms, &c. .. .. .	10
Lookouts .. .. .	2
Grids .. .. .	37
Bores and wells .. .. .	2
Magazines .. .. .	2
Telephone lines .. .. .	9
Ramps .. .. .	6

**Expenditure and Labour.**—Expenditure on reforestation works was £1,246,000 which represents a drop of approximately £266,000 on the record figure of the previous year.

Details of this expenditure are set out in Appendix H from which the following figures are extracted :—

Plantations .. .. .	£ 284,518
Natural Regeneration .. .. .	25,312
Nursery Working Expenses .. .. .	44,918
Protection (including fire-fighting) .. .. .	235,174
Research .. .. .	16,784
Capital Improvements .. .. .	114,913
Surveys .. .. .	20,935
Wet Time, Holidays, Leave .. .. .	138,104
Tools, Tents, Cartage, Supervision .. .. .	250,698
Workers' Compensation .. .. .	24,566
Pay Roll Tax .. .. .	23,776
Cartage of Rations .. .. .	13,395
Camping Allowance .. .. .	64,981
Travelling Time .. .. .	77,875
Depot Stock .. .. .	Cr. 89,773
	<u>£1,246,176</u>

It is pointed out that the direct expenditure on plantations was approximately £33,000 more than that of 1951-52.

Wages staff employed on reforestation works at the commencement of the year numbered 1,509, but by the end of the year this figure had dropped to 1,397.

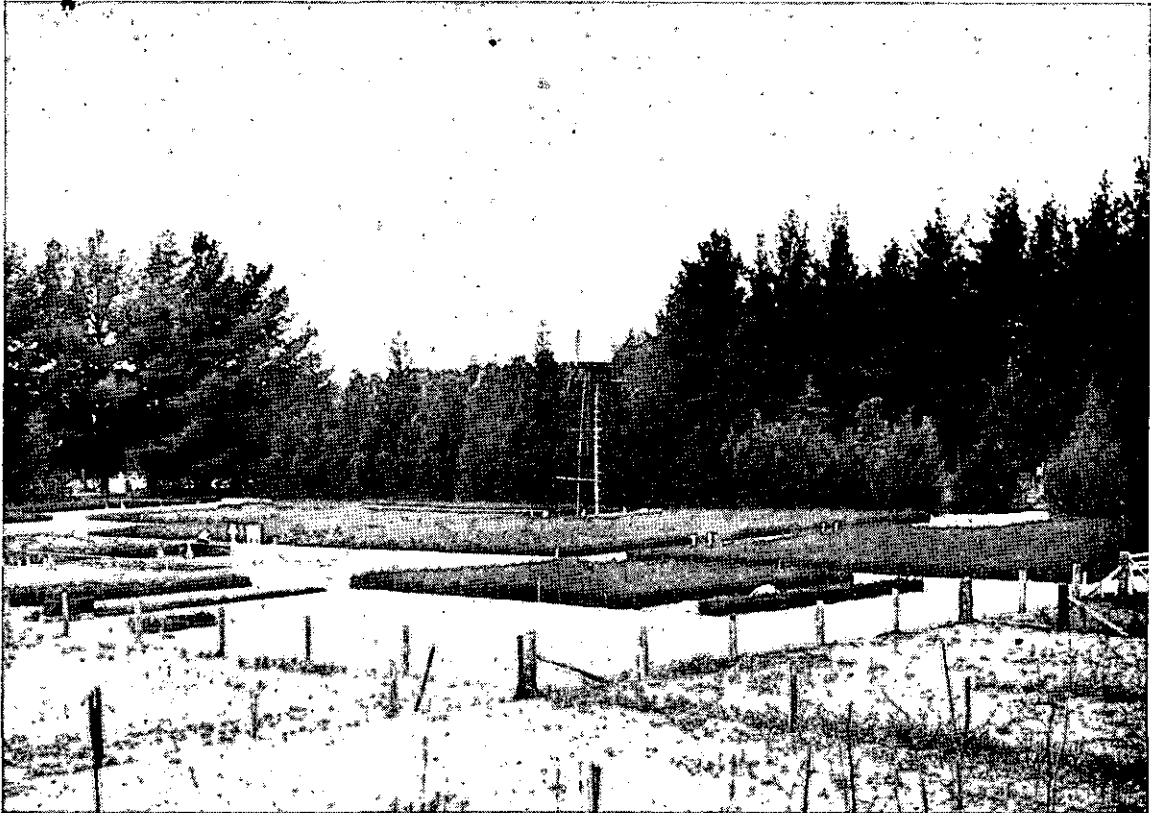
#### ACQUISITION OF LAND.

During the year 1952-53 an amount of £6,580 14s. 8d. was expended on the acquisition of land for Forestry purposes.

Thirteen properties, covering an area of 3,509 acres 2 roods 24 perches, were purchased at a cost of £4,463 16s. 3d. and compensation paid during the year in respect of areas resumed amounted to £560 8s. 9d.

Areas totalling 39,000 acres, surrendered from leasehold land, were proclaimed State Forests, while a further 123,457 acres, surrendered from Grazing Farms, were gazetted Timber Reserves. In these cases the previous lessees were granted Special Leases under Forestry conditions.

In addition, 10,817 acres of an expired leasehold were gazetted as a State Forest and 66,035 acres from five grazing tenures which had expired were proclaimed Timber Reserves.



**FOREST SERVICE NURSERY.**

Twenty-nine nurseries produced four million plants in 1952-53, and seven million plants remained in nurseries at the end of the year.



**SLASH PINE PLANTATION, AGE 21 YEARS.**

This is the chief exotic used in plantations.



**FIRES.**

A tabulated summary of reports received of outbreaks of fire on or threatening forest reservations during the year ended 30th June, 1953, shows the magnitude of fires as follows :—

½ acre or less.	½ acre to 10 acres.	10 acres to 100 acres.	Over 100 acres.	Unknown.
4	9	8	15	39

An examination of the causes of the outbreaks, as disclosed by these reports, shows :—

- In 43 cases, cause unknown
- In 9 cases, deliberate burning
- In 4 cases, from camp fires
- In 4 cases, sparks from burning firebreaks
- In 3 cases, from dropped cigarette butts
- In 3 cases, from burning off logs
- In 3 cases, from lightning
- In 2 cases, from burning rubbish
- In 2 cases, fire spread from adjoining property
- In 1 case, from burning of carcass
- In 1 case, spark from tractor

Total 75 cases

Two prosecutions were instituted during the year for unauthorised fires. One involved the lessee of a Forest Grazing Lease on a State Forest and he was fined £25 and action taken for the resumption of his lease. The other prosecution resulted in a fine of £3.

In several other cases, the offenders have been requested to meet all or part of the fire-fighting costs involved by the Department in controlling the outbreaks.

**FOREST SURVEYS.**

Fourteen fully-equipped survey camps operated throughout the year.

Total expenditure for survey work amounted to £46,887 16s. 3d. of which £25,952 11s. 7d. was chargeable against Harvesting and Marketing projects and the balance, £20,935 4s. 8d., against Reforestation projects.

As a result, 34,145 acres were assessed (Class 2); 46,465 acres were subjected to either firebreak, compartment or soil survey; 97,073 acres were covered by Forest Inventory Survey, entailing the establishment of 612 plots, whilst 3,472 acres were closely inspected (Class 1 Survey).

Miscellaneous district surveys, mainly concerned with planting, were carried out as required.

Mileage completed was—

	Miles	Chains
Theodolite and chain .. .. .	5	23
Compass and chain .. .. .	1,232	76
Strip survey .. .. .	971	54
Elevations, old boundaries .. .. .	130	51
Compass and step .. .. .	78	28

Briefly, operations in each district were—

**Atherton.**—Two camps operated in North Queensland throughout the year.

Class 2 Survey on Reserve 755 Bartle Frere (Russell River) was completed by July, followed by a further seven miles of investigation survey on the Mount Lewis road until the end of November. Camp was then occupied in the re-opening of land survey boundaries in the Parish of Whyanbeel, finally returning to the Walsh scrubs (R. 194 Herberton and Western) in June.

The second camp, badly understaffed, completed the marking of the Tinaroo Dam levels by October. From that date, main work was road location both within and to Reserves 185, 557 and 772 Danbulla.

**Mackay.**—Early in August Class 2 Survey commenced on Reserve 6 Cauley, continuing until the end of October, when camp transferred to Cotherstone, on which an urgent assessment was required. At the end of report period approximately 27,000 acres had been dealt with, plus Class 1 inspection of part of Cherwell Holding.

**Maryborough.**—On State Forest 915 Tahiti (Tuan) soil and compartment surveys were continued, 1,792 acres being stripped and 2,750 acres divided into compartments.

Another unit completed Class 3 Survey of Reserve 67 Thornhill before moving to the Mackay district at the end of July.

A third camp effected a number of district miscellaneous road and firebreak surveys, mainly on State Forests 97 Manumbar and 298 Gallangowan.

A fourth camp, after completing 15 yield plots and road surveys on Fraser Island by the middle of August, carried out a strip regeneration survey over part of State Forest 169 St. Agnes before establishing 12 detailed plots on State Forest 958 Gundiah by the middle of January. This camp then transferred to the Gympie District.

**Gympie.**—Two camps operated throughout, the first almost totally engaged on firebreak and related surveys of 2,786 acres on the Imbil, Brooloo, Kandanga, Cambroon and Widgee forests, plus road investigation surveys on the Woondum and Imbil areas.

The second camp, after the completion of the soil survey of 2,500 acres for Exotic planting at State Forest 392 Como, returned to the survey of compartments and soils on Coondoo (S.F. 1004) at the end of August, where approximately 3,500 acres were covered by soil survey and 3,770 acres compartmented.

In January, a third camp from the Maryborough District commenced with Forest Inventory Survey on State Forests 627 and 741 Goomboorian, field work being completed by the middle of May, when camp transferred to similar work on State Forest 393 Woondum. Forty-six plots were established on State Forest 627 whilst 14 plots had been completed on State Forest 393 by the end of report period.

Plots on Reserve 242 Widgee (41) and Reserve 435 Amamoor (119) were remeasured by another small camp from September to December.

**Dalby.**—Two camps were engaged throughout the year on Compartment and Forest Inventory Survey over State Forest 155 Marmadua and Durabilla (30,000 acres—142 plots) and State Forest 184 Halliford and Stretchworth (50,000 acres—225 plots).

**Brisbane Valley.**—One small district camp operated throughout the year, mainly engaged on firebreak, road location and plantation surveys within the district.

**Brisbane.**—Three camps operated throughout the year. The first was almost totally engaged on the necessary soil and compartment surveys for exotic plantations on Reserves 589, 611, and 638 Beerwah and Reserve 561 Bribie, together with incidental sub-district surveys as required. A second camp at Jimna carried out firebreak, road and related surveys on Reserve 207 Monsildale and Reserve 137 Yabba. In addition, a timber estimate of scrubs on Reserve 343 Monsildale was commenced late in May.

Forest Inventory Surveys on the Kenilworth Forests (Reserves 318, 292, 445, 583, 572) were continued by a third camp, an area of approximately 11,790 acres being covered and 131 plots established.

**Many Peaks.**—Plantation, road and miscellaneous surveys were carried out by district staff on Reserve 95 New Cannindah and Minerva, also on Reserve 67 Bulburin, as required.

### NATIONAL PARKS.

No better tribute could be paid to the work being done on the National Parks throughout the State than the increasing number of visitors flocking to these reservations of great natural attraction. It is estimated that during the year just closed they exceeded 300,000, evidence of the wide interest and appeal of the reservations and bearing testimony to the Department's policy of making the areas readily accessible to the public by means of easy-graded walking tracks, which can be constructed with the minimum of interference to the natural vegetation of the Parks.

Our National Parks, apart from providing enjoyment and recreation for the people of our own State, are now amongst the main tourist attractions of Queensland and the various tourist agencies conduct regular trips to them. The parks undoubtedly play a big part in Queensland's tourist trade and whilst the Government has acted generously in making available, to date, an amount of approximately £300,000 for expenditure on these areas, the State and the community at large are directly receiving a financial return from the tourists visiting Queensland.

Notwithstanding the expenditure that has been made and will continue to be made, visitors are not called upon to pay any fee whatever. Furthermore, permits to camp on National Parks are issued free of charge.

The increasing number of visitors to the Parks has brought a wider appreciation and recognition of the ideal of protection and preservation of these areas as nature left them. This has remained the fundamental policy of the Department despite, at times, much opposition.

The public has co-operated splendidly with the Department's officers and employees in protecting the Parks and there were very few acts of vandalism. In one instance where a person was found in possession of some staghorns and elkhorns, he was prosecuted and fined. In this respect, special thanks are due to the Honorary Rangers and to the National Parks Association of Queensland and its members, for their assistance in promoting and regulating the use of the National Parks and protecting the natural beauties therein. The work of Honorary Rangers in organised week-end and holiday patrols of the more frequented National Parks was particularly helpful.

During the year one new National Park of 295 acres at Mount Moon, in the parish of Alford, was proclaimed. Two areas, totalling 168 acres, which had been purchased in the parishes of Samsonvale and Parker and two further areas which had been donated to the Department—one by the Misses A. J. A. and H. M. Greene of Wynnum, and the other by Mr. T. S. G. Brown of Ascot—were combined with National Park Reserves 1320 and 1408 to make a reservation of 879 acres at Mount Glorious. This will enable the Department to provide an ideal round trip at this popular Park so handy to Brisbane.

An area of 104 acres was acquired on the headwaters of Tallebudgera Creek and added to the adjoining Mount Cougal National Park Reserve 694. The total number of National Parks is now 241 and the total area so reserved 765,260 acres.

The sum of £24,696 was expended on work on National Parks during 1952-53, bringing the total expenditure on these areas to £298,443 since work first commenced in 1936-37. Work during the year just closed was confined mainly to maintenance and improvement of the existing walking tracks, but 4 miles 23 chains of new tracks were constructed, bringing the total of track construction to date to 214 miles 7 chains. Other work carried out included the provision of direction signs on tracks, name plates on specimen trees, eradication of lantana and other noxious plants and improvements to parking and picnic grounds. It has been noticed that a marked interest has been shown by visitors, particularly from Southern States, in name plates affixed to representative trees and this work will be continued.

An item of special interest is the making, at the direction of the Minister for Lands and Irrigation, the Hon. T. A. Foley, M.L.A., of National Park cine-films. The work was carried out by the Photographic Section of the Survey Office with the help of this Department. Three films of individual National Parks have been completed, two of which have been shown publicly to appreciative audiences, whilst a fourth film is under way.

Some features of the work during the year were :—

**Gwongorella (Springbrook).**—The round trip track from the picnic ground via Purlingbrook Falls and Rankins Falls was completed, making a full circle of the cliffs and providing a walk of ever changing views and interest. Highly appreciative comments by visitors have greeted the construction of this track.

**Bunya Mountains.**—The construction of the West Cliffs loop track was continued. This track has been extended as far as Range View Lookout, probably the best vantage point made available on the Mountain, where a panoramic view extending from 80 to 100 miles along the horizon may be obtained.

**Queen Mary Falls.**—A complete round trip has been constructed, giving access to the Gorge below the Falls and providing a means of exit via the cliffs opposite the entrance.

