QUEENSLAND.

ANNUAL REPORT

OF THE

SUB-DEPARTMENT OF FORESTRY

FOR THE

YEAR 1954-55.

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Report of the Director of Forests for the Year ended 30th June, 1955.

INTRODUCTION.

During the year the Department functioned smoothly and efficiently and advances can be recorded in a number of directions.

A concerted effort was made to examine the results of silvicultural research work and routine practice with the object of improving current procedures.

For the North Queensland rain forests a new set of rules covering the marking for logging and silvicultural treatment was formulated. These were put into effect on a number of State Forests. It is unfortunate that much of North Queensland that must be devoted to the growth of the valuable North Queensland timbers has not yet been permanently reserved for timber production by gazettal as State Forest. This limits the general application of sound silvicultural practice. The Department cannot initiate silvicultural work on areas that may later be diverted to other forms of land use. The practical recognition of this fact by the gazettal of adequate State Forest areas in North Queensland is essential if the Department is to make effective use of North Queensland forests—and to perpetuate the important sawmilling industry in that part of the State.

In South Queensland a critical review was made of the procedures to be followed in establishing and managing Hoop Pine plantations, and the available knowledge has been condensed into a booklet on Hoop Pine Technique, for the guidance of all officers dealing with this species.

Cypress Pine procedures have also been subject to review and revised rules for marking for logging and silvicultural treatment have been issued.

It is the aim of the Department to avoid any lag in applying the results of research work in practice and these revisions of procedures should result in increased efficiency of forestry operations in the forest types dealt with.

On the marketing side, the extremely wet conditions that prevailed throughout most of the year greatly hindered logging. This is not without compensation as there is considerable difficulty in preventing the overcutting of Queensland's inadequate forest resource.

The relative pricing of Crown log timber was improved during the year by the gazettal of new log prices for the Mackay District. The prices were based on mill studies, and are now much more realistic than the previous prices. It is the aim of the Department to price Crown log timber so that there is a sound relationship from district to district, bearing in mind the desirable directions of timber movement. In addition, every endeavour is made to have a sound relationship between the price of log timber and sawn timber so that the sawmiller can secure a reasonable recompense for his part in production; and also to return to the State, and hence the people of Queensland, the fair value of the product of the forest.

Ringbarking of useful or potentially useful timber on leasehold lands has for a long time been a major concern of the Department. During the year there were several serious cases of ringbarking without permits, or in violation of the conditions of the permits. These occurred mainly in districts in which reliance for the production of local supply must be largely on timber from leasehold lands. Queensland is so short of timber that it cannot afford indiscriminate waste of either the present or future crop. It is hoped that interdepartmental investigations initiated by the Board will result in an improvement in the control of ringbarking. It is essential that ringbarking permits be issued with discretion, and that closer supervision be exercised over ringbarking on leasehold areas. Furthermore, the preservation of selected stems of commercial species from the regrowth following ringbarking on areas that should contribute to the State's future timber needs, is a matter of grave importance. To this end, the appointment of a number of officers to deal specifically with ringbarking has been recommended.

The importance to the State of maintaining timber production on areas other than permanent forestry reservations, which are being used for the dual purpose of timber production and grazing, is not sufficiently recognised. This applies particularly to hardwood and Cypress Pine areas. Only 60 per cent. of the hardwood cut on Crown land comes from permanent reservations. The respective figure for Cypress Pine is 55 per cent. Furthermore, about two-thirds of the hardwood, and one-half of the Cypress Pine cut in the State comes from private lands, which are being very heavily logged with little concern for future timber production. The timber output from privately owned areas must progressively decrease, and, even at present, the State is short of timber.

This emphasises the grave need for a careful husbandry of all timber that vests in the Crown. An important part of this resource is on leasehold lands. The co-operation of Government Departments and of the leaseholders themselves is essential if the best use is to be made of the joint resources in the interests of the State. Ringbarking on these areas must be properly practised and controlled.

REFORESTATION.

The year ended 30th June, 1955, was characterised by abnormal weather conditions over practically the whole State. The following brief notes for each month, extracted from Meteorological Summaries issued by the Weather Bureau, are of interest—

1954.

July, 10th–13th—Cyclones, accompanied by heavy rains and gale force winds, over South-Eastern District. 70 m.p.h. winds along the coast south from Bundaberg did much damage and had a bushfire scorching effect over thousands of acres of Eucalypt forest.

August—District rainfall averages were mainly 100 to over 200 per cent. above normal. On the 12th, Brisbane's maximum temperature of 50·4 degrees was the lowest on record.

September—Severe hailstorms from Brisbane to Bundaberg, with an earth tremor in a wide area of South-West Queensland.

October—District rainfall averages 100 per cent. to 400 per cent. above normal with the Peninsula North receiving the highest figures since 1892, more than 1,200 per cent. above normal.

November—Severe thunderstorms accompanied by torrential rain over the greater part of the State.

December—Severe electrical storms on the South-Eastern coastal region, with heat wave temperatures in the Western half of the State.

1955.

January—Heat wave temperatures prevailed in the Western half of the State, with severe thunderstorms along the coastal strip.

February—Torrential rains in Northern and Central Queensland with falls of up to 45 inches in the first 12 days of the month.