**Kondalilla.**—The construction of the southern section of a round trip track via the Falls, Gorge and Southern cliffs, was commenced. Extensive views of the Obi Obi Valley, intimate views of the Kondalilla Falls, and beautiful palms and rain forest vegetation are features of this round trip track.

**Ravensbourne.**—The track has been extended towards the Sandstone Caves and the Northern Palm Grove, giving access to other palm creeks and to interesting forest country en route.

**Palmerston Highway.**—The track to Nandroya Falls on Douglas Creek was completed and a start made on a return track down Douglas Creek, 43 chains of which have been constructed. When work has been completed, graded tracks will make available a picturesque walk from the Palmerston Highway, via Nandroya Falls, back to the point of commencement, a distance of 3½ miles.

**Dunk Island.**—Fifty-five chains of track were constructed, linking the two systems and providing two return tracks from the central island range to the settlement.

**Eungella.**—Forty-eight chains of track construction were carried out. Approximately 25 chains remain to be constructed to link the "Bevan's Lookout" track with the Broken River system.

**Long Island.**—Re-grading of tracks, following considerable damage during the very wet season, was undertaken and is well in hand.

**South Molle Island.**—Maintenance work was undertaken on graded tracks and most of the used tracks are in good order.

#### HARVESTING AND MARKETING.

**General.**—At 206,008,000 superficial feet, the cut of Crown log timber for the year shows a decrease of 32,331,000 superficial feet from the previous year's record total.

The year's cut was some 2,000,000 superficial feet more than the average annual cut over the preceding ten years.

The market for Crown timber showed a selective tendency. The more valuable species were readily saleable, but the demand for classes which require special treatment, such as miscellaneous species and plantation timbers, remained quiet until towards the end of the period, when interest revived.

While the cut of Hoop and Bunya Pine increased by 3,000,000 superficial feet, and cabinet woods by 1,000,000 superficial feet, the cut of forest hardwoods was 8,000,000 superficial feet down. The cut of miscellaneous species was halved (15,000,000 superficial feet down) and the cut of plantation timbers, being mostly thinnings, was reduced by two-thirds (10,500,000 superficial feet down). Kauri Pine cut was 2,000,000 superficial feet down, due to dwindling stands of this species. The Cypress Pine cut showed little change.

During the period of peak demand plantation thinnings had provided timber for special uses, in addition to case timbers. As demand slackened, use was restricted and this trend was recognised by a reduction in depot prices for plantation thinnings ranging from 1s. 5d. to 3s. 7d. per 100 superficial feet.

The same factors operated in regard to southern scrubwoods, and log price reductions of up to 6s. 2d. per 100 superficial feet were applied.

While the same difficulty applied in respect of miscellaneous scrubwoods in North Queensland, the cost of delivery of logs to key markets was a limiting factor which precluded any reduction in log prices for this group.

Reductions in ply log prices, amounting to 4s. 6d. per 100 superficial feet, were made in North Queensland utility species, in order to assist the industry to meet strong competition by imported material. The ply log classification for North Queensland species was reviewed and adapted to existing circumstances in the industry.

The demand for Cypress Pine was keen throughout the year—largely due to the activities of New South Wales buyers. As the price being obtained for sawn cypress in New South Wales is substantially above that on which log prices are based in Queensland, this active demand from New South Wales greatly complicates the endeavours of the Department to ensure adequate supplies of sawn Cypress Pine for Queensland users at a reasonable price. At the end of the year the Department was examining the position.

In previous years reference has been made to increasing costs of log haulage; the increase during 1952-53 was inconsiderable and it was not found necessary to adjust log prices upwards on that account.

Keen competition, resulting in bids well over upset, occurred in seven cases where auction sales were conducted involving a right to establish a sawmill to operate Crown timber. Four similar sales realised upset rates.

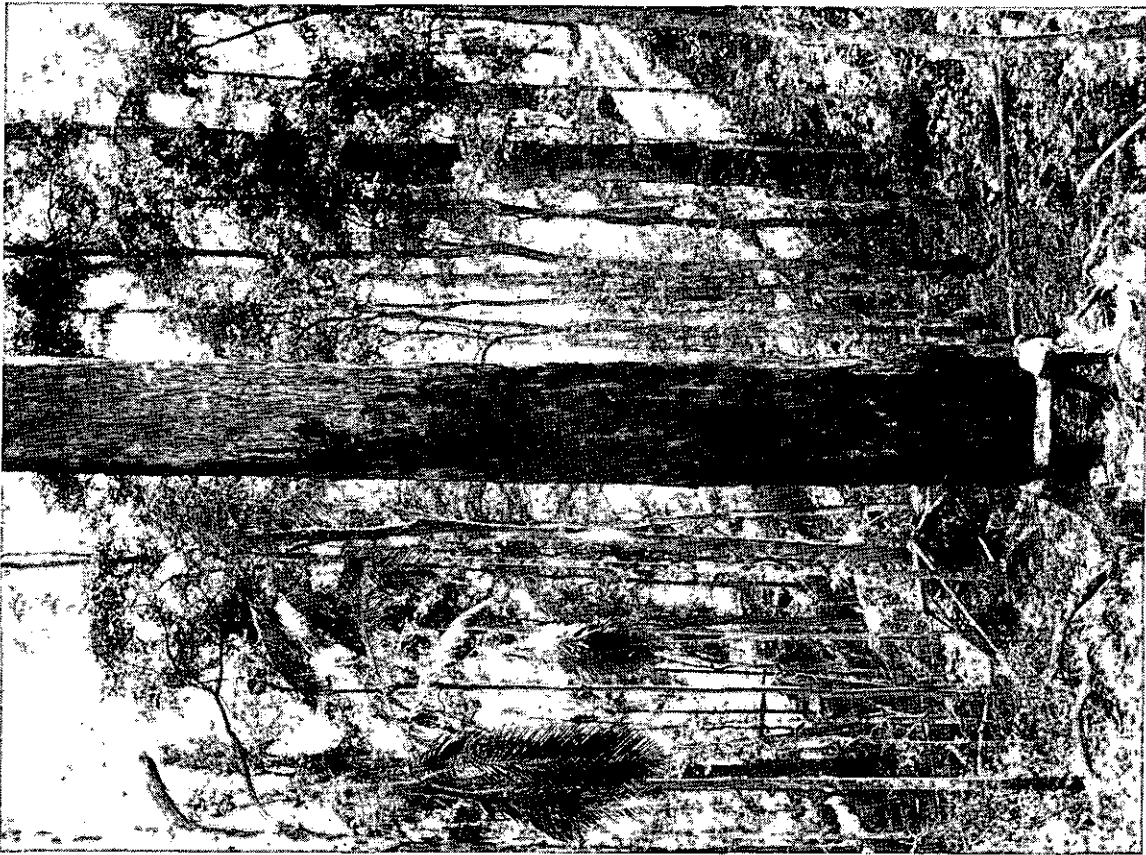
The gross revenue of £2,541,904 and nett revenue of £1,344,969 are records due to increased sales of constructional timbers, and the demand for high quality logs.

**Mill Logs Cut—Crown and Private Lands.**—This table shows logs out 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.)								
1947-48	82,336	6,072	2,739	28,711	186,444	23,371	45,903	2,432	378,008
1948-49	69,104	4,406	6,626	33,524	211,553	23,117	55,564	5,064	409,858
1949-50	55,779	4,904	8,384	37,159	218,649	23,913	57,871	9,499	416,158
1950-51	47,681	5,558	11,925	34,736	229,510	21,211	54,365	8,552	413,538
1951-52	56,416	7,741	15,319	46,167	271,222	22,263	62,334	5,778	487,240
1952-53 (estimated).	65,610	6,091	6,776	48,467	267,692	24,465	37,280	2,577	458,978

**Mill Logs—Crown Lands.**—The following are the annual quantities of logs obtained from Crown Lands as from 1942-43 :—

1942-43 .. .. .	super ft.	199,000,000	1948-49 .. .. .	super ft.	208,000,000
1943-44 .. .. .	202,000,000	1949-50 .. .. .	202,000,000		
1944-45 .. .. .	193,000,000	1950-51 .. .. .	187,000,000		
1945-46 .. .. .	190,000,000	1951-52 .. .. .	238,000,000		
1946-47 .. .. .	220,000,000	1952-53 .. .. .	206,000,000		
1947-48 .. .. .	204,000,000				



TALLOWOOD (*Eucalyptus microcorys*) 22 FT. GIRTH.

Crown land cut of hardwood mill logs for 1952-53 was 72,000,000 s. ft. and, in addition, the equivalent of 64,000,000 s. ft. of logs was cut for round and squared timber.



SNIGGING HOOP PINE LOGS.

60,750,000 s. ft. of hoop and bunya pine logs were cut in 1952-53. A total of 206,000,000 s. ft. of logs of all species was removed from Crown lands.

A comparison of quantities of the various species of log timbers 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.)								
1948-49 .. ..	66,739	3,986	19,612	58,727	10,006	15,376	26,889	6,268
1949-50 .. ..	55,215	4,906	18,317	59,272	11,417	16,452	27,735	8,648
1950-51 .. ..	46,588	5,055	15,667	61,618	7,907	13,324	24,948	12,313
1951-52 .. ..	57,680	7,677	25,883	70,227	9,809	18,366	32,991	15,666
1952-53 .. ..	60,755	5,577	25,151	62,063	10,228	19,377	17,728	5,121

### The Timber Business.

(a) Mill Logs—	1951-52.	1952-53.
Hoop and Bunya Pine ..	57,680,000 super. feet	60,755,000 super. feet
Forest Hardwoods ..	70,227,000 super. feet	62,063,000 super. feet
Scrub Hardwoods ..	9,809,000 super. feet	10,228,000 super. feet
Cypress Pine .. ..	25,883,000 super. feet	25,151,000 super. feet
Kauri Pine .. ..	7,677,000 super. feet	5,577,000 super. feet
Cabinet Woods .. ..	18,366,000 super. feet	19,377,000 super. feet
Miscellaneous Species ..	32,991,000 super. feet	17,728,000 super. feet
Plantation Timbers ..	15,666,000 super. feet	5,121,000 super. feet
Stumps and Fitches ..	40,000 super. feet	8,000 super. feet
<b>Total Crown Mill Logs ..</b>	<b>238,339,000 super. feet</b>	<b>206,008,000 super. feet</b>

(b) Construction Timbers—	1951-52.	1952-53.
Headstocks, Transoms, Crossings, Braces ..	444,542 super. feet	650,903 super. feet
Sleepers .. ..	1,103,974 pieces	1,322,481 pieces
Girders, Corbels, Piles, Sills, and Girder Logs }	133,945 lineal feet	97,722 lineal feet
	715,087 super. feet	522,954 super. feet
Poles .. ..	707,775 lineal feet	517,898 lineal feet
House Blocks .. ..	314,185 lineal feet	292,405 lineal feet
Mining Timbers .. ..	325,208 lineal feet	621,865 lineal feet
Mining Timbers .. ..	142,573 pieces	148,697 pieces
Gross Receipts from Timber Sales .. ..	£2,182,406	£2,541,904
Net Revenue .. ..	£1,155,234	£1,344,969

**Logging.**—During 1952-53 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 .. ..	32,503,517	
Forest hardwoods .. ..	4,346,160	
Scrub hardwoods .. ..	215,249	
Miscellaneous .. ..	524,992	
Cedar .. ..	49,572	
	<b>37,639,490</b>	<b>322,896 12 5</b>
<b>North Queensland—</b>		
Kauri Pine .. ..	1,656,275	
Cabinet-woods .. ..	7,559,536	
Forest hardwoods .. ..	845,462	
Scrub hardwoods .. ..	2,688,348	
Miscellaneous .. ..	6,636,090	
Cedar .. ..	110,104	
	<b>19,495,815</b>	<b>179,067 13 7</b>
<b>Totals .. ..</b>	<b>57,135,305</b>	<b>501,964 6 0</b>

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

<i>Rosewood.</i>		T.	C.	Q.
In stock at 1st July, 1952	.. .. .	..	..	..
Purchased during year	.. .. .	70	12	0
		70	12	0
Exported to Hongkong	.. .. .	29	0	0
On hand, 30th June, 1953	.. .. .	41	12	0

No Sandalwood was purchased or exported during the year.

**The Plywood Industry.**—Returns from plywood and veneer mills covering the quantities of logs treated during the year 1952-53 are not yet available. However, manufactured deliveries, as compared with the previous year, were as follows :—

	1951-52.	1952-53.
	Square Feet.	Square Feet.
Through the Southern Board	51,096,803	60,132,914
Through the Northern Board	39,185,097	26,923,253
	90,281,900	87,056,167

Distribution of production for 1952-53 was as follows :—

	Southern Board.	Northern Board.	Total.
	Sq. ft.	Sq. ft.	Sq. ft.
Queensland	30,973,251	10,465,919	41,439,170
Interstate	28,249,617	16,300,204	44,639,821
Overseas	910,046	67,130	977,176
Total	60,132,914	26,923,253	87,056,167

**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 28th July, 1952	10 13 0	to 10 19 0
On 3rd November, 1952	10 19 0	to 11 2 0
On 4th May, 1953	11 2 0	to 11 4 0

Cutting rates were adjusted in accordance with award variations. Hauling and snigging rates were reviewed in November, 1952, in accordance with increased costs of operations, and stumpage rates were adjusted accordingly.

Further adjustments are pending judgment by the Arbitration Court on claims heard in May, 1953, under the award.

**Hewn Timber Prices.**—Increased award rates also affected the prices of hewn timbers as follows :—

Class of Timber.	23-7-52.	8-11-52.
	£ s. d.	£ s. d.
Sleepers—squared 7 feet per 100 pieces	54 2 5	54 13 6
Sleepers—hogback 7 feet per 100 pieces	44 6 7	44 15 5
Crossing timbers per 100 super. feet	3 6 4	3 6 10
Transoms per 100 super. feet	3 16 11	3 17 5
Braces per 100 super. feet	3 8 5	3 9 0
Headstocks per 100 super. feet 12 inches by 6 inches	3 19 11	4 0 6

**Logging Roads.**—The procedure adopted is for the Department of Main Roads to construct main arterial roads, whilst the Forestry Department normally carries out the location and working surveys. Subsidiary roads within the Forestry Reserves are constructed and maintained by the Forestry Department.

Expenditure by the Department of Main Roads for the year totalled £72,007 17s. 9d. for construction and £30,765 17s. 7d. for maintenance. These roads were constructed to usual Main Roads standards for location and grades and will provide heavy transport service under all weather conditions. The Forestry Department road programme for the year constituted 98 miles 22 chains of construction. Location and working surveys covering 76 miles 4 chains were carried out.

Maintenance on all existing roads was given attention and Shire Councils throughout the State were suitably subsidised where the Forestry use of Shire roads warranted it.

Expenditure from Forestry Votes was as follows :—

	£
Construction .. .. .	97,761
Maintenance .. .. .	33,114
Subsidies to Shire Councils .. .. .	13,335
Investigation Surveys .. .. .	2,726
Workers' Compensation .. .. .	269
Pay Roll Tax .. .. .	1,636
	£148,841

**Constructional Timbers.—Departmental Contracts.**—A comparison of supply of constructional timber from Crown Lands with the two previous years is as follows :—

Class of Timber.	1950-51.	1951-52.	1952-53.
Sleepers .. .. .	463,181 pieces	865,537 pieces	1,103,453 pieces
Crossings .. .. .	114,403 super. feet	139,737 super. feet	266,436 super. feet
Transoms .. .. .	97,950 super. feet	154,489 super. feet	226,789 super. feet
Bridge timbers (round) .. .. .	52,349 lineal feet	52,182 lineal feet	51,780 lineal feet
Bridge timbers (squared) .. .. .	45,444 super. feet	7,214 super. feet	25,674 super. feet

#### SAWMILL LICENSES.

The number of new Sawmill Licenses granted during 1952-53 reflected the policy determined earlier in 1952.

New licenses were granted only after close consideration, bearing in mind the need for permanence in the industry, and the desirability of the operating mill capacity being confined, as far as possible, to the capacity of the forests to produce timber.

For the first time for some years, the number of licensed sawmills decreased. Actually 105 mills ceased operation. Whilst there were many contributory causes, the principal ones were the restriction of demand and the insistence on the part of purchasers on a high quality product.

This reduction in the number of sawmills is not an undesirable trend as, in the principal timber producing areas in South Queensland, the production of the forest is insufficient to support, permanently, the already existing sawmilling industry.

The mills in actual operation (as at 31st March, 1953) numbered 750.

The following table sets out the position at the commencement and the end of the year, showing particulars of new licenses granted, &c. :—

Number of Licenses as at 30th June, 1952.	Sawmill Classification.	New Licenses Granted.	Number Ceasing to Operate.	Mills Re-licensed.	Restrictions Withdrawn.	Formerly Restricted now Unrestricted.	As at 30th June, 1953.
1,105	General Mills .. .. .	34	87	..	..	1	1,053
50	Case Mills .. .. .	1	5	..	1	..	45
43	Sleeper Mills .. .. .	11	6	..	..	..	48
19	Other restricted .. .. .	3	2	..	..	..	20
67	Resaw and dressing .. .. .	3	5	..	..	..	65
1,284		52	105	..	1	1	1,231

#### OFFENCES.

During the year 1952-53 210 cases of offences against Acts and Regulations administered by this Department were reported, of which 44 were breaches of "The Timber Users' Protection Act of 1949."

Proceedings were instituted against 36 persons for unauthorised removal of timber and fines totalling £312 imposed. In a further seven cases, prosecutions are pending.

In seventy-eight cases, the value of timber was collected and warnings issued whilst in another thirteen cases warnings only were issued. In thirteen minor cases, no action was taken.

Seven cases of breaches on Main Roads were investigated by officers of this Department and referred to the Main Roads Commission for further action. Several cases of unauthorised ringbarking on Crown leaseholds and on roads were investigated and appropriate action taken.

As a result of action taken in all cases, timber revenue to the extent of £2,890 was recovered to the Crown.

Of the forty-four reported breaches of the Timber Users' Protection Act, four prosecutions were effected and fines totalling £64 14s. imposed. Three cases of prosecution are pending.



In connection with breaches under this Act, it has been the policy of the Department to endeavour to have the position rectified by the offending party and, as a result, in a number of cases the affected timber has been either replaced or treated.

### FOREST PRODUCTS RESEARCH.

**General.**—Continued insistence on quality by buyers has forced the trade generally to give serious consideration to production methods and practices calculated to meet this requirement. This trend meant an increased demand for the advisory services of the Department, noticeably in connection with seasoning, sawmill engineering and preservation.

Mill study activities, aimed at determining the basic economic facts of the industry, were intensified during the year and methods adapted to obtain quick coverage of the effects of changed market conditions on log pricing.

Collaboration with Research Institutions and State and Commonwealth Departments was maintained and the ready assistance given in mutual problems has been beyond value. In particular, there was close liaison with the Government Botanist and the Division of Forest Products, C.S.I.R.O. The Sixth Forests Products Research Conference in Melbourne in November, 1952 was attended by officers of the Department. The discussions at this conference have assisted in the planning and co-ordination of Forest Products Research activities in Australia.

Acknowledgment is due to the trade associations and individual firms for assistance readily given.

**Utilization.**—A steady demand for identification of wood specimens, and advice on their qualities and uses, was maintained and 1,633 specimens were received for identification. More than 500 specimens were identified by the Government Botanist during the year, the bulk being North Queensland rain forest species. Identification, in the field, of the numerous species forming these forests is not always easy for field staff and work has commenced on the construction of two keys for field use—one based on the more easily recognised external morphological characters of the species and the other directed to identification of the woods by macroscopic features.

A dichotomous key for identification of the various members of the "Red Bloodwood" group was issued to field staff.

The survey of 2,000 new railway sleepers to determine standards of acceptance, commenced in 1951-52, was completed and is now being analysed by Division of Forest Products, C.S.I.R.O.

A survey of sleepers removed from service has been commenced to determine causes of failure. This is an essential preliminary to any consideration of preservative treatment.

Co-operation with Standards Association of Australia continued. Discussions were held with trade associations, architects and builders, regarding current trade practices in grading of sawn hardwoods, but at the close of the year finality had not been reached. Comparative grading studies of milled flooring of Brush Box (*Tristania conferta*) and mixed Eucalypt hardwoods were carried out. The results indicated that the proportion of select and standard quality obtained from Brush Box was higher than that obtained from the Eucalypt species, and that there was no significantly higher proportion of total rejects in Brush Box due to degrade in seasoning. This is confirmatory evidence of the value of this timber for flooring purposes.

**Preservation.—1. Lyctus Control.**—Influenced by the current demand for quality, the trade showed increasing interest in the provision of treatment plants for control of Lyctus, and plant-design service was continued.

An intensive check was kept on operational standards, and, with few exceptions, a satisfactory standard, complying with legal requirements, has been maintained. Plant operators have been given necessary instruction both in the laboratory and at the various plants.

Enquiries have been received from England and U.S.A. for details of boron treatment methods.

Development of analytical technique for boron was continued, with considerable improvement in average output and cost. This work is nearing completion.

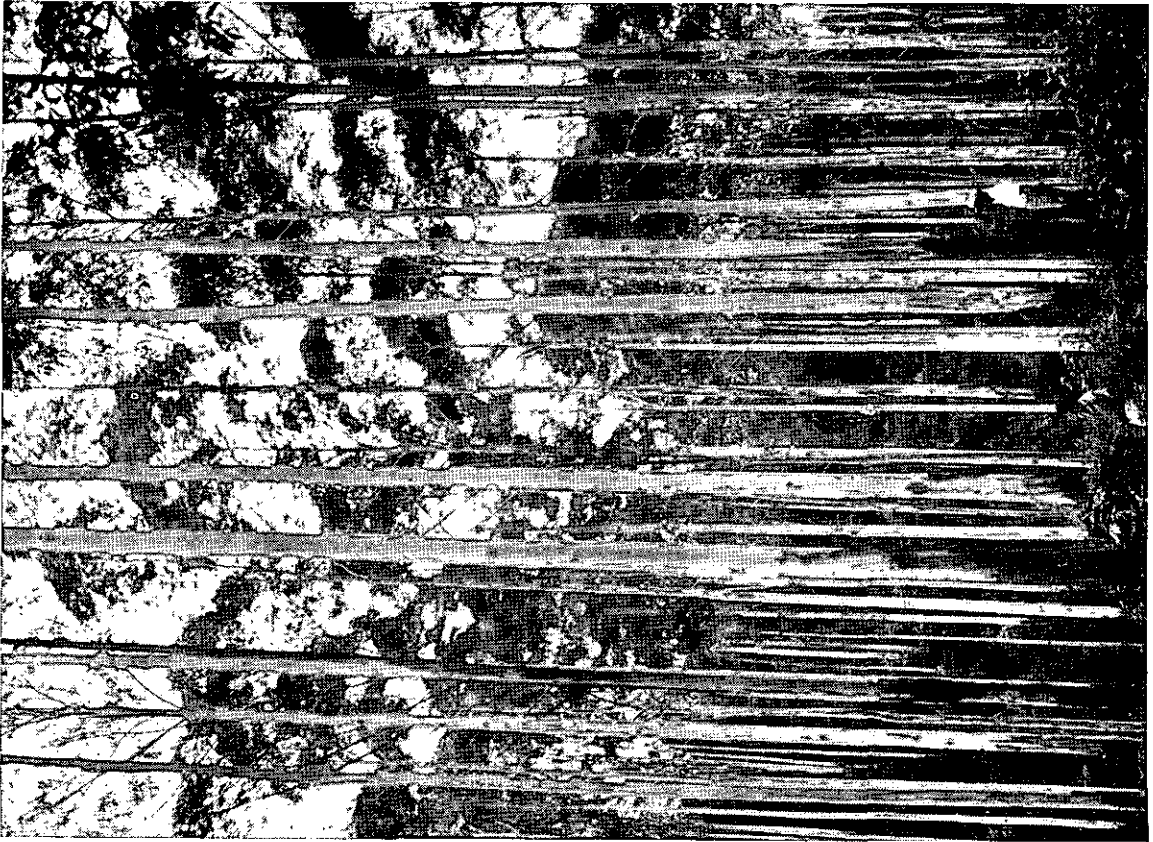
**2. Timber Users' Protection Act.**—Inspection of current building activities was intensified during the year, 372 inspections being made. The work was extended to the major country towns—Ipswich, Maryborough, Rockhampton, Toowoomba, Mackay, Ayr, Bowen and Townsville. Many breaches of the Act were detected and in a number of cases satisfactory arrangements for replacement of affected material were made by the offenders. Forty-four complaints were received and in 21 cases arrangements have been made for repair of the damage. In other cases the question of taking proceedings under the Act, as the most effective means of meeting the situation, is receiving consideration.

Constant inspection is having the desired effect of educating the building industry in the requirements of the Act in regard to permanent construction.



RED CEDAR—18 FT. GIRTH BREAST HIGH.

Research work is in progress to determine the best technique for re-establishing this rare but valuable species.



NATURAL REGENERATION OF EUCALYPTUS GRANDIS.

33,861 acres of native forest were treated for natural regeneration in 1952-53.

**3. Other Preservation.**—The use of Sodium trichlorophenate for control of fungal attack in sawn timber has been general practice in North Queensland. During the period July-September, 1952, tomatoes from the Bowen-Home Hill area, packed in cases treated with Sodium trichlorophenate, were reported to be tainted to a serious extent.

Since the chlorinated phenols offer the most economic and effective treatment for fungal control thorough investigation was commenced immediately. The work is not yet complete, but there is evidence that Sodium trichlorophenate at 0.5 per cent. concentration, which is the minimum for effective fungal control, is a cause of taint, and case manufacturers have been advised to discontinue its use.

Sodium pentachlorophenate at 0.5 per cent. concentration, on the other hand, does not appear to cause taint. Previous trials by the Health Department with apples, butter, cheese and eggs packed in treated cases had indicated no tainting, but in view of the effect of Sodium trichlorophenate on tomatoes further trials with pentachlorophenate were undertaken but are not yet complete.

The testing of oil preservatives was continued, and a large number of samples were given experimental treatments. Completion of all treatments, analyses and installation of samples in the test sites is anticipated by the end of 1953.

Paint panels supplied by Commonwealth Defence Research Laboratories were installed in exposure racks at Rocklea in January, 1953, and observations commenced.

Railway sleepers of hardwood species of lower natural durability rating, which were treated with creosote and fuel oil by the hot-cold method and installed for service tests in main line traffic, have been inspected and re-treated according to the experimental requirements. While it is too early to expect positive results, the treated sleepers are in much better condition than the untreated controls after only two years' exposure.

**Plywood and Veneer.**—The general recession suffered by the plywood industry in 1952 and the consequent tighter market have had some beneficial effects. The general standard of the product is significantly higher but there is still room for improvement in control of manufacturing technique and utilization of species. Initial steps have been taken for experimental work aimed at obtaining the desired improvement.

Equipment for experimental glue mixing and spreading has been ordered and installation will enable work on practical problems in the industry to be undertaken.

The co-operative experiment with the Plywood and Veneer Marketing Board and glue manufacturers on urea resin glues was continued and an interim report on results has been issued to the industry.

Experimental work on methods of moisture content determination of boron treated veneers was done. Electrical moisture meters are unreliable for this work because of the effect of boron. The use of hair hygrometers has been tested with good results and trials in commercial practice have been sufficiently satisfactory to warrant general use in the industry.

**Laboratory.**—A major breakdown in the laboratory ventilation equipment interfered seriously with analytical work. The analyses carried out during the year were :—

Preservation	..	..	..	..	..	..	..	..	..	..	444
Adhesives	..	..	..	..	..	..	..	..	..	..	7
Soil	..	..	..	..	..	..	..	..	..	..	521
Water	..	..	..	..	..	..	..	..	..	..	13
Plywood Tests—											
Experimental	..	..	..	..	..	..	..	..	..	..	1,440
Commercial	..	..	..	..	..	..	..	..	..	..	1,212
Total	..	..	..	..	..	..	..	..	..	..	3,637

**Seasoning.**—The insistence, by purchasers, on quality was reflected by the demand for moisture content testing—some 1,288 determinations being made.

Design data were computed for three sawn timber drying kilns and one veneer kiln.

Air seasoning observations were continued on *Pinus taeda*, *Pinus caribaea* and Spotte l Gum. Kiln seasoning experiments on *Pinus taeda* and *Pinus caribaea* were undertaken and results indicated that degrade was no worse than in air drying. Reconditioning after drying had an appreciable effect in reducing degrade.

It should be obvious to the trade that substantial improvement in seasoning quality is now demanded by the purchaser and much more attention will need to be paid to technical detail than has been the post-war practice. The neglect of fundamental details of operation and control has been apparent from observations made at various kilns during the year. Too many plymills and sawmills are still inefficient in seasoning methods.

**Fancywoods.**—The yard has been maintained to handle material becoming available from experimental projects. Sales were :—

Sawn Timber .. .. .	8,829 super. feet
Mouldings .. .. .	1,270 lineal feet
Fishing Rod Pieces .. .. .	714
Garden Stakes (Reject Fishing Rod Pieces) .. .. .	1,079
Black Palm .. .. .	16 lb.

**Engineering and Mill Studies.**—During the year the planing machine at the experimental yard was reconditioned and equipment assembled for experimental circular saw test bench.

Design of sawn yard layout and overhead gantry equipment was completed for a medium sized hardwood mill. Advice on incinerators and general sawmill engineering problems was given.

In conjunction with mill studies a comprehensive engineering survey of 13 hardwood mills was undertaken. Results indicated that Canadian benches in use are not in efficient mechanical condition and that the provision of efficient machines and the adoption of proper sawing patterns could do much to increase unit production rates.

Mill studies were intensified to determine present day trends in the hardwood industry. Modified study technique enabled the study of 13 hardwood mills to be undertaken in a short period. Attention has been given to the adoption of punch card calculating methods to enable rapid and reliable analysis of the study material.

The results of the hardwood studies have confirmed previous indications of the general relationship between log girth, sawn recovery and production rates, and have indicated the desirability of proceeding with the determination of stumpages on the basis of the gross hoppus volume of the log.

The continuing study of sawmill economics is essential to the determination of log pricing policy, and the equitable treatment of purchasers of Crown timber.