March—Two cyclones crossed the coast during this month. The first crossed between Carmila and Mackay on the 7th and the second 35 miles north of Bundaberg on the 27th. Heavy flooding occurred in all affected areas, with severe flooding in the Mary and Brisbane Rivers. Flooding of the Mary River caused much damage to the towns of Gympie and Maryborough whilst a steel and concrete railway bridge was destroyed in the Brisbane Valley.

April—Rainfall in most parts of the State well above average.

May—General heavy rains with most centres recording record May totals.

June—Rainfall at most centres above average.

As an indication of the abnormal rainfall received during the year the following figures for Yarraman and Beerwah—the centres of large reforestation operations—are quoted—

	Yarraman.	Beerwah.
July	612	1,651
August	316	336
September	218	245
October	495	782
November	451	459
December	145	304
January	404	580
February	484	614
March	912	2,485
April	501	887
May	564	777
June	181	160
	5,283	9,280
Average for 20 years	29·9	61·5

Although the year has been most favourable as regards rainfall, and the resulting almost nil expenditure on fire patrol and fire fighting, the high rainfall and gale force winds have resulted in delayed and poor scrub burns, prolific weed growth on all plantation areas, heavy expenditure on the straightening and firming of wind-blown trees and extensive damage to roads and bridges. The amount of wet time has also greatly reduced the amount of effective work that should have been carried out in plantation and forest areas. Despite these difficulties a larger programme of work than for 1953–54 was carried through. Details of the work performed are as follows :

	1953–54. Acres.	1954–55. Acres.
Area of natural forest treated	25,921	28,792
Area of plantation established	5,092	5,095
Area covered in pruning	7,980	8,038
Area tended	33,471	40,095
Area thinned merchantably	1,808	2,500
Area thinned unmerchantably	1,683	1,932

The demand for plantation thinnings has remained buoyant throughout the year and removals are as follows :

	1953–54. Sup. Ft.	1954–55. Sup. Ft.
Native Conifers	7,346,927	9,080,019
Exotic Conifers	4,098,780	4,999,186
Other Species	9,515	31,886
	11,455,222	14,111,091

It will be noted that the total cut has increased by 2,656,000 super. feet on that for 1953–54 and, of this, the increase in the cut of native conifers has been responsible for 1,734,000 super. feet. Total cut of plantation thinnings to date now becomes 83,173,627 super. feet.

Plantations—Appendix I. shows, by districts and species, the areas planted from 1st April, 1954, to 31st March, 1955. The total area planted for the year was 5,094·8 acres made up as follows:

	Acres.
Native Conifers (chiefly Hoop Pine)	1,556·1
Exotic Conifers (mainly Slash Pine, *P. taeda*, *P. patula* and *P. radiata*)	3,516·1
Broadleaved species	20·0
Eucalypts	2·6
	5,094·8

The total area of effective plantation is now 67,273·3 acres and of this 37,486·6 acres comprise native conifers and 25,647·5 acres exotic conifers, the balance is made up of other species, chiefly Eucalypts and Silky Oak.

As mentioned earlier in the report, abnormal weather conditions rendered the burning of felled areas most difficult and in many cases the poor burns secured resulted in high stacking and burning costs. The difficulty of securing sufficient contractors for scrub and forest felling also compelled the use of some inexperienced day labour fellers, with resultant higher felling costs than usual.

Planting conditions, generally, were favourable and very little refilling was called for in respect of new areas. The winter 1955 planting at the Toolara State Forest was delayed, as all available labour was concentrated on the straightening and firming of young plants—1 to 3 years of age—which had been affected by the heavy winds of March and April.

Heavy rat damage was sustained in the Hoop Pine plantations on various reserves in the Brisbane Valley during the winter of 1954 and approximately 140,000 plants were required as refills on these areas.

Despite the tending of over 40,000 acres of plantations, the abnormal season has been responsible for an unprecedented growth of weeds and at the close of the report period many areas were badly in need of further tending. The growth of lantana in the thinned Hoop Pine areas has been phenomenal. Another plantation weed which has made exceptional growth, and which has spread over some 1,500 acres of Hoop Pine plantation in the Brisbane Valley, is the Mexican Rubber vine (*Araujia albens.*) The vine has been located as scattered occurences in all Hoop Pine planting areas and every effort is being made in these centres to prevent the vine assuming pest proportions. Investigations into the control of the vine, using selective weedicides, are in progress.

Good progress has been made with pruning and during the year some 8,038 acres o plantations were covered. Details are as follows :

	Acres.
First operation	1,931
Second operation	533·5
Third operation	911·0
Fourth operation	4,131·5
Combined second and third operations	100·6
Combined third and fourth operations	430·5
	8,038·1

In addition, 3,102 acres of plantations were covered for the removal of epicormic shoots.

Thinning removals totalled 14,110,000 superficial feet and unmerchantable thinnings were applied to 1,932 acres of exotic pines.

Seed Collection.—(*A*) *Araucaria cunninghamii*—No collection of Hoop Pine seed was possible during the year.

Stocks held in the Departmental cold stores at Rocklea are being subjected to further germination tests and, from results to date, it would appear that the average drop in viability will be less than 5 per cent.

At 30th June, 1955, stocks of Hoop Pine seed in cold storage were :—

Collected 1953.

L.G.C.	Amount. lbs.
– 20 per cent	5,739
20–30 per cent.	8,718
30–40 per cent.	10,734
40–50 per cent.	24,038
50 per cent. +	5,463
	54,692

Collected 1950.