#### STAFF.

It is with regret that the death is recorded of Mr. Kevan Wheeler, clerk (Forest Products Research Branch), who passed away on 26th July, 1952, at the early age of 33 years. Mr. Wheeler was a very efficient officer whose quiet, genial disposition won for him many friends in the Department.

Mr. J. J. Reardon, messenger for six years in Head Office, was compelled by ill-health to retire on 30th April, 1953. We extend to him best wishes for the future and trust that his health improves.

There were seventeen resignations during the year, including those of Messrs. J. R. Dawson, Officer in Charge, Harvesting and Marketing Branch, and H. E. Wawn, Timber Sales Officer. Messrs. Dawson and Wawn, who resigned to join private sawmilling firms, had given many years of valuable service to the Department. Mr. Dawson will best be remembered for his contribution to the activities of the Department in North Queensland, particularly over the difficult war years, and Mr. Wawn for his service in the Timber Sales Section in Head Office.

Total salaried staff as at 30th June, 1953, was 307, a decrease of 5 on last year's figure.

Wages Staff decreased from 1,995 at 1st July, 1952, to 1,615 at 30th June, 1953.

In conclusion, I desire to express my thanks to all members of the staff for a year's work well done.

V. GRENNING,  
Director of Forests.

## Appendices.

## APPENDIX A.

Return of Timber, &amp;c., removed from Crown Lands during the year ended 30th June, 1953.

Species.	Quantity.	
	Super. Feet.	Super. Feet.
<b>Milling Timber—</b>		
Hoop and Bunya Pine—		
Ply .. .. .	7,904,616	
Logs .. .. .	27,215,523	
Tops .. .. .	25,634,913	
		60,755,052
Kauri Pine .. .. .	5,576,719	
Cypress Pine .. .. .	25,151,113	
Forest Hardwoods .. .. .	62,062,546	
Scrub Hardwoods .. .. .	10,228,461	
Cabinet Woods .. .. .	19,377,589	
Miscellaneous Species .. .. .	17,727,708	
Stumps and Fitches .. .. .	7,727	
		140,131,863
<b>Plantation Thinnings—</b>		
Hoop Pine .. .. .	3,548,659	
Bunya Pine .. .. .	38,639	
Kauri Pine .. .. .	63,055	
Pinus caribaea .. .. .	560,192	
Pinus taeda .. .. .	746,916	
Pinus patula .. .. .	101,448	
Pinus radiata .. .. .	53,417	
Pinus echinata .. .. .	724	
Cupressus lusitanica .. .. .	1,653	
Silky Oak .. .. .	6,096	
		5,120,799
		206,007,714
<b>Other Classes—</b>		
Sleepers .. .. .	445,750 pieces	16,939,640
Sleeper Blocks (as Sleepers contained)	876,701 pieces	31,561,236
Transoms .. .. .	273,089 superficial feet	436,942
Headstocks, Crossings, Longitudinals	377,814 superficial feet	604,502
Girders, Corbels, Piles, Sills, Kerb Logs	97,722 lineal feet	1,758,996
Girder Logs .. .. .	522,954 superficial feet	522,954
Poles .. .. .	517,398 lineal feet	3,625,286
House Blocks, Round Posts .. .. .	292,405 lineal feet	1,754,430
Fencing Material—Split .. .. .	451,209 pieces	4,060,881
Fencing Material—Round .. .. .	227,320 lineal feet	568,300
Hewn and Bridge Timbers .. .. .	21,378 superficial feet	34,204
Mining Timbers—Split .. .. .	146,697 pieces	586,788
Mining Timbers—Round .. .. .	621,865 lineal feet	1,243,730
Stakes .. .. .	10,990 pieces	87,920
Miscellaneous Sawn Timber (offcuts)	9,654 superficial feet	15,446
		63,801,255
Fuel .. .. .	52,747 tons	
Charcoal .. .. .	55,732 bags	
Trees and Plants (Number) .. .. .	237,087	
Sand, Gravel, Soil .. .. .	36,186 cubic yards	
Rosewood .. .. .	70 tons	
Mulga Wood .. .. .	31 tons	
Lawyer Cane .. .. .	86 tons	
Shell Grit .. .. .	120 tons	
Staghorns .. .. .	40 pieces	
Byfield Fern .. .. .	£140	

Expressed as  
Superficial Feet  
(Hopper) Log  
Measure.

## APPENDIX B.

Annual Cut—Pine—Financial Year ended 30th June, 1953.

Forestry District.	Ply.	Logs.	Tops.	Total.
	Super. Feet.	Super. Feet.	Super. Feet.	Super. Feet.
Brisbane .. .. .	586,708	4,034,780	2,892,139	7,573,627
Brisbane Valley .. .. .	4,716,159	12,474,228	13,256,622	30,447,009
Gympie .. .. .	315,134	1,728,185	1,149,749	3,193,068
Mackay .. .. .	Nil	36,977	28,149	65,126
Monto .. .. .	790,034	2,549,383	2,260,508	5,599,925
Maryborough .. .. .	1,496,581	5,863,164	5,675,067	13,034,812
Warwick .. .. .	Nil	468,806	372,679	841,485
<b>Total .. .. .</b>	<b>7,904,616</b>	<b>27,215,523</b>	<b>25,634,913</b>	<b>60,755,052</b>

## APPENDIX C.

## Receipts under the State Forests and Timber and Quarry Regulations for the Year ended 30th June, 1953.

DISTRICTS.	Totals.	
	£	s. d.
Group 1—South Queensland (Brisbane, Bundaberg, Gympie, Monto, Maryborough, Toowoomba, Yarraman) .. .. .	1,311,804	7 9
Group 2—Goondiwindi, Ingleswood, St. George, Stanthorpe, Warwick .. .. .	43,160	10 1
Group 3—Dalby .. .. .	37,932	1 7
Group 4—Charleville, Cunnamulla, Roma, Quilpie .. .. .	485	15 1
Group 5—Barcaldine, Blackall, Jundah, Longreach, Muttaturra, Stonehenge, Winton, Aramac, Isisford, Jericho .. .. .	905	9 5
Group 6—Clermont, Emerald, Springsure .. .. .	2,556	8 10
Group 7—Gayndah, Gladstone, Taroom, Theodore, Mundubbera .. .. .	62	2 8
Group 8—Rockhampton .. .. .	2,403	14 7
Group 9—Mackay .. .. .	7,478	19 0
Group 10—Bowen .. .. .	3,239	19 3
Group 11—Townsville .. .. .	8,037	19 4
Group 12—Charters Towers, Ravenswood .. .. .	450	2 1
Group 13—Hughenden .. .. .	380	17 7
Group 14—Cloncurry, Boulia, Kynuna, Mackinlay .. .. .	220	13 2
Group 15—North Queensland (Atherton, Herberton, Cooktown, Port Douglas, Cairns, Innisfail, Ingham) .. .. .	549,294	2 4
Group 16—Burketown, Coen, Croydon, Georgetown, Normanton, Thursday Island .. .. .	1	10 0
	1,968,414	12 9
Receipts—Forestry and Lumbering .. .. .	558,492	1 7
Sale of Plants, Material, &c. .. .. .	13,296	7 11
Rents and Grazing Dues .. .. .	6,078	2 7
	2,546,281	4 10
Less Treasury Refunds .. .. .	4,377	2 10
	£2,541,904	2 0

## COMPARISONS WITH TOTALS OF PREVIOUS YEARS.

1948-49.	1949-50.	1950-51.	1951-52.	1952-53.
£1,029,282	£1,010,459	£1,279,446	£2,182,406	£2,541,904

## APPENDIX D.

## Proceeds of Sales of Timber, &amp;c., for the Period 1st July, 1949, to 30th June, 1953.

Districts.	1949-1950.		1950-1951.		1951-1952.		1952-1953.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Group 1 .. .. .	490,429	4 0	753,340	19 7	1,330,134	10 2	1,311,804	7 9
Group 2 .. .. .	13,638	14 9	10,869	11 9	31,837	17 2	43,160	10 1
Group 3 .. .. .	24,516	5 1	30,963	9 0	34,212	15 5	37,932	1 7
Group 4 .. .. .	602	7 6	505	9 4	458	14 8	485	15 1
Group 5 .. .. .	707	3 11	759	1 4	1,797	12 11	905	9 5
Group 6 .. .. .	2,525	4 8	2,268	8 9	4,435	18 0	2,556	8 10
Group 7 .. .. .	449	18 5	202	14 0	235	11 10	62	2 8
Group 8 .. .. .	2,146	1 6	1,269	13 0	2,692	17 0	2,403	14 7
Group 9 .. .. .	6,633	1 7	6,172	3 3	7,711	6 4	7,478	19 0
Group 10 .. .. .	2,224	10 4	2,838	5 1	5,701	5 6	3,239	19 3
Group 11 .. .. .	10,038	17 2	6,793	0 10	16,139	6 9	8,037	19 4
Group 12 .. .. .	162	4 3	206	8 9	232	14 5	450	2 1
Group 13 .. .. .	219	3 6	286	19 10	397	6 7	380	17 7
Group 14 .. .. .	345	3 1	402	5 7	461	10 3	220	13 2
Group 15 .. .. .	333,316	13 5	293,406	4 3	446,715	17 11	549,294	2 4
Group 16 .. .. .	6	9 6	7	12 5	3	3 4	1	10 0
	887,961	2 8	1,110,292	6 9	1,883,168	8 3	1,968,414	12 9
Receipts—Forestry and Lumbering .. .. .	112,971	1 11	155,030	4 2	285,073	18 4	558,492	1 7
Sale of Plants, Material, &c. .. .. .	7,586	6 1	11,239	18 3	27,909	5 3	13,296	7 11
Rents and Grazing Dues .. .. .	4,821	15 5	4,769	5 5	5,475	16 11	6,078	2 7
	1,013,340	6 1	1,281,331	14 7	2,201,627	8 9	2,546,281	4 10
Less Treasury Refunds .. .. .	2,880	14 3	1,885	6 8	19,220	18 9	4,377	2 10
Total .. .. .	1,010,459	11 10	1,279,446	7 11	2,182,406	10 0	2,541,904	2 0

## APPENDIX E.

The following Schedule illustrates the market price of logs during the year 1st July, 1952 to 30th June, 1953:—

Species—Standard Trade Names. (Botanical Names and Common Names in Brackets).	Log Class.	Delivery.	Price per 100 super. feet (Hoppus measure).		
			As at 1-7-52.	From 1-4-53.	From 8-6-53.
			s. d.	s. d.	s. d.
Red Tulip Oak ( <i>Argyrodendron peralatum</i> )	8 ft. plus	F.o.r. Cairns	33 8	33 3	33 8
		F.o.r. Townsville	33 8	33 8	33 8
Red Cedar ( <i>Cedrela toona</i> )	8 ft. plus	F.o.r. Cairns	63 8	63 8	63 8
		F.o.r. Townsville	63 8	63 8	63 8
		F.o.r. Netherdale	46 2	48 2	48 2
		F.o.r. Brisbane	71 8	71 8	71 8
North Queensland Kauri Pine ( <i>Agathis palmerstoni</i> )	8 ft. plus	F.o.r. Cairns	53 8	53 8	53 8
		F.o.r. Townsville	53 8	53 8	53 8
Queensland Walnut ( <i>Endiandra palmerstoni</i> )	8 ft. to 8 ft. 11 in.	F.o.r. Cairns	44 7	44 7	44 7
		F.o.r. Townsville	44 7	44 7	44 7
Northern Silky Oak ( <i>Cardwellia sublimis</i> )	8 ft. plus	F.o.r. Cairns	53 8	53 8	53 8
		F.o.r. Townsville	53 8	53 8	53 8
Queensland Maple ( <i>Flindersia brayleyana</i> )	8 ft. to 8 ft. 11 in.	F.o.r. Cairns	58 8	58 8	58 8
		F.o.r. Townsville	58 8	58 8	58 8
Black Pine ( <i>Podocarpus an.</i> )	8 ft. plus	F.o.r. Cairns	43 8	43 8	43 8
		F.o.r. Townsville	43 8	43 8	43 8
Silver Silkwood (Putts Pine) ( <i>Flindersia acuminata</i> )	8 ft. plus	F.o.r. Cairns	53 8	53 8	53 8
		F.o.r. Townsville	53 8	53 8	53 8
White Beech ( <i>Gmelina leichhardtii</i> ) ( <i>Gmelina fasciculiflora</i> )	8 ft. plus	F.o.r. Cairns	53 8	53 8	53 8
		F.o.r. Townsville	53 8	53 8	53 8
		F.o.r. Brisbane	56 8	56 8	56 8
Hickory Ash (Hickory) ( <i>Flindersia iflailana</i> )	8 ft. plus	F.o.r. Cairns	43 8	43 8	43 8
Northern Silver Ash (White Ash) ( <i>Flindersia pubescens</i> )	8 ft. plus	F.o.r. Cairns	53 8	53 8	53 8
		F.o.r. Townsville	53 8	53 8	53 8
Queensland Silver Ash (Ash) ( <i>Flindersia bourjotiana</i> )	8 ft. plus	F.o.r. Cairns	53 8	53 8	53 8
		F.o.r. Townsville	53 8	53 8	53 8
Bolly Silkwood (Tarzali Silkwood) ( <i>Cryptocarya oblata</i> )	8 ft. plus	F.o.r. Cairns	33 8	33 8	33 8
		F.o.r. Townsville	33 8	33 8	33 8
Satin Sycamore ( <i>Ceratopetalum succirubrum</i> )	8 ft. plus	F.o.r. Cairns	33 8	33 8	33 8
		F.o.r. Townsville	33 8	33 8	33 8
Yellow Walnut ( <i>Beilschmiedia bancroftii</i> )	8 ft. plus	F.o.r. Cairns	33 8	33 8	33 8
		F.o.r. Townsville	33 8	33 8	33 8
Hardwoods	6 ft. plus	F.o.r. Brisbane,	28 9	28 9	28 9
		Warwick			
Hardwoods	6 ft. plus	F.o.r. Maryborough,	28 3	28 3	28 3
		Bundaberg			
Hardwoods	6 ft. plus	F.o.r. Rockhampton	32 2	32 2	32 2
Hardwoods	6 ft. plus	F.o.r. Townsville	31 2	31 2	31 2
Hardwoods	6 ft. plus	F.o.r. Mackay	30 4	30 4	30 4
Hoop Pine Ply	7 ft. plus	F.o.r. Brisbane	80 1	80 1	80 1
Hoop Pine "A" Quality Logs	7 ft. plus	F.o.r. Brisbane	59 7	59 7	59 7
Bunya Pine Logs	7 ft. plus	F.o.r. Brisbane	58 1	58 1	58 1
Hoop Pine "C" Quality Logs	6 ft. plus	F.o.r. Brisbane	48 1	48 1	48 1
Hoop Pine "D" Quality Logs	6 ft. plus	F.o.r. Brisbane	48 1	35 3	35 3
Bunya Pine Tops	6 ft. plus	F.o.r. Brisbane	43 1	35 3	35 3
Cypress Pine	28 in. plus	F.o.r. Brisbane	27 10	27 10	27 10
		F.o.r. Rockhampton	26 8	26 8	26 8
		F.o.r. Gympie,	25 8	25 8	25 8
		Maryborough,			
		and Bundaberg			
South Queensland Scrubwoods—					
Case and Building Timbers Group (a)	6 ft. plus	F.o.r. Brisbane	38 1	38 1	31 11
Common Cabinetwoods Group (b)	6 ft. plus	F.o.r. Brisbane	40 0	40 0	33 10
Special Purpose Timbers Group (c)	6 ft. plus	F.o.r. Brisbane	41 11	41 11	35 9

(a) Case and Building Timbers Group includes the following species:—

Brown Alder ( <i>Ackama paniculata</i> )	Bollywood (Brown Bollywood) (Bollygum) ( <i>Litsea reticulata</i> )
Red Apple ( <i>Eugenia brachyandra</i> )	Tulip Plum (Burdekin Plum) ( <i>Pleogynium cerasiferum</i> )
Blush Coondoo ( <i>Planchonella richardii</i> )	Brown Tulip Oak (Crows Foot Elm) ( <i>Argyrodendron trifoliolatum</i> )
Rose Satinash ( <i>Eugenia francisii</i> )	Silky Beech ( <i>Citronella moorei</i> )
Mararie ( <i>Pseudoweinmannia lachnocarpa</i> )	Rose Walnut ( <i>Endiandra discolor</i> )
Pink Poplar (Blush Cudgerie) (Maidens Blush) ( <i>Euroschinus falcatus</i> )	White Birch ( <i>Schizomeria ovata</i> )
Brush Mahogany (Red Carrobean) ( <i>Geissois benthami</i> )	Blush Walnut ( <i>Beilschmiedia obtusifolia</i> )
Yellow Carabeen (Carrobean) ( <i>Sloanea woollei</i> )	

(b) Common Cabinetwoods Group includes the following species:—

Rose Mahogany ( <i>Dysoxylum fraserianum</i> )	Rose Maple (Rose Walnut) (Pigeonberry Ash) ( <i>Cryptocarya erythroxylon</i> )
Southern Silky Oak ( <i>Grevillea robusta</i> )	Blush Alder ( <i>Sloanea australis</i> )
Silver Quandong ( <i>Elaeocarpus grandis</i> )	Brown Pine (She Pine) ( <i>Podocarpus elatus</i> )
Miva Mahogany ( <i>Dysoxylum muelleri</i> )	Silver Sycamore ( <i>Cryptocarya glaucescens</i> )
Sassafras ( <i>Daphnandra micrantha</i> and <i>Doryphora sassafras</i> )	

(c) Special Purpose Timbers Group includes the following species:—

Crows Ash ( <i>Flindersia australis</i> )	Yellowwood ( <i>Flindersia zanthoxyla</i> )
Ivorywood ( <i>Siphonodon australe</i> )	Yellow Boxwood ( <i>Planchonella pohimaniana</i> )
Southern Silver Ash (Bumpy Ash) ( <i>Flindersia schottiana</i> )	

## APPENDIX F.

## Constructional Timber supplied during Financial Year 1952-53 under Forestry and Lumbering Operations.

Class of Timber.	Quantity.	Sales Value.	
		£	s. d.
Hewn Crossings .. .. .	266,436 superficial feet	11,192	10 10
Headstocks, Longitudinals and Braces .. .. .	25,674 superficial feet	1,027	5 0
Hewn Transoms .. .. .	226,339 superficial feet	9,284	4 2
Sawn Transoms .. .. .	450 superficial feet	19	17 2
Girders—Dressed .. .. .	28,506 lineal feet	18,875	16 7
Girder Logs .. .. .	817 lineal feet	382	12 11
Piles .. .. .	22,307 lineal feet	6,228	7 3
Sills .. .. .	149 lineal feet	85	1 3
Poles .. .. .	157 lineal feet	13	14 9
Round Posts .. .. .	8,940 lineal feet	1,032	9 1
Split Posts and Rails .. .. .	88,680 pieces	8,261	13 3
Hewn Sleepers .. .. .	172,578 pieces	85,419	4 7
Sawn Sleepers .. .. .	100,541 pieces	47,171	11 4
Sleeper Blocks (as sleepers contained) .. .. .	830,334 pieces	318,972	13 11
Total .. .. .		£507,967	2 1

## APPENDIX G.

## Comparative Statement of Expenditure for Years 1951-52 and 1952-53.

	1951-52.	1952-53.
	£	£
<b>Revenue—</b>		
Salaries .. .. .	188,633	207,159
Travelling and Incidentals .. .. .	26,105	24,769
Extra Living Allowances .. .. .	1,541	1,590
Fares, Printing, Stores, &c. .. .. .	4,173	6,411
Cash Equivalent Extended Leave .. .. .	1,477	1,051
National Parks .. .. .	43,749	13,000
Reforestation .. .. .	83,000	238,176
Access Roads .. .. .	..	87,437
Purchase of Plant .. .. .	..	21,348
<b>Loan—</b>		
Reforestation .. .. .	1,429,223	808,000
Access Roads .. .. .	114,913	..
Acquisition of Land for Forestry Purposes .. .. .	11,985	6,581
Purchase of Plant .. .. .	79,032	..
<b>Trust—</b>		
Hardwood Supplies to Railway Department and Others .. .. .	319,814	488,682
Harvesting and Marketing Timber .. .. .	651,049	646,848
Access Roads .. .. .	56,309	61,404
<b>Treasury—Post-War Reconstruction and Development Fund—</b>		
Reforestation .. .. .	..	200,000
National Parks .. .. .	..	11,696
Total .. .. .	£ 3,010,983	2,824,152



APPENDIX H.

Summary of Reforestation Expenditure, 1952-53.

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.
Reserve 69	143 17 8				920 16 6	141 14 2	8 6 2		202 10 7	210 10 3	22 9 8			1,650 5 0
Reserve 215					1,028 11 7	43 6 6		30 14 11	30 14 11	171 14 1	43 16 9			1,817 10 1
Reserve 309					902 8 0		803 8 8	873 17 7	873 17 7	360 5 6				3,088 6 0
Reserve 359	700 0 0													700 0 0
Reserve 446					18 3 10			29 19 10	29 19 10	14 13 9				62 17 5
Reserve 494					980 15 7	51 0 1		315 10 9	315 10 9	231 16 2				1,759 15 2
Reserve 571					1,218 12 1	75 3 7	20 16 7	182 18 2	182 18 2	473 15 6				2,049 15 9
Reserve 667					305 8 5	19 7 0		48 16 8	48 16 8	92 15 6				644 4 3
Reserve 702	177 16 8				3 19 5	43 11 8	36 3 5	489 11 2	489 11 2	295 3 7	21 0 9			1,082 14 9
Reserve 727	264 10 0				742 15 9			16 13 1	16 13 1	14 1 9				1,082 14 9
Reserve 1376	68 1 8				157 19 5			44 16 5	44 16 5	166 6 7				257 0 11
Reserve 1526	307 11 2				752 9 8			233 15 7	233 15 7	125 8 3				1,271 2 10
Pay Roll Tax					1,067 14 11									1,473 16 5
Administration								207 7 3	207 7 3					19 0 8
Experiments				25 8 11										25 8 11
Freighting and Patrol					708 12 11									708 12 11
Depot Stock Account									Cr. 106 7 5					106 7 5
	700 0 0	961 17 2		25 8 11	12 0 5	8,799 8 8	868 14 10	2,570 8 7	2,156 10 11	161 15 8	457 3 0	19 0 8		17,106 11 5

BRISBANE WORKING PLAN AREA.

KILCOY WORKING PLAN AREA.

Reserve 137/207	13,349 3 4				1,176 18 8	4,061 2 4	4,923 6 2	10,479 9 0	6,320 7 5					47,096 2 8
Reserve 274					2 10 4									2 10 4
Reserve 345					4 16 10									4 16 10
Pay Roll Tax													859 13 7	859 13 7
Administration								729 17 2						729 17 2
Freighting and Patrol														202 4 8
Experiments				11 16 3										11 16 3
Depot Stock Account								Cr. 1,538 1 3						1,538 1 3
	13,349 3 4			11 16 3	1,184 5 10	4,263 7 0	4,923 6 2	9,671 4 11	6,320 7 5				859 13 7	47,369 0 3

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.
Reserve 60	..	..	..	..	11 18 1	849 17 8	424 17 8	..	384 0 3	149 1 9	..	..	..	1,819 15 6			
Reserve 108	..	..	..	..	..	259 1 8	119 11 1	..	..	3 7 0	..	..	..	381 19 0			
Reserve 158	..	..	..	..	..	48 16 1	..	..	..	..	..	..	..	48 16 1			
Reserve 173	..	..	..	..	50 0 8	1,243 18 5	817 14 11	..	693 1 7	593 16 9	..	..	..	3,860 4 5			
Reserve 249	..	..	..	..	..	342 1 5	24 8 7	..	..	111 19 11	..	..	..	601 5 6			
Reserve 318	..	..	..	..	..	24 8 7	..	..	..	30 18 11	..	..	..	349 12 2			
Reserve 370	..	..	..	..	2 19 5	1,184 8 6	985 2 9	11 9 6	..	1,504 2 7	..	..	..	4,876 11 1			
Reserve 445	..	..	..	..	8 17 0	1,198 12 11	..	..	..	212 2 6	..	..	..	2,700 1 5			
Reserve 561	..	..	..	..	..	1,397 10 8	112 3 1	6 18 10	..	3,706 1 0	..	..	..	2,016 11 7			
Reserve 589	..	..	..	..	146 8 11	1,375 10 6	1,673 1 9	1,294 4 10	..	541 8 3	..	..	..	14,648 12 0			
Reserve 611	..	..	..	..	484 8 15	2,156 10 9	1,687 5 9	696 5 9	..	1,907 14 2	..	..	..	12,204 2 0			
Reserve 638	..	..	..	..	2,402 0 11	1,738 12 8	7,393 11 8	4,383 11 8	..	13,230 1 6	..	..	..	73,829 9 11			
Reserve 698	..	..	..	..	481 3 4	1,470 1 4	1,252 18 2	203 5 1	..	1,805 2 0	..	..	..	12,885 5 7			
Pay Roll Tax	..	..	..	..	..	985 14 9	56 6 9	159 11 3	..	244 19 5	..	..	..	2,005 19 8			
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	2,370 17 5			
Firefighting and Patrol	..	..	..	..	..	3,763 9 10	..	..	..	25 18 1	..	..	..	3,763 9 10			
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	5,035 8 1			
Depot Stock Account	..	..	..	..	..	..	..	..	..	Cr. 1,871 19 0	..	..	..	Cr. 1,871 19 0			
	31,650 19 11	310 18 2	4,948 18 10	5,085 8 1	3,587 17 6	28,329 4 1	14,632 11 10	6,755 6 11	14,382 3 1	22,250 11 6	608 5 8	6,383 2 5	2,370 17 5	141,652 0 5			

NORTH COAST WORKING PLAN AREA.

BRISBANE VALLEY WORKING PLAN AREA.

Reserve 117	..	..	..	..	3 19 0	..	..	..	..	1 10 0	..	..	..	5 9 0
Reserve 118	..	..	..	..	4 12 8	..	..	..	..	..	..	..	..	4 12 8
Reserve 120	..	..	..	..	1,860 12 8	47 2 3	..	..	..	2,468 2 5	..	..	..	10,298 6 11
Reserve 149	..	..	..	..	..	..	..	..	..	..	..	..	..	523 13 0
Reserve 241	..	..	..	..	12 19 5	921 11 8	416 12 9	11 19 2	..	1,421 6 5	..	..	..	-6,315 5 11
Reserve 257	..	..	..	..	15 0 5	1,961 19 7	539 13 6	103 2 11	..	4,256 11 11	..	..	..	20,849 13 11
Reserve 258	..	..	..	..	110 3 7	708 14 10	440 9 0	227 8 3	..	1,857 13 7	..	..	..	9,917 11 4
Reserve 258	..	..	..	..	72 15 11	6,140 7 4	1,233 15 5	402 0 5	..	11,967 10 9	..	..	..	48,175 11 4
Reserve 259	..	..	..	..	645 9 0	2,392 7 5	697 10 10	8 6	..	5,206 10 9	..	..	..	42,672 17 9
Reserve 259	..	..	..	..	286 11 6	1,695 19 3	1,134 3 5	627 4 6	..	2,423 5 0	..	..	..	23,849 7 8
Reserve 278	..	..	..	..	169 0 9	135 16 5	..	..	..	64 18 7	..	..	..	2,011 9 4
Reserve 325/9/474	..	..	..	..	157 14 9	13 19 8	120 3 11	96 7 7	..	583 0 10	..	..	..	2,011 9 4
Reserve 373	..	..	..	..	2 14 11	..	..	..	..	..	..	..	..	5 4 2
Reserve 378	..	..	..	..	29 10 4	2,194 11 3	20 8 8	41 17 9	..	2,120 13 10	..	..	..	10,078 7 8
Reserve 579	..	..	..	..	..	2,270 1 0	271 17 0	93 15 5	..	2,308 4 1	..	..	..	9,964 8 5
Reserve 599	..	..	..	..	..	995 1 1	101 8 11	17 10 1	..	1,064 3 4	..	..	..	3,773 13 6
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	..	3,745 11 3
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	771 12 5
Firefighting and Patrol	..	..	..	..	..	2,192 14 3	..	..	..	..	..	..	..	2,192 14 3
Experiments	..	..	..	..	..	..	..	..	..	..	..	..	..	1,934 13 10
Depot Stock Account	..	..	..	..	..	..	..	..	..	..	..	..	..	Cr. 4,605 11 11
	58,741 19 0	588 14 2	14,279 14 10	1,984 12 10	1,481 0 10	25,832 8 10	6,764 5 1	2,880 7 7	23,872 13 11	43,036 6 4	957 3 10	8,614 9 1	3,745 11 3	192,230 7 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.		
Reserve 82/242	8,340 6 9		763 13 10		41 2 0	326 6 8	523 2 0	1,910 4 0	0 0 0	7,325 14 7	2,898 5 9	68 18 9	940 0 0		23,640 14 4	
Reserve 124	8,907 10 4		873 7 6		4 0 0	2,478 19 3	156 7 0	6,222 19 5	0 0 0	6,153 19 3	3,706 12 0	187 0 0	1,357 15 0		24,448 10 0	
Reserve 234					8 5 9	2,012 3 4	4 3 9	288 5 7	0 0 0	1,001 10 4	576 9 4	19 10 2	1,198 3 4		4,108 19 7	
Reserve 592			1,328 2 7		412 17 5	1,862 10 4	191 19 8	214 7 4	0 0 0	5,476 12 2	2,208 2 3	131 8 5	584 15 0		14,031 8 3	
Reserve 593			763 10 11		98 15 7	2,078 1 1	115 10 2	161 15 10	0 0 0	4,291 15 6	1,608 6 7	115 8 6	486 15 0		9,787 8 3	
Reserve 592			198 3 2			1,021 12 8	22 0 1	183 0 0	0 0 0	1,779 4 8	1,014 4 2	41 8 6	200 17 6		4,545 15 9	
Reserve 578					6 4 6			181 6 4	0 0 0	64 4 5	6 15 11				288 1 2	
Reserve 627			189 13 9			1,461 4 6	6 18 4	88 14 1	0 0 0	1,325 10 6	710 13 1	18 4 0	31 17 0		3,782 15 3	
Reserve 673					6 0 0				0 0 0	6 0 0					6 0 0	
Reserve 932						201 18 3		56 18 0	0 0 0	267 16 9	64 6 3				506 13 3	
Reserve 943						375 4 0		107 5 7	0 0 0	136 13 4	112 19 4				732 2 3	
Reserve 932						9,067 15 3	49 17 2	195 13 0	0 0 0	4,088 13 5	1,549 0 0	109 8 8	231 2 0		9,907 9 0	
Reserve 939			353 7 1			2,099 4 1	52 5 9	46 17 3	0 0 0	2,259 2 9	1,247 18 3		34 1 7		6,739 8 8	
Reserve 933						987 10 3	46 6 4	24 18 8	0 0 0	251 19 6	17 18 8	8 15 9			1,110 12 0	
Reserve 937						418 17 11	33 14 6	13 17 0	0 0 0	423 10 5	237 18 2		12 13 0		70,102 19 10	
Reserve 1004			15,763 12 11		3,093 1 9	10,907 6 11	538 13 11	5,664 1 8	0 0 0	25,376 12 10	4,776 13 7	130 17 6	2,561 2 0		3,082 10 11	
Pay Roll Tax										3,089 18 9					3,089 18 9	
Firefighting and Patrol Administration															4,708 15 5	
Construction of Portable Fire Tanks, Oil Stoves, and Wireless Mast															291 5 6	
Experiments															604 2 2	
Miscellaneous Surveys															5 1 1	
Maintenance Oil Stove															5 1 1	
Depot Stock Account															Cr. 29,575 4 4	
	88,116 13 7	1,151 7 10	4,914 7 9	904 2 2	3,674 10 2	33,387 10 2	1,745 19 9	9,981 0 3	0 0 0	33,943 19 10	20,782 10 4	830 18 3	6,590 19 5	3,082 10 11	157,056 19 5	

GYMPIE WORKING PLAN AREA.