L.G.C.	Amount. lbs.
Average L.G.C. of 15 per cent.	7,000
	7,000

An average annual sowing of Hoop Pine absorbs just over 8,000 lbs. of seed, so that stocks on hand are sufficient, assuming no appreciable drop in viability, for at least 7 years.

(*B*) *Pinus Species.*—The total quantity of Pinus seed collected from our plantations during the year was 330 lbs., and is considerably less than the 1953–54 collection. This can be attributed to the fact that a surplus collection of *P. elliottii* was made the previous year and sufficient stocks are held to meet expected requirements.

Details of collection are shown by species :—

Pinus elliottii	250 lb. including 93 lb. from select trees
Pinus taeda	15 lb. all from select trees
Pinus patula	45 lb. all from selected trees
Pinus radiata	10¾ lb. all from selected trees
Pinus longifolia	10 lb. all from selected trees

Subsequent to a poor yield, much lower than anticipated, from select trees of *P. radiata*; efforts are being made to arrange further collection from trees of good form.

Thinning around elite trees in the older stands is being continued in an effort to promote greater crown and cone development.

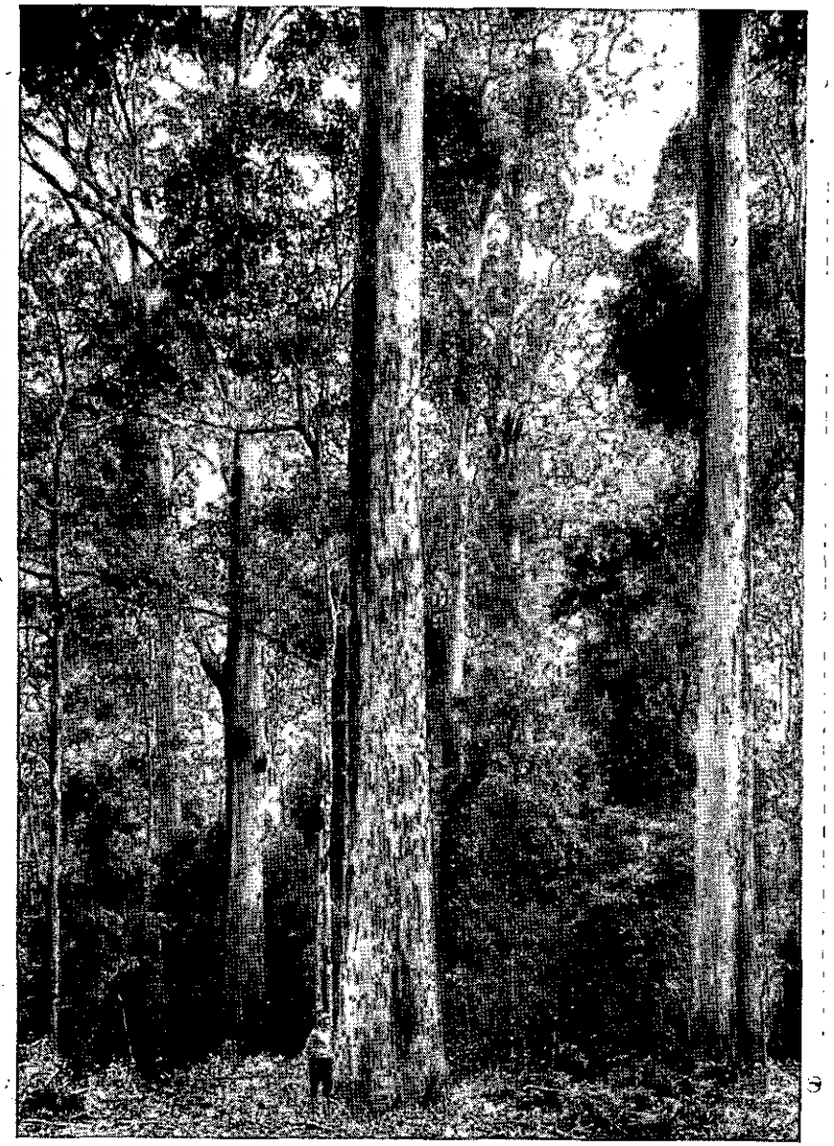
(*C*) *Eucalyptus Species.*—Following the steady demand from interstate and overseas buyers for seed of the principal commercial and special purpose eucalypts, collections were made in order to maintain reserve stocks at sufficient level to meet both Departmental and outside requirements.

Collection totalled 43 lbs., comprising fifteen species.

At 30th June, 1955, stock totalled approximately 135 lbs. representing 43 species.