MARY VALLEY WORKING PLAN AREA.

Reserve 135	40,912 16 1		1,958 1 2		1,947 17 9	7,471 7 9	4,088 17 4	10,039 1 8	0 0 0	33,159 12 0	13,075 4 10	197 0 8	6,272 12 0		118,522 11 2
Reserve 135/274	7,592 18 6		1,184 12 5		158 3 0	2,219 9 5	1,370 17 0	2,117 2 9	0 0 0	6,335 7 11	3,558 9 11	30 3 0	1,639 0 0		25,734 4 7
Reserve 268	4,273 8 8				928 10 0	4,07 13 7	88 16 0	94 6 10	0 0 0	802 14 3	68 11 1	30 0 0	466 1 6		7,533 3 3
Reserve 435	13,943 0 7		1,451 18 6		493 1 8	5,366 2 1	441 8 4	2,990 4 6	0 0 0	14,475 9 10	5,016 13 9	328 5 6	2,710 12 0		47,521 19 4
Reserve 544					93 18 7	250 0 0			0 0 0	1 2 4					273 1 11
Portion 209, Conondale					18 3 2										18 3 2
Pay Roll Tax															3,864 5 10
Administration										727 5 11					727 5 11
Firefighting and Patrol Experiments															2,014 14 11
Depot Stock Account										Cr. 20,296 17 6					2,613 18 10
	66,720 3 10		4,544 12 1	2,615 8 10	2,974 7 6	17,729 7 9	5,909 19 8	15,170 15 9	0 0 0	35,205 14 10	21,631 9 10	585 9 2	11,143 5 6	3,864 5 10	138,100 0 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.	Carriage of Rations, &c.	Camping Allowance.		
Reserve 117 .. ..	499 6 11	..	..	..	..	1,089 4 2	515 0 3	778 14 2	373 7 2	81 12 1	240 12 0	..	3,572 16 9	
Reserve 127 .. ..	742 16 10	..	..	..	..	1,737 8 10	144 0 9	1,233 9 5	363 3 11	176 12 1	305 4 0	177 7 7	4,737 14 5	
Pay Roll Tax .. ..	..	..	..	..	..	..	..	333 14 7	..	..	..	..	333 14 7	
Administration .. ..	..	..	..	..	..	383 0 8	..	..	..	..	..	..	383 0 8	
Firefighting and Patrol .. ..	1,242 3 9	..	..	..	..	3,209 13 8	659 1 0	2,340 18 2	736 11 1	258 4 2	545 16 0	177 7 7	9,204 14 0	
CLEMONT WORKING PLAN AREA.														
Reserve 20 .. ..	8,060 0 9	..	1,196 1 1	..	49 12 7	5,848 0 1	87 3 0	2,832 1 10	3,255 7 9	272 11 4	1,295 4 7	534 3 6	24,471 0 0	
Pay Roll Tax .. ..	..	..	..	..	..	..	..	189 14 11	..	..	..	..	534 3 6	
Administration .. ..	..	..	..	..	..	28 6 0	..	..	..	..	..	..	28 6 0	
Firefighting and Patrol .. ..	..	..	..	288 12 3	..	..	..	..	..	..	..	..	288 12 3	
Experiments .. ..	..	..	..	..	..	..	..	Cr. 1 0 11	..	..	..	..	1 0 11	
Depot Stock Account .. ..	8,060 0 9	..	1,196 1 1	288 12 3	49 12 7	5,876 6 7	87 3 0	3,020 15 10	3,255 7 9	272 11 4	1,295 4 7	534 3 6	25,460 16 3	
ROCKHAMPTON WORKING PLAN AREA.														
Reserve 28 .. ..	1,772 13 4	606 8 8	994 1 9	..	10 19 8	4,077 13 6	155 12 1	2,886 6 2	1,074 12 0	453 17 2	620 4 0	..	11,105 19 2	
Reserve 67 .. ..	..	..	..	..	81 12 4	1,946 14 4	139 7 9	2,611 19 8	1,284 13 3	396 11 3	652 9 0	..	10,817 10 4	
Reserve 81 .. ..	..	..	2,000 12 2	..	612 17 11	1,838 0 2	2 15 4	7,949 4 1	4,135 8 8	43 5 8	2,353 10 0	1,055 7 11	34,184 19 8	
Pay Roll Tax .. ..	..	..	..	..	..	..	..	196 13 0	..	..	..	..	1,055 7 11	
Administration .. ..	..	..	..	..	..	383 14 2	..	..	..	..	..	..	383 14 2	
Firefighting and Patrol .. ..	..	..	..	95 19 7	..	..	..	..	..	..	..	..	95 19 7	
Experiments .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Depot Stock Account .. ..	19,035 13 9	605 8 8	2,994 13 11	95 19 7	705 9 11	7,187 7 3	3,209 0 3	11,575 8 2	6,494 13 11	893 14 1	3,626 3 0	1,055 7 11	56,776 11 10	
MANY PEAKS WORKING PLAN AREA.														
Reserve 8 .. ..	..	..	..	..	142 3 11	1,568 17 7	70 13 4	1,268 6 3	533 13 4	124 8 6	276 17 0	..	193 1 0	
Reserve 9 .. ..	..	..	..	..	..	1,946 14 4	217 13 3	403 19 9	319 9 1	73 18 4	105 8 0	..	5,509 9 11	
Reserve 27 .. ..	..	..	..	..	97 0 4	1,112 7 2	276 2 6	574 3 2	405 4 10	30 7 10	271 15 0	..	2,841 12 2	
Reserve 27 .. ..	..	..	..	..	52 0 10	3,239 11 1	109 17 0	2,541 8 5	603 10 0	189 12 10	590 17 0	..	5,345 10 3	
Reserve 287 .. ..	..	..	..	..	12 8 0	..	..	..	..	..	..	..	8,311 10 7	
Reserve 517 .. ..	..	..	..	..	13 4 3	..	..	..	..	..	..	..	13 4 3	
Reserve 645 .. ..	..	..	..	..	3,888 7 3	11,908 0 3	603 16 11	13,653 17 3	6,556 10 0	493 16 11	3,133 12 1	..	70,939 9 2	
Reserve 916 .. ..	..	..	..	..	..	1,106 0 2	103 16 2	1,093 19 11	420 19 10	18 0 0	48 15 0	1,888 5 8	9,346 7 3	
Reserve 958 .. ..	..	..	..	..	..	1,033 13 2	..	1,776 12 9	..	..	..	..	1,338 5 3	
Pay Roll Tax .. ..	..	..	..	..	..	..	..	..	..	..	..	..	1,271 12 0	
Administration .. ..	..	..	..	..	..	..	..	..	..	..	..	..	1,033 13 2	
Firefighting and Patrol .. ..	..	..	..	1,366 18 3	7 14 7	..	..	..	..	..	..	..	1,366 18 3	
Experiments .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Miscellaneous Surveys .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Construction .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Stamp, Thincomb .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Depot Stock Account .. ..	22,074 5 0	1,940 18 7	2,439 13 8	1,366 13 3	4,148 14 7	21,024 3 9	1,396 3 2	22,492 1 6	8,929 16 7	919 18 5	4,577 8 1	1,888 5 8	102,108 17 6	

APPENDIX H—continued.

Reserve.	Reforestation.			Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.					Forest Experiment.	Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Balfions, &c.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Reserve 80	745 10 1			1 14 1	1 052 8 8	25 2 1	10 8 11	389 14 5	32 11 11	202 12 0		3 231 7 6
Reserve 160				14 10 5	1 224 10 5	140 18 5	1 913 5 6	580 11 1	59 3 5	236 18 0		5 113 7 5
Reserve 191/864				60 10 0	2 566 12 0	41 11 0	84 13 1	523 18 7	70 6 0	318 18 0		5 124 1 10
Reserve 278				12 15 9	1 566 8 7	30 14 5	890 3 7	463 11 11	23 11 10	316 10 0		4 435 14 4
Reserve 332/7	1 088 2 2				1 813 9 4	193 14 6	175 16 10	723 0 10	151 6 5	327 16 0		5 331 17 4
Pay Roll Tax											303 7 5	303 7 5
Administration												106 10 3
Firefighting and Patrol Experiments												212 6 2
				484 11 8								434 11 8
				1 783 12 3	8 427 15 8	442 0 5	2 432 7 11	2 666 2 10	338 19 7	1 452 14 0	303 7 5	24 823 13 1

BUNDABERG WORKING PLAN AREA.

KILKIVAN WORKING PLAN AREA.

Reserve 24	676 14 8				1 587 3 0	39 2 8	156 10 3	503 7 3	90 0 0	223 15 0		4 405 9 11
Reserve 26					7 15 4	0 6 4	11 11 3	0 13 1		0 8 0		94 13 8
Reserve 27					69 18 7		981 10 7	4 7 2		7 0 0		14 306 12 10
Reserve 97/9				310 17 2	554 2 5	114 13 11	11 11 3	1 654 19 8	241 8 3	1 095 14 0		1 736 17 3
Reserve 134					79 10 7			248 10 5				15 959 16 5
Reserve 154					1 404 19 0	359 7 8	517 16 4	1 749 17 11	190 11 6	1 157 7 0		8 857 12 5
Reserve 220					749 1 2	74 18 2	68 9 9	1 481 9 2	176 7 9	809 5 0		562 7 9
Reserve 290					283 2 3	20 3 7	37 17 3	42 0 2	40 18 6	38 16 0		40 393 4 7
Reserve 333					4 797 3 3	474 16 5	5 905 9 10	3 375 10 6	551 4 7	3 141 10 7		892 11 11
Reserve 345					0 12 0		75 5 10	151 3 10		43 8 0		956 15 9
Reserve 424					234 4 1	46 2 9	32 9 8	51 9 1	219 6 5	37 8 0		3 926 18 10
Reserve 494					8 18 6		312 5 3	331 9 11	226 8 8	360 11 0		30 18 6
Reserve 502					17 9 6							1 9 0
Reserve 673					0 6 6							1 897 18 7
Pay Roll Tax											1 897 18 7	1 897 18 7
Administration												1 652 9 6
Firefighting and Patrol Experiments												837 3 2
Miscellaneous Surveys				56 3 4								56 3 4
Depot Stock Account	27 694 10 10	676 14 8	5 921 7 4	56 3 4	10 973 11 1	1 298 4 11	8 099 6 0	9 708 7 2	1 793 15 2	6 635 2 7	1 897 18 7	90 330 14 2

NORTH QUEENSLAND WORKING PLAN AREA.

Reserve 55	158 4 2	216 17 2											209 6 2
Reserve 99	278 19 7	22 13 9											401 9 10
Reserve 185	478 6 10												1 055 12 8
Reserve 191													3 594 19 4
Reserve 194													33 11 1
Reserve 310													1 833 17 7
Reserve 438													3 059 12 2
Reserve 456													2 437 14 0
Reserve 461													315 17 8
Pay Roll Tax													613 15 11
Administration													293 14 1
Firefighting and Patrol Experiments													8 7 5
Miscellaneous Surveys													3 153 15 7
Depot Stock Account	1 602 6 0	709 11 3	653 14 10	3 153 15 7	2 408 18 2	150 13 7	1 398 3 2	2 067 6 5	353 6 7	653 1 10	315 7 8	15 046 5 11	



## APPENDIX I.

## Net Area of Plantation Established 1st April, 1952, to 31st March, 1953.

Species.	Brisbane.	Brisbane Valley.	Gympie.	Mackay.	Maryborough.	Monto.	Warwick.	Queensland Totals.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
<i>Softwoods.</i>								
Native Conifers—								
Hoop Pine .. .. .	167.1	772.4	618.8	..	196.3	104.7	..	1,859.3
Bunya Pine .. .. .	17.0	..	10.0	..	..	..	..	27.0
Exotic Conifers—								
<i>P. caribaea</i> .. .. .	541.4	..	828.9	249.2	400.1	..	44.2	2,063.8
<i>P. taeda</i> .. .. .	439.7	..	7.6	..	..	..	..	447.3
<i>P. patula</i> .. .. .	..	131.3	11.0	..	..	..	38.5	180.8
<i>P. radiata</i> .. .. .	..	..	..	..	..	..	16.9	16.9
<i>P. insularis</i> .. .. .	..	..	..	0.3	..	..	..	0.3
<i>P. hondurensis</i> .. .. .	9.0	..	2.7	30.2	1.8	..	..	43.7
Others .. .. .	..	..	2.4	0.2	..	..	0.9	3.5
Broadleaved Softwoods—								
Red Cedar .. .. .	..	..	2.0	..	..	..	..	2.0
<i>Cedrela odorata</i> .. .. .	..	..	4.0	..	..	..	..	4.0
Total—Softwoods .. .. .	1,174.2	903.7	1,487.4	279.9	598.2	104.7	100.5	4,648.6
<i>Eucalypts.</i>								
<i>Euc. saligna</i> .. .. .	..	..	..	..	..	..	..	Nil
Other Eucalypts .. .. .	..	..	..	..	..	..	..	Nil
Total—All species .. .. .	1,174.2	903.7	1,487.4	279.9	598.2	104.7	100.5	4,648.6

## APPENDIX J.

## Net Area of Effective Plantation Classified into Forestry Districts to 31st March, 1953.

Species.	North Queensland.	Brisbane.	Brisbane Valley.	Gympie.	Mackay.	Maryborough.	Monto.	Warwick.	Fraser Island.	Queensland Totals.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
<i>Softwoods.</i>										
Native Conifers										
Hoop Pine ..	574.2	2,043.9	12,079.7	12,248.3	15.4	3,995.7	1,579.8	..	126.1	32,663.1
Kauri Pine ..	285.0	1.7	..	1,451.1	0.7	..	..	..	69.7	1,808.2
Bunya Pine ..	0.3	20.8	8.0	217.4	1.7	14.8	..	..	0.7	263.7
Others ..	0.6	4.6	0.4	45.4	0.6	1.1	..	..	0.6	53.3
Exotic Conifers										
<i>P. caribaea</i> ..	7.8	5,184.3	962.4	1,870.1	615.8	1,956.0	62.3	424.0	6.7	11,039.4
<i>P. taeda</i> ..	13.7	3,200.5	41.4	102.1	5.4	84.9	1.0	220.7	2.4	3,672.1
<i>P. patula</i> ..	44.1	33.4	2,023.0	22.2	7.6	73.5	7.9	667.3	3.4	2,883.3
<i>P. radiata</i> ..	..	..	98.5	..	..	..	..	315.9	..	414.4
<i>P. palustris</i> ..	..	245.6	2.6	1.2	1.1	0.5	..	8.2	..	259.2
Others ..	8.1	49.2	21.9	17.6	67.7	12.0	2.1	19.7	6.8	205.1
Broadleaved Softwoods										
Silky Oak ..	31.7	..	744.0	175.9	..	32.1	..	..	..	983.7
Maple ..	202.3	..	..	36.0	..	..	..	..	..	238.3
Others ..	104.6	0.1	..	85.8	..	1.2	..	..	0.4	192.1
Total Softwoods ..	1,272.4	10,784.1	15,982.8	16,273.1	718.0	6,171.8	1,653.1	1,655.8	216.8	54,725.9
<i>Eucalypts.</i>										
<i>Euc. saligna</i> ..	0.7	36.2	197.3	908.2	..	35.2	..	..	..	1,177.6
<i>Euc. paniculata</i> ..	35.6	228.3	465.6	216.2	..	75.3	..	..	..	1,021.0
<i>Euc. microcorys</i> ..	27.7	215.4	35.4	17.5	..	..	..	..	..	296.0
<i>Euc. pilularis</i> ..	0.2	160.9	..	..	..	..	..	..	..	161.1
Other Eucalypts	4.0	17.0	12.7	72.0	..	..	..	..	..	105.7
Total Eucalypts	68.2	657.8	711.0	1,213.9	..	110.5	..	..	..	2,761.4
Total All Species	1,340.6	11,441.9	16,693.8	17,487.0	718.0	6,282.3	1,653.1	1,655.8	216.8	57,487.3



## APPENDIX K.

Net Area of Plantation Effective at 31st March, 1953, 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.	1951-52.	Total.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
<i>Softwoods.</i>									
A. Native Conifers—									
Hoop Pine .. ..	21.0	184.5	1,780.9	4,379.7	9,613.9	2,238.7	10,807.5	3,636.9	32,663.1
Kauri Pine .. ..	7.1	55.0	18.7	125.2	1,137.5	237.4	227.3	..	1,808.2
Bunya Pine .. ..	6.0	28.8	74.8	0.9	123.9	..	2.3	27.0	263.7
Others .. ..	..	3.7	42.6	2.4	4.6	..	..	..	53.3
B. Exotic Conifers—									
<i>P. caribaea</i> .. ..	..	6.7	48.1	2,032.6	1,160.8	506.5	3,665.9	3,668.8	11,089.4
<i>P. taeda</i> .. ..	..	..	32.5	561.3	552.0	453.0	1,284.7	788.6	3,672.1
<i>P. patula</i> .. ..	..	1.0	17.0	160.1	472.4	189.0	1,427.5	616.3	2,883.3
<i>P. radiata</i> .. ..	..	0.4	67.8	151.9	1.9	..	131.5	60.9	414.4
<i>P. palustris</i> .. ..	..	..	0.2	28.1	108.7	44.1	45.8	32.3	259.2
Others .. ..	..	1.6	18.8	38.5	20.5	1.0	50.7	74.0	205.1
C. Broadleaved Softwoods—									
Silky Oak .. ..	..	3.1	607.3	286.7	86.6	..	..	..	983.7
Maple .. ..	0.8	11.9	49.1	93.6	63.4	..	14.0	5.5	238.3
Others .. ..	9.7	14.7	110.0	25.9	6.3	9.3	1.7	14.5	192.1
Total Softwoods .. ..	44.6	311.4	2,867.8	7,886.9	13,352.5	3,679.0	17,658.9	8,924.8	54,725.9
<i>Eucalypts.</i>									
<i>Euc. saligna</i> .. ..	..	..	1.0	1.2	126.6	129.3	782.0	137.5	1,177.6
<i>Euc. paniculata</i> .. ..	..	..	7.7	532.1	402.1	77.3	1.8	..	1,021.0
<i>Euc. microcorys</i> .. ..	..	..	12.0	90.0	194.0	..	..	..	296.0
<i>Euc. pilularis</i> .. ..	..	..	0.2	97.9	56.9	..	6.1	..	161.1
Other Eucalypts .. ..	..	..	0.5	6.4	22.7	9.4	39.7	27.0	105.7
Total Eucalypts .. ..	..	..	21.4	727.6	802.3	216.0	829.6	164.5	2,761.4
Total—All Species .. ..	44.6	311.4	2,889.2	8,614.5	14,154.8	3,895.0	18,488.5	9,089.3	57,487.3

## APPENDIX L.

## Areas of Natural Forest Treated.

Working Plan Area.	Reserve No.	Eucalypts. (Acres.)			Softwoods. (Acres.)			Other Species. (Acres.)			All Species. (Acres.)
		Treated 1952-53.	First Treatment 1952-53.	Total as at 30th June, 1953.	Treated 1952-53.	First Treatment 1952-53.	Total as at 30th June, 1953.	Treated 1952-53.	First Treatment 1952-53.	Total as at 30th June, 1953.	Total as at 30th June, 1953.
Brisbane .. ..	69	72	..	1,535	..	..	..	..	..	1,535	
	1,376	178	..	1,450	..	..	..	..	..	1,450	
	215	..	..	925	..	..	..	..	..	925	
	702	109	..	2,060	..	..	..	..	..	2,060	
	494	..	..	934	..	..	..	..	..	934	
	446	..	..	1,094	..	..	..	..	..	1,094	
	667	96	..	914	..	..	..	..	..	914	
	309	..	..	2,970	..	..	..	..	..	2,970	
	1,355	..	..	1,625	..	..	..	..	..	1,625	
	727	220	..	900	..	..	..	..	..	900	
..	675	..	14,407	..	..	..	..	..	..	14,407	
Brisbane Valley and Nanango .. ..	283	..	..	1,880	..	..	..	..	40	1,920	
	257	..	..	125	..	..	..	..	66	191	
	299	..	..	50	..	..	..	..	..	50	
	527/8/9	542	..	5,386	..	..	..	..	..	5,386	
..	542	..	7,441	..	..	..	..	106	7,547		
Bundaberg .. ..	169	..	..	..	..	..	9,902	..	..	9,902	
	80	1,355	..	9,060	..	..	..	..	..	9,060	
	191/864	..	..	12,505	..	..	..	..	..	12,505	
	723	..	..	564	..	..	..	..	..	564	
	832/837	1,370	1,348	13,433	..	..	..	..	..	13,433	
..	2,725	1,348	35,562	..	..	9,902	..	..	45,464		
Clermont .. ..	117	1,243	..	10,820	..	..	..	..	..	10,820	
	127	1,925	..	18,370	..	..	..	..	..	18,370	
	..	3,168	..	29,190	..	..	..	..	..	29,190	
Dalby .. ..	93	1,314	694	16,465	..	..	1,928	..	..	18,393	
	4	82	82	10,978	..	..	280	..	..	11,258	
	83	..	..	4,876	..	..	..	..	..	4,876	
	78 etc.	..	..	1,130	3,915	3,275	47,245	..	..	48,375	
	34	..	..	1,270	..	..	2,496	..	..	3,766	
	150	..	..	..	545	106	6,244	..	..	6,244	
	16M	346	346	6,463	545	545	24,321	..	..	30,784	
	127	..	..	..	..	..	710	..	..	710	
	126/135	..	..	..	153	..	3,700	..	..	3,700	
	154	..	..	..	931	931	25,539	..	..	25,539	
	155	..	..	..	233	233	2,245	..	..	2,245	
	16B	1,389	1,389	2,004	..	..	..	..	..	2,004	
106	124	124	1,023	..	..	18	..	..	1,041		
..	3,255	2,635	44,209	6,322	5,090	114,726	..	..	168,936		
Fraser Island .. ..	3	635	256	17,852	..	..	4,374	..	..	22,226	
Inglewood .. ..	79	..	..	..	1,311	665	30,913	..	..	30,913	
	122	..	..	..	564	..	18,300	..	..	18,300	
	101	..	..	8,512	153	..	540	..	..	9,052	
	134	..	..	..	388	..	14,790	..	..	14,790	
	81	268	..	7,490	336	336	4,620	..	..	12,110	
	48	..	..	..	251	251	3,965	..	..	3,965	
	132	..	..	207	..	..	..	..	..	207	
	120	..	..	298	..	..	515	..	..	813	
	..	268	..	16,507	3,003	1,252	73,643	..	..	90,150	
	Kilcoy .. ..	370	..	..	3,210	..	..	..	..	..	3,210
893		..	..	3,090	..	..	..	..	..	3,090	
637		..	..	1,168	..	..	..	..	..	1,168	
..	..	..	7,468	..	..	..	..	..	7,468		
Kilkivan .. ..	221	..	..	1,922	..	..	..	..	..	1,922	
	12/24	1,508	359	14,271	..	..	..	..	..	14,271	
	424/7	..	..	80	..	..	..	..	..	80	
..	1,508	359	16,273	..	..	..	..	..	16,273		
Many Peaks .. ..	28	568	33	6,744	..	..	..	..	..	6,744	
	150	..	..	1,811	..	..	..	..	..	1,811	
	..	568	33	8,555	..	..	..	..	..	8,555	

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

Working Plan Area.	Reserve No.	Eucalypts. (Acres.)			Softwoods. (Acres.)			Other Species. (Acres.)			All Species. (Acres.)										
		Treated 1952-53.	First Treatment 1952-53.	Total as at 30th June, 1953.	Treated 1952-53.	First Treatment 1952-53.	Total as at 30th June, 1953.	Treated 1952-53.	First Treatment 1952-53.	Total as at 30th June, 1953.	Total as at 30th June, 1953.										
Maryborough .. ..	958	5,620	..	15,926	..	..	..	..	..	..	15,926										
	57	3,264	..	23,070	..	..	..	..	..	..	23,070										
	12	741	..	5,426	..	..	..	..	..	..	5,426										
	8/1, 454	120	..	14,483	..	..	..	..	..	..	14,483										
	27	585	..	7,050	..	..	..	..	..	..	7,050										
	1	..	..	1,632	..	..	..	..	..	..	1,632										
	..	10,330	..	67,587	..	..	..	..	..	..	67,587										
Mary Valley .. ..	135	..	..	159	..	..	..	..	..	..	159										
North Coast .. ..	318	}	..	8,910	..	..	..	..	..	..	8,910										
	445																				
	583																				
	313											..	..	1,650	..	..	..	..	..	1,650	
	249											..	..	1,050	..	..	..	..	..	1,050	
	60											..	..	1,380	..	..	..	..	..	1,380	
	108											..	..	1,750	..	..	..	..	..	1,750	
	173											145	145	3,135	..	..	..	..	..	..	3,135
	531											..	..	200	..	..	..	..	..	..	200
	351											..	..	580	..	..	..	..	..	..	580
689	..	..	340	..	..	..	..	..	..	340											
	..	145	145	18,995	..	..	..	..	..	..	18,995										
Gympie .. ..	393	..	..	3,020	..	..	..	..	..	..	3,020										
	234	..	..	1,730	..	..	..	..	..	..	1,730										
	502	107	..	1,568	..	..	..	..	..	..	1,568										
	627	170	..	2,423	..	..	..	..	..	..	2,423										
	700	..	..	3,672	..	..	..	..	..	..	3,672										
	124	..	..	770	..	..	..	..	..	..	770										
	959	..	..	965	..	..	..	..	..	..	965										
	950/1	..	..	1,135	..	..	..	..	..	..	1,135										
	..	277	..	15,283	..	..	..	..	..	..	15,283										
North Queensland ..	99	..	..	..	..	..	..	25	25	25	25										
	191	..	..	..	..	..	..	..	..	58	53										
	194	..	..	175	..	..	..	..	..	..	175										
	310	..	..	..	..	..	..	..	..	128	128										
	418	..	..	..	..	..	..	..	..	43	43										
	452	..	..	..	..	..	..	..	..	20	20										
	245	..	..	339	..	..	..	..	..	..	339										
	243	..	..	1,457	..	..	..	..	..	..	1,457										
	185	..	..	..	..	..	..	..	..	..	279										
	438	325	..	1,577	..	..	..	90	..	279	1,577										
	343	..	..	200	..	..	..	..	..	..	200										
		..	325	..	3,748	..	..	..	115	25	548	4,296									
Warwick .. ..	444	..	..	4,360	..	..	..	..	..	..	4,360										
	574	..	..	4,230	..	..	..	..	..	..	4,230										
	..	..	..	8,590	..	..	..	..	..	..	8,590										
Grand Totals ..	..	24,421	4,776	311,826	9,325	6,342	202,645	115	25	654	515,125										

## APPENDIX M.

## Summary of Forest Survey Work—Year Ended 30th June, 1953.

Reserve or Portion.	Parish.	Area in Acres.
CLASS 1—INSPECTIONS OF VACANT CROWN LANDS AND TIMBER RESERVES.		
Portions 66, 88, 154 .. .. .	Conway .. .. .	384
Portion 123 .. .. .	Marsh .. .. .	192
Portion 2 .. .. .	Binkey .. .. .	1,841
Portion 700 .. .. .	Canning (part) .. .. .	..
Portion 663 .. .. .	Beerwah .. .. .	37
Portions 48, 100v .. .. .	Bribie .. .. .	273
Portion 78 .. .. .	Burpengary .. .. .	40
Portion 19v .. .. .	Durundur .. .. .	247
Portion 87v .. .. .	Durundur .. .. .	118
Portions 79, 153, 162v .. .. .	Mooloolah .. .. .	..
Portion 56 .. .. .	Toorbul .. .. .	340
Portions 33, 124v .. .. .	Wararba .. .. .	..
	Total .. .. .	3,472
CLASS 2—ASSESSMENT SURVEYS.		
6 .. .. .	Cauley (postponed) .. .. .	..
Cotherstone .. .. .	Kirkcaldy, Dunsmure, Calvert .. .. .	26,951
343 .. .. .	Monsildale (proceeding) .. .. .	450
18 .. .. .	Cambroon .. .. .	1,688
755 .. .. .	Bartle Frere .. .. .	4,900
169 .. .. .	St. Agnes (part) .. .. .	..
194 .. .. .	Herberton, Western .. .. .	..
84 .. .. .	Beerwah .. .. .	156
	Total .. .. .	34,145
CLASS 3—INTENSIVE CONTOUR AND ASSESSMENT SURVEY.		
67 .. .. .	Thornhill (completed) .. .. .	..
185 .. .. .	Danbulla (levels) .. .. .	..
30 .. .. .	Riflemead (Mount Lewis road) .. .. .	..