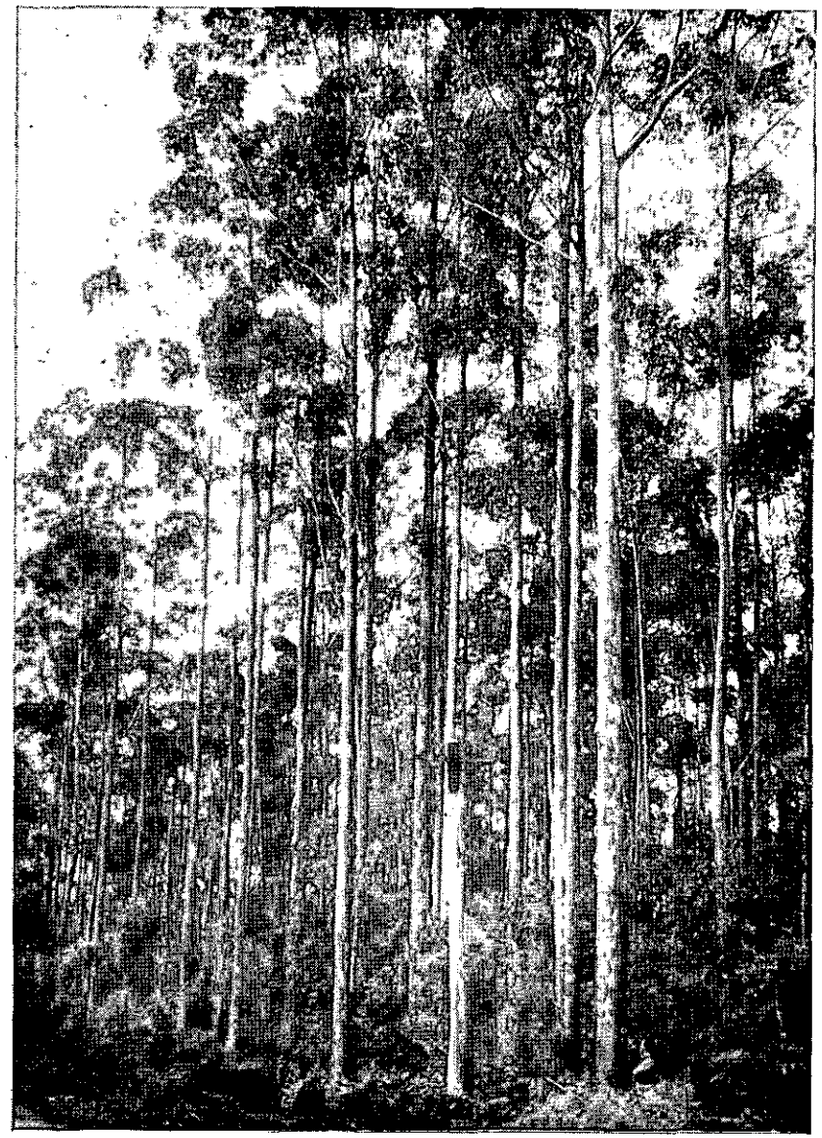
(*D*) *Miscellaneous Species.*—Seed of numerous species was obtained for trial plantings and for the production of stock of ornamental, shade, and fodder species for Departmental and public use. The seed was obtained from various sources, including Departmental collections, Brisbane and Rockhampton Botanical Gardens, Brisbane City Council, National Parks staff, and from other Forest Services, to all of whom we are grateful.

THE OLD.



Excellent Specimen of Blackbutt (Eucalyptus pilularis), **280-inch g.b.h. on a Crown Forest.** In the past year 76,000,000 super feet. of hardwood mill logs were cut from Crown lands.

THE NEW.



Natural Regeneration of Blackbutt following Logging. During 1954-55, 15,664 acres of Eucalypt forest were given natural regeneration treatment.

Departmental seed movements during the past year are as follows:

SEED MOVEMENTS, 1954–55.

Subject.	Species.											
	Eucalyptus.		Pinus.		Araucaria cunninghamii.		Agathis robusta.		Miscellaneous.		Total.	
	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.
(1) Departmental Seed Collection	43	0	330	0	..		..		250	0	623	0
Total	43	0	330	0	..		..		250	0	623	0
(2) Purchase of Seed—												
(a) Ex Private Individuals	..		..		..		..		1	5	1	5
(b) Ex Other State Services	1	8		8	..		..		5	5	7	5
(c) Ex Overseas	..		*57	8	..		..		25	0	82	8
Total	1	8	58	0	..		..		31	10	91	2
(3) Sale of Seed—												
(a) Private Individuals ..	1	9		6	47	0	..		1	8	50	7
(b) Interstate		3	56	0	23	8	..		20	4	99	15
(c) Overseas	10	5	89	8	†4,836	0	..		50	4	4,986	1
Total	12	1	145	14	4,906	8	..		72	0	5,136	7
(4) Departmental Sowings—												
(a) Rocklea Nursery ..	3	11		8	..		‡20	0	18	0	42	3
(b) All Nurseries (excluding Rocklea)	3	9	208	0	8,015	0	171	0	8	12	8,406	5
Total	7	4	208	8	8,015	0	191	0	26	12	8,448	8

* Mainly *P. caribaea* ex Caribbean Region.

† Mainly export to Hong Kong.

‡ Thick sowing of seed of very low L.G.C.

Nurseries.—A new high shade Hoop Pine nursery is under construction in North Queensland and section of the nursery was sown with seed this year. The number of nurseries in production thus becomes 29, an increase of one since last year. Extensions were carried out to the Hoop Pine nurseries at Jimna, Kalpowar, and Builyan and to the exotic pine nursery at Bowenia. Bed size, layout and the watering system at the Beerwah nursery have also been re-designed and considerably improved.

Stock produced by all nurseries was most satisfactory and there should be no difficulty in maintaining this condition at the 29 nurseries. Hoop Pine planting stock is produced by 20 nurseries, exotic pine stock by 7 nurseries, Eucalyptus stock by 1 and 1 nursery, i.e., Rocklea, is responsible for the production of shade, fodder, ornamental, and miscellaneous planting stock.

The use of filter press of suitable Ph. value has now become standard practice in all exotic pine nurseries for the maintenance of bed fertility, and its use should help to reduce weeding costs—a major factor in the cost of production. Weeding costs should be still further reduced by the introduction of white spirit as a pre- and post- emergent weed control in these nurseries. In Hoop Pine nurseries the use of white spirit as a pre-emergent spray for weed control has been approved, but its use as a post-emergent control has been postponed pending the results of further experimental work.

The number of plants on hand at 30th June, totalled 7,497,000 while, during the year, 4,259,000 plants were despatched to plantations, school forest plots, and supplied to the public.

Regeneration Treatment of Natural Forest.—There has been a slight increase in the acreage of natural forest treated during the year, the details for 1953–54 and for this year being as follows:

	Acres. 1953–54.		Acres. 1954–55.
Hardwoods	14,611	..	15,664
Cypress Pine	10,919	..	12,145
Tropical Rain forest	391	..	608
Natural Hoop Pine	..	..	375
	25,921	..	28,792

The acreage treated during 1954–55 includes nearly 17,000 acres of forest treated for the first time. During the year the treatment rules for Cypress Pine were revised, the major alteration being with respect to spacing. Work on the treatment of tropical rain forest has continued, but the shortage of skilled labour required for this class of work has greatly curtailed operations.

A considerable amount of day-labour logging has been carried out in the hardwood forests of South East Queensland and although this work is not recorded as treatment it is actually a silvicultural treatment in so far as it aims at the removal of the large, overmature stems by felling—stems which the contract feller prefers to by-pass.

Supply of Trees to the Public.—Sales to the public totalled 213,563, distributed as follows :

By Species.		By Purchases.	
Slash Pine	94,187	Farmers	160,254
P. taeda	13,761	Schools	6,019
P. patula	3,927	Private	41,704
P. radiata	2,809	Government Departments	5,586
Hoop Pine	56,345		
Miscellaneous	42,534		
	213,563		213,563

Research.—During the year the number of trained officers engaged full time on research was increased to 11 by the return from America of the officer engaged on Tree-Breeding work and the retention of the officer who had relieved during his absence. The Department is deeply appreciative of the courtesy and ready assistance extended to him in all countries visited.

Trained research officers are located as follows : North Queensland (3), Mary Valley (1), Beerwah (3), Brisbane Valley (1), Dalby (1).

(*i.*) *North Queensland.*

A survey was made of the present position of knowledge in respect of the silvicultural treatment of the Rain Forests of North Queensland, and the information available was summarised in a paper presented at the 4th World Forestry Conference at Dehra Dun.

Field work continued along the lines of earlier reports and further plots were established dealing with the silvicultural treatment of forest types not previously covered.

Preliminary rules were formulated for the silvicultural treatment and tree marking of the rain forests of the North and these will be reviewed, from time to time, in the light of the information gained.

(*ii.*) *Coastal Central Queensland (Bowenia—23 degrees South Latitude.)*

Caribbean Pine (*P. caribaea*) is maintaining its advantage over Slash Pine (*P. elliottii*) in this area and the oldest plots, now 6 years old, have reached the stage for first pruning. After thinning to 400 per acre the average figures for height and girth are 23 feet 2 inches and 14·1 inches respectively.

Both small and large scale ploughing experiments continue to make encouraging growth.

Following its promising growth in the arboretum, a further series of plots of *P. tropicalis* has been established. This species appears to be well adapted to the locality.

(*iii.*) *South Queensland.*

(*a*) *Tree-Breeding—Slash Pine.*—During the year 190 successful grafts, representing 12 parent trees, were established in the seed orchard at a spacing of 24′ x 24′. Grafts were randomised as individuals and cover an area of over 2 acres.

Action was taken to extend the seed orchard clearing so that a net area of 20 acres is available for planting and to provide improved protection.

At the close of the year female cones were developing on grafts established in 1952 and transferred to the orchard in 1953.

To handle an increased grafting programme, embracing *P. caribaea* as well as *P. elliottii*, a lath house was erected in the Beerwah nursery and in the 1955 season approximately 1,000 grafts were attempted.

THE FUTURE CROP.

Natural Regeneration of Maple. A vigorous programme of improvement and natural regeneration treatment has commenced in the North Queensland rain forests.

THE VIRGIN FOREST.

Queensland Maple (Flindersia brayleyana) **14 feet g.b.h. in a North Queensland Forest.**

In March, 1954, 30 lbs. of seed were collected from a progeny test established in 1945 with stock from the controlled pollination of 3 selected parents. On germination, a number of albino plants appeared. This is similar to happenings with stock from selfed seed. The remaining plants developed normally and by winter 1955 were comparable with routine plants in the nursery. It was decided to widen the planting spacing to 9′ x 9′ (routine is 8′ x 8′) with this stock and an area of approximately 500 acres was covered.

A third series of observations was made on Free Growth Experiments to study the effect of spacing on seed production and the results outlined in the last report were confirmed. These observations, together with those on Loblolly and Hoop Pine, have been written up as a Research note to be issued shortly.