## COMPARTMENT, FIREBREAK AND SOIL SURVEYS.

Reserve.	Parish.	Type.	Area in Acres.
915 .. .. .	Tahiti .. .. .	Soil .. .. .	1,792
915 .. .. .	Tahiti .. .. .	Compartment .. .. .	2,750
1004 .. .. .	Goomboorian .. .. .	Soil .. .. .	3,500
1004 .. .. .	Goomboorian .. .. .	Compartment .. .. .	3,770
392 .. .. .	Como .. .. .	Soil .. .. .	2,500
256 .. .. .	Imbil .. .. .	Firebreak .. .. .	835
135 .. .. .	Brooloo .. .. .	Firebreak .. .. .	853
435 .. .. .	Kandanga .. .. .	Firebreak .. .. .	119
135 .. .. .	Cambroon .. .. .	Firebreak .. .. .	760
274 .. .. .	Cambroon .. .. .	Firebreak .. .. .	178
242 .. .. .	Widgee .. .. .	Firebreak .. .. .	41
124 .. .. .	Glastonbury .. .. .	Land Slide .. .. .	..
97, 99 .. .. .	Manumbar .. .. .	Compartment and Firebreaks .. .. .	810
154 .. .. .	Gallangowan .. .. .	Compartment and Firebreaks .. .. .	50
298 .. .. .	Gallangowan .. .. .	Compartment and Firebreaks .. .. .	3,000
864 .. .. .	Kullogum .. .. .	Compartment .. .. .	..
278 .. .. .	Hercules .. .. .	Soil .. .. .	2,000
287 .. .. .	Woowoonga .. .. .	Soil .. .. .	5,000
207 .. .. .	Monsildale .. .. .	Firebreak .. .. .	3,977
611 .. .. .	Beerwah .. .. .	Soil .. .. .	6,000
589 .. .. .	Beerwah .. .. .	Soil .. .. .	3,000
155 .. .. .	Marmadua .. .. .	Compartment .. .. .	..
184 .. .. .	Halliford .. .. .	Compartment .. .. .	..
258 .. .. .	Cooyar .. .. .	Firebreak .. .. .	..
289 .. .. .	Cooyar .. .. .	Firebreak .. .. .	..
283 .. .. .	Colinton .. .. .	Firebreak .. .. .	..
299 .. .. .	Avoca .. .. .	Firebreak .. .. .	..
638 .. .. .	Beerwah .. .. .	Soil .. .. .	5,000
561 .. .. .	Bribie .. .. .	Soil .. .. .	400
173 .. .. .	Durundur .. .. .	Compartment .. .. .	..
60 .. .. .	Wararba .. .. .	Compartment .. .. .	..
699 .. .. .	Beerwah .. .. .	Compartment .. .. .	..
95 .. .. .	New Cannindah .. .. .	Firebreak .. .. .	130
	Total .. .. .		46,465

APPENDIX M.—continued.  
FOREST INVENTORY SURVEY.

Reserve.	Parish.	Area in Acres.
155 .. .. .	Marmadua and Durabilla (proceeding) ..	30,000
184 .. .. .	Halliford, Stretchworth (proceeding) ..	50,000
627, 741 .. .. .	Goomborian .. .. .	3,610
393 .. .. .	Woodum (proceeding) .. .. .	1,673
3 .. .. .	Fraser Island .. .. .	..
958 .. .. .	Gundiah .. .. .	..
318 .. .. .	Maroochy .. .. .	1,243
583 .. .. .	Kenilworth .. .. .	1,200
445 .. .. .	Kenilworth (part) .. .. .	5,000
572 .. .. .	Kenilworth (part) .. .. .	2,617
292 .. .. .	Maroochy .. .. .	1,730
242 .. .. .	Widgee (re-measure) .. .. .	..
435 .. .. .	Amamoor (re-measure) .. .. .	..
	Total .. .. .	97,073

## APPENDIX N.

## State Forests, Timber Reserves, and National Parks at 30th June, 1953.

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 .. .. .	14	65,540	0 3	7	46,469	2 26	5	3,552	2 0
Bowen .. .. .	..	..	..	7	90,800	0 0	36	118,587	0 0
Brisbane .. .. .	67	224,965	3 33	42	69,068	1 13	38	77,658	1 3
Bundaberg .. .. .	19	132,227	0 15	37	172,418	0 24	..	..	..
Cairns .. .. .	7	118,859	0 36	15	486,793	2 0	20	92,300	3 24
Charleville .. .. .	..	..	..	2	69,747	0 0	..	..	..
Charters Towers .. .. .	..	..	..	2	125,550	0 0	..	..	..
Clermont .. .. .	2	126,500	0 0	6	50,803	0 35	..	..	..
Cloncurry .. .. .	..	..	..	1	3,950	0 0	..	..	..
Cooktown .. .. .	..	..	..	8	623,460	0 0	7	10,691	0 0
Dalby .. .. .	28	1,013,782	2 19	4	9,578	0 0	1	13,100	0 0
Gayndah .. .. .	1	4,790	0 0	15	63,658	2 19	..	..	..
Gladstone .. .. .	5	35,490	0 0	26	88,446	1 14	4	230	0 0
Goondiwindi .. .. .	5	149,981	1 0	6	42,063	1 20	..	..	..
Gympie .. .. .	48	427,447	1 13	15	67,831	2 38	5	922	2 7
Herberton .. .. .	10	75,343	3 29	11	76,635	1 7	5	3,361	3 28
Ingham .. .. .	1	43,620	0 0	3	68,840	0 0	4	18,495	0 0
Inglewood .. .. .	15	185,942	3 35	4	8,407	1 8	..	..	..
Innisfail .. .. .	2	65,167	0 0	12	364,653	2 18	21	106,787	1 31
Ipswich .. .. .	32	169,097	1 24	24	67,825	2 33.2	4	5,339	0 0
Jundah .. .. .	..	..	..	1	25,600	0 0	..	..	..
Mackay .. .. .	1	18,450	0 0	19	148,633	3 0	56	148,736	0 29
Maryborough .. .. .	59	698,278	1 10	25	30,461	0 13	4	8,185	0 0
Monto .. .. .	10	196,227	3 20	11	75,042	2 32.6	..	..	..
Nanango .. .. .	45	219,733	2 34	13	18,023	0 19	2	9,636	1 18
Rockhampton .. .. .	8	182,678	1 0	17	140,538	1 22	15	2,597	0 0
Roma .. .. .	11	128,434	3 22	1	8,600	0 0	..	..	..
Springsure .. .. .	..	..	..	5	115,888	1 0	1	65,000	0 0
Stanthorpe .. .. .	2	10,495	0 0	..	..	..	6	12,604	3 0
Taroom .. .. .	3	22,186	0 0	5	48,864	2 0	..	..	..
Toowoomba .. .. .	22	258,837	0 2	15	27,805	1 27	5	3,214	3 0
Townsville .. .. .	1	23,123	0 0	2	17,199	1 31	2	64,260	0 0
Total .. .. .	418	4,597,198	3 15	361	3,253,656	1 39.8	241	765,259	2 20

At 30th June, 1953—

Total area reserved for—

State Forests .. .. .	4,597,198	3 15
Timber Reserves .. .. .	3,253,656	1 39.8
National Parks .. .. .	765,259	2 20

Total Reservations .. .. . 8,616,114 3 34.8

## APPENDIX O.

## Reservations for the Year Ended 30th June, 1953.

*State Forests.*—Six (6) State Forests with a total of 54,157 acres were proclaimed during the year. The largest of these are as follows:—

Acres.		Land Agent's District.
39,000	{ Reserve 55, Mount Hutton .. .. .	Roma
	{ Reserve 20, Hallett and Stephenton .. .. .	Roma
10,817	Reserve 72, Warranna .. .. .	Dalby
2,680	Reserve 485, Ravenshoe .. .. .	Herberton

42,333 acres were added to existing reserves and 16 reserves were rescinded for inclusion in adjoining State Forests.

*Timber Reserves.*—At 30th June, 1953; the number of Timber Reserves was 361, compared with 354 at 30th June, 1952.

Fifteen (15) new areas, with a total of 192,512 acres, were reserved, the largest being:—

Acres.		Land Agent's District.
114,780	{ Reserve 1, Pluto .. .. .	Charleville
	{ Reserve 7, Kent .. .. .	Springure
17,500	Reserve 486, Ismailia, Rameh and Timsah .. .. .	Herberton
15,665	{ Reserve 76, Monogorilby .. .. .	Nanango and Gayndah
	{ Reserve 131, Weir Weir .. .. .	Nanango and Gayndah
13,770	Reserve 14, Dromedary .. .. .	Rockhampton
13,440	Reserve 238, Minerva .. .. .	Bundaberg
5,760	Reserve 239, Minerva .. .. .	Bundaberg
5,397	Reserve 215, Beninbi .. .. .	Gayndah
1,758	Reserve 589, Lockyer .. .. .	Ipswich
1,542	Reserve 140, Keilambete .. .. .	Springure

Seven (7) areas, totalling 38,055 acres, were converted to State Forests and one reserve of 295 acres was converted to National Park. 91 acres were released.

*National Parks.*—One (1) new National Park of 295 acres, Reserve 785, Alford (Mount Moon), Ipswich Land Agent's District, was proclaimed during the year. 280 acres were added to existing reserves and one reserve was rescinded for inclusion in adjoining National Park.

1st JULY, 1952, TO 30th JUNE, 1953.

STATE FORESTS.		No.	A.	R.	P.
At 1st July, 1952 .. .. .		428	4,500,708	2	35
Proclaimed 1-7-52 to 30-6-53 .. .. .		6	54,157	0	12
V.C.L. added to existing reserves .. .. .		..	42,333	0	8
		434			
Reserves rescinded .. .. .		16			
<b>Total at 30th June, 1953 .. .. .</b>		<b>418</b>	<b>4,597,198</b>	<b>3</b>	<b>15</b>
TIMBER RESERVES.		No.	A.	R.	P.
At 1st July, 1952 .. .. .		354	3,099,434	1	0.8
Proclaimed 1-7-52 to 30-6-53 .. .. .		15	192,511	2	13
V.C.L. added to existing reserves .. .. .		..	151	2	17
		369	3,292,097	1	30.8
7 reserves converted to State Forests .. .. .	38,054	2	7		
1 reserve converted to National Park .. .. .	295	0	0		
Areas released .. .. .	91	1	24		
		8	38,440	3	31
<b>Total at 30th June, 1953 .. .. .</b>		<b>361</b>	<b>3,253,656</b>	<b>1</b>	<b>39.8</b>
NATIONAL PARKS.		No.	A.	R.	P.
At 1st July, 1952 .. .. .		241	764,684	0	27
Proclaimed 1-7-52 to 30-6-53 .. .. .		1	295	0	0
V.C.L. added to existing reserves .. .. .		..	280	1	33
		242	765,259	2	20
1 reserve rescinded for inclusion in adjacent National Park .. .. .		1	..		
<b>Total at 30th June, 1953 .. .. .</b>		<b>241</b>	<b>765,259</b>	<b>2</b>	<b>20</b>
<b>Total Reservations at 30th June, 1953 .. .. .</b>		<b>..</b>	<b>8,616,114</b>	<b>3</b>	<b>34.8</b>

## APPENDIX P.

## Expenditure. Surveys, Year ended 30th June, 1953.

## Particulars of Survey—

## Harvesting and Marketing Project—

	£	s.	d.
Survey Prints, Maps and Mountings			
Class 3 Surveys, Reserve 67, Bundaberg	1,120	13	1
Forest Inventory Survey, Reserve 67, Bundaberg	135	17	11
Forest Inventory Survey, Reserve 169, Bundaberg	2	6	5
Class 2 Survey, Cotherstone, Clermont	517	18	11
Forest Inventory Survey, Reserve 16, Dalby	2,332	19	9
Forest Inventory Survey, Reserve 78, Dalby	16	11	6
Forest Inventory Survey, Reserve 150, Dalby	7	3	10
Forest Inventory Survey, Reserve 154, Dalby	11	17	6
Forest Inventory Survey, Reserve 155, Dalby	31	18	10
Forest Inventory Survey, Reserve 184, Dalby	3,892	19	2
Resumption Survey, Dalby	4,251	1	7
Forest Inventory Survey, Reserve 242, Gympie	2	11	10
Forest Inventory Survey, Reserve 392, Gympie	148	11	6
Forest Inventory Survey, Reserve 393, Gympie	66	2	4
Forest Inventory Survey, Reserve 502, Gympie	668	2	7
Forest Inventory Survey, Reserve 627, Gympie	18	5	0
Class 2 Survey, Reserve 343, Monsildale	1,007	1	11
Forest Inventory Survey, Reserve 137, Kilooy	139	3	1
Surveys, Reserve 67, Kilkivan	10	10	0
Inspections of Exotic Areas—Mackay	42	9	11
Class 1 Survey, Reserve 6, Cauley	3	2	0
Forest Inventory Survey, Reserve 57, Maryborough	642	10	7
Forest Inventory Survey, Reserve 435, Gundiah	8	5	0
Forest Inventory Survey, Reserve 915, Maryborough	669	17	5
Forest Inventory Survey, Reserve 435, Mary Valley	44	2	11
Forest Inventory Survey, Reserve 318, North Coast	327	16	3
Forest Inventory Survey, Reserve 445, North Coast	1,231	0	2
Forest Inventory Survey, Reserve 583, North Coast	1,482	3	6
Survey Camp Carr, North Queensland	184	12	8
Survey Camp Arnold, North Queensland	1,563	9	7
Road Investigation Survey, Mount Lewis Road	1,370	9	7
Investigation Survey, Reserve 30, Riflemead	317	1	5
Class 2 Survey, Reserve 755, Bartle Frere	61	7	2
Class 1 Survey, Reserve 194, Herberton	138	18	9
Road Survey, Reserve 557, Danbulla	15	8	6
Road Survey, Reserve 772, Danbulla	396	16	6
Levels, Reserve 185, Danbulla	37	2	5
Class 2 Surveys, Reserve 55, North Queensland	197	8	11
Class 2 Surveys, Vacant Crown Lands, Palmerston	0	14	2
Class 2 Survey, Whyanbeel	33	4	7
Russell River Road Survey	221	11	3
Malaan Suttie's Gap Road Survey	10	16	0
Road Survey, Warwick	1,922	0	11
Forest Inventory Survey, Reserve 215, Redlands	366	7	2
Forest Inventory Survey, Reserve 3, Fraser Island	49	2	4
	232	15	2
	<u>£25,952</u>	<u>11</u>	<u>7</u>
Reforestation Branch Projects— As Detailed in Appendix H.	20,935	4	8
Total	<u>£46,887</u>	<u>16</u>	<u>3</u>

## APPENDIX Q.

## Distribution of Personnel 30th June, 1953.

Salaried Officers	307
Other Employees	1,615
	<u>1,922</u>