Caribbean Pine.—This species has made excellent growth in trial plots, especially within the tropics. Its form is, however, greatly inferior to that of Slash Pine and there is urgent need for work on strain improvement if maximum use is to be made of this species. Therefore, the older plots (1948 and 1949 plantings) have been combed for plus trees and 28 located. From these over 500 grafts were attempted at Beerwah. For this species a seed orchard is proposed at Bowenia.

Loblolly Pine.—During his stay in the United States of America the officer-in-charge of Tree Breeding secured, with the assistance of local investigators, seed representing 12 widely separated localities covering the range of occurrence of this species. Using stock from seed of local origin as control, a comprehensive series of plots has been established at Beerwah. Selected provenances were used in smaller experiments at Tuan and at Passchendaele. At time of lifting for transfer to the field considerable differences were evident in the nurseries and average height of stock ranged from 15·9″ (Louisiana) to 8·5″ (Maryland).

P. radiata.—Arrangements are in hand to obtain from New Zealand scions and established grafts from some of the elite trees being used in that country.

Kauri Pine.—It has been confirmed that root shoots can easily be obtained where tubed stock are permitted to root into the nursery bed and the root is severed at lifting. This will provide an effective method of vegetation reproduction once a plant is established in the nursery. To use this method, grafting is of no avail and therefore work is being concentrated on production of cuttings. Early attempts at air layering were unsuccessful but the work is continuing.

Hoop Pine.—The most important development with this species was the successful grafting of scions from 15-year old trees. Second order branches, from near the top of the tree, were used. Grafts made in October showed 56 per cent. still surviving. It remains to be seen whether these will continue to grow with a branch habit or if they can be induced by staking to develop into normal apical shoots. With this species, which produces seed at approximately four-yearly intervals and has proved almost impossible to strike with cuttings from old trees, this advance could accelerate strain improvement work.

(*b*) *Exotic Pines.*—Establishment of the large scale drainage experiment at Tuan, using *P. elliottii*, was completed with the planting of a further 50 acres. This brings the area involved in this planting to approximately 150 acres, planted in three years, 1953, 1954, and 1955. The health and development of the earlier plantings are encouraging and, if maintained, would indicate that large areas of the type covered could be planted successfully.

The large scale tending trial established with 2, 4, 5–T ester, referred to in last year's report, has given reasonable control of Eucalypt and Wattle regrowth. Results, however, are not such as permit its economics to be determined at this stage and it will be necessary to follow tending costs over the next few years. Further small-scale trials indicate that an earlier application of the treatment (March-April), following a November burn, should give better results and arrangements are in hand for a further large-scale trial to be initiated in the coming year.

The use of white spirits as a weedicide has been adopted in routine nursery practice. Aromatic content of the spirit used is about 20 per cent. and rate of application about 50 gallons per acre. Bed preparation and manuring are timed to permit the development of the major weed crop before the germination of the pine seed. A month after the completion of germination of the pine, white spirits can again be used without harm to the seedlings. . .

Manuring experiments involving the use of filter press and cow manure continue to show similar results from application of equivalent volumes of each.

Maintenance of long term experiments, and the establishment of new series to determine the most satisfactory thinning schedule for Slash Pine, continue to be the most important phase of the work conducted at Beerwah. During the year a Research Note was issued setting out the present status of this work. It is hoped that the series of experiments established in 1951 with a basal area control will provide basic data to permit evaluation of a range of treatments beyond that which can be covered in field experiments with the area and staff available. Examination of data from existing experiments shows a good correlation between standing basal area and basal area increment. From age 13 to age 27 years (the oldest Slash in Queensland) near maximum basal area increment is given over a wide range of standing basal areas from 120 to 180 sq. ft. With *Pinus patula* there are reliable indications that this range is considerably more restricted in extent and that maximum basal area increment in normal years is put on as low as 80 to 90 sq. ft. standing. This is shown by the following figures taken from Experiment 1334 at Pechey. Each figure is the average for two plots.

Standing Basal Area 1952.	Basal Area Increment.		
	1952–53.	1953–54.	1954–55.
	Sq. ft.	Sq. ft.	Sq. ft.
123 square feet	8·8	5·4	7·2
104 square feet	8·3	6·1	7·7
74 square feet	7·9	4·9	9·6
63 square feet	7·7	4·6	9·1

(*c*) *Hoop Pine.*—The only nursery experiments being continued in Hoop Pine areas are those which involve weed control and those which aim at finding the rate of manuring necessary to maintain nursery fertility. Indications are that applications prior to sowing, at two yearly intervals (Hoop is a 2 year crop), of from 10–20 tons of cow manure per acre will maintain fertility at a satisfactory level. Use of white spirits as a pre-emergent weedicide has greatly reduced early weeding costs and has been adopted in routine. Further work remains to be done to determine if and when it is safe to use white spirits as a post-emergent spray. Interesting results were obtained from the use of "Crag" Herbicide No. 1 as a post-emergent weedicide. This material, based on 2, 4–D ethyl sulphate, shows no herbicidal properties until broken down by soil micro-organisms to 2, 4–D when it becomes toxic to germinating weeds. At Yarraman it greatly reduced weed development and prevented, in the treated plots, a heavy development of Erigeron. Cost of the compound is not known and therefore the economics of treatment are uncertain.

In the field the principal work lies in the maintenance of a series of thinning experiments at Imbil and Yarraman. The stage has been reached where a critical review of thinning schedules is justified and it is intended that this be made the subject of a Research note in the near future.

Work is under way on the production of a yield table for Hoop Pine and this should soon be completed. Using as site index the average predominant height at age 25 years, the following average indices were obtained for areas in which Hoop has been planted.

District.	Average Site Index.
Brisbane Valley	75·6 feet
Mary Valley	84·2 feet
Monto	78·6 feet
Gallangowan	77·2 feet
North Queensland	105·8 feet

The spread of *Aruajia albens* (Rubber Vine) in the Brisbane Valley over the past 5 years has caused great concern and a number of experiments have been established in the past year in an effort to achieve chemical control using a number of 2, 4, 5–T formulations.

Most promising results have been obtained by the use of "Agserv" experimental formulation 2122. This has greatly reduced the numbers and the vigour of the survivors, but the cost is prohibitive, because of the number of applications necessary to give any degree of practical control.

Amizol, which acts by preventing chlorophyll formulation, has shown great promise in a single preliminary trial. Further experiments will be carried out with this material.

In December, 1953, there was a heavy and general seed-fall of Hoop Pine and a series of experiments was laid down in R. 169 St. Agnes in an effort to assist the establishment of natural regeneration. Treatments involved brushing of scrub species, brushing and burning before seed fall and brushing to reduce canopy after germination was obtained. In some plots regeneration recorded was over 200,000 per acre, with the highest figures on the brushed and burnt plots. Despite excellent weather conditions, which should have been most favourable to survival, in only 17 out of 72 plots has any regeneration persisted and the highest survival is 60,000 per acre. In general, the untreated control has higher numbers of survivors than the treated plots and of the 17 plots quoted as having stocking 12 are in the untreated. Main causes of deaths of seedlings have been insolation, drought, browsing by wallabies and chewing by grasshoppers. Similar observations were made in the Yarraman district in standing rain forest and under plantations.

Under-planting of rain forest with Hoop Pine at St. Agnes, where a natural regeneration system is in effect, has given variable results. Survival has been good but growth is slow. In some plots severe damage has resulted from wallabies. Hormones (2, 4, 5–T ester) have been used to control scrub regrowth where established plants are being liberated and the results have been good. Use of the butyl ester in oil as a basal paint has given promising results.

Trial plots were established of *Cunninghamia lanceolata* to test its suitability as a plantation species both in frosted and frost free sites. Survival has been excellent. Plots were also established with Parana Pine (*Araucaria augustifolia*). No difficulty was experienced in handling the stock along lines standard with Hoop Pine and the development in the nursery and the field has been better than that of Hoop.

(*d*) *Coastal Hardwoods.—Euc. pilularis—Thinning Experiments.* The Blackbutt thinning experiments referred to in the 1952–53 report were measured during the year and a comprehensive report prepared for publication as a Research Note. Interpretation of the results was made in terms of the value of wood material standing at various spacings, using data obtained from mill studies. The effect of this approach is shown in the table below, which contrasts volumes and values for the three experiments at age 31.

Spacing.	Standing volume per acre. (cubic feet.)			Standing value per acre. (pounds.)		
	Expt. 1.	Expt. 100.	Expt. 101.	Expt. 1.	Expt. 100.	Expt. 101.
16 feet x 16 feet	4,650	3,800	5,150 } 2 plots 3,510 }	41	21	53 } 2 plots 10 }
20 feet x 20 feet	3,970	3,670	3,900	51	41	58
25 feet x 25 feet	3,860	3,580	3,780	90	73	92

It is clear that consideration of volumes alone, without taking into account the rapid increase in value with size in material of this type, can be misleading.

Use of 2, 4, 5–*T*.—Experiments with 2, 4, 5–T in the thinning of natural regeneration of Blackbutt were continued. A large scale trial was established to obtain information on the cost of applying 2, 4, 5–T solutions to stumps in conjunction with standard treatment. An 0·5 per cent. water solution of 2, 4, 5–T amine salt was used, and stump height kept to a maximum of 12 inches. Costs for the treated block were :—

Labour—		
Axework (equivalent to normal treatment)	£2 15 3	per acre
Applying 2, 4, 5–T	£1 1 3	per acre
	£3 16 6	per acre
Materials	0 3 10	per acre
Total	£4 0 4	per acre

The use of 2, 4, 5–T has resulted in a 45 per cent. increase in costs over those for normal treatment.

Assessment of the block treated with 2, 4, 5–T indicates a kill of 75 per cent. and 80 per cent. respectively, with Blackbutt and Smudgee (*Angophora woodsiana*), which are the most important species on the area. On the control block (normal treatment only) all stumps are coppicing vigorously.

Excellent results were obtained in a further trial with injections of 5 per cent. 2, 4, 5–T butyl ester in distillate. With a rate of application of one injection of 3 ccs. of solution to each 5″ girth an overall kill of 98 per cent. was obtained. The only species in which a 100 per cent. kill was not obtained were Smudgee (*Angophora woodsiana*), Bloodwood (*Euc. intermedia*) and Grey Ironbark (*Euc. drepanophylla*). For these species the kill was 93 per cent., 80 per cent., and 91 per cent. respectively, and those stems which were not killed completely had their crowns so severely injured that they no longer constitute effective members of the stand.

Prescribed Burning.—Observations in the two prescribed burning experiments in the Maryborough district have continued. Three successful burns have now been effected at R. 958 Gundiah, with the proportion of the compartment actually burnt decreasing on each occasion :—

Year.	Percentage of Area Burnt.
1952	90
1953	65
1954	45

At R. 57 St. Mary no further burns have been carried out, but one is proposed in the near future.

Girth increments over the period 1954–55 for the principal species involved in the two experiments are set out below :—

Species.	G.B.H. Increment 1954–55—inches.			
	R. 958 Gundiah.		R. 57 St. Mary.	
	Unburnt.	Burnt.	Unburnt.	Burnt.
Spotted Gum	·55	·68	·33	·93
Grey Ironbark	·48	·57	·76	·94
Red Ironbark	·89	·58	·49	·97

Height increments on the smaller stems (up to 40′ in height) since inception of the experiments are as follows :—

Species.	Height Increment 1952–55 (feet.) Height Class (feet.)							
	0–10 feet.		10–20 feet.		20–30 feet.		30–40 feet.	
	Unburnt.	Burnt.	Unburnt.	Burnt.	Unburnt.	Burnt.	Unburnt.	Burnt.
R. 958 Gundiah—								
Spotted Gum	1·83	1·33	5·42	1·13	5·05	6·53	7·50	7·36
Grey Ironbark	2·89	1·14	5·42	0·37	10·32	8·17	8·61	7·66
Red Ironbark	1·25	..	8·74	2·60	9·16	5·16	7·16	3·33
R. 57 St. Mary—								
Spotted Gum	1·64	3·24	2·48	1·02	4·00	3·70	1·60	2·14
Grey Ironbark	0·60	0·21	2·28	1·00	2·12	2·67	2·81	2·64
Red Ironbark	2·10	3·62	4·39	·77	2·83	6·58	3·90	5·16

In view of the conflicting evidence provided by girth and height increments, it is obvious that the apparent increase in girth growth must be treated with caution. A study has been undertaken to check on possible changes in form resulting from burning.

At this stage, it appears that prescribed burning in this forest type results in almost no obvious damage to stems over 20 feet in height. Damage increases in the smaller sizes. No stem below a height of 8 feet has progressed into a higher class over the 4 years since the Experiment commenced.

(iv.) South West Queensland.

The principal work in this region has been the maintenance of thinning experiments in Cypress Pine. During the year the compilation of a volume table based on g.b.h. and height was completed. This will permit the critical examination of results obtained from a number of thinning experiments which have been current for upwards of 20 years. It is hoped to complete this work within the present year.

The work conducted on the growth of shade, windbreak, and fodder trees is reaching the stage where useful information is being provided. The oldest plots are established on the property of J. F. Thomas at Brookstead on the heavy black soils of the Darling Downs. On this area the outstanding species are two which grow naturally in the south west, namely, *Acacia excelsa* (Myall) and *Acacia homalophylla* (Yarran). It is proposed to issue a Research Note dealing in detail with this and other plantings.

Protection.—The extremely good weather conditions throughout the year greatly reduced the risk of fire and also reduced the amount of burning on green breaks in the Coastal hardwood areas by almost 50 per cent. Expenditure on fire fighting, patrol and co-operative burning did not exceed £13,990, compared with an expenditure of £136,300 for 1951–52—a year of high fire hazard. Details of firebreak construction and maintenance work carried out during the year are as follows :

CLEARED BREAKS-PLANTATIONS.

	Miles.
Construction—	
Temporary Breaks	58·2
Clear	98·3
Rotary Hoe	6·0
Grade	47·6
Scrub Break Improvements	22·0
Maintenance—	
Chip	75·1
Burn	122·4
Rotary Hoe	287·8
Grade	579·3

CLEARED BREAKS-WESTERN FORESTS.

	Miles.
Construction—	
Cut and Grub	112·4
Stack and Burn	8·5
Improvements—	
Grub Roads	43·9
Grade	96·5
Stump	97·7
Green Strips	145·0
Maintenance—	
Sucker and Burn	360·3
Grade	541·7
Rotary Hoe	425·3

GREEN BREAKS-(COASTAL HARDWOOD AREAS).

	Miles.
Construction—	
Fell dangerous trees	12·1
Stack and Burn	5·1
Improvements	14·4
Roads	59·5
Maintenance—	
Chip and/or plough	1,436·8
Burn	682·0
Roads	361·8
Grade	575·7

Capital Improvements.—During the year, 9 barracks for the accommodation of single men were constructed but, unfortunately, it was not possible to commence the provision of a higher standard of housing for married men living on the job with their families.

Details of the main improvements constructed are as follows :

IMPROVEMENTS CONSTRUCTED.

Item.	Completed 1954–55.
Barracks (6 man)	9
Ranches	1
Offices	2
Store rooms	5
Garages	19
Sheds	12
Lookouts	2
Camp Rigs	10
Galley–Shower–Laundries (Combined)	11
Bathrooms	2
Showers	1
Galleys	1
Lavatories	3
Huts	6
Gantries	2
Chinamen	3
Magazines	1
Grids and Culverts	46
Bridges	14
Water Supply	2
Telephone Lines	24 miles.
Telephones installed	5

Expenditure and Labour.—Expenditure on reforestation works was £1,403,864 which represents an increase of approximately £307,568 on the figure for 1953-54.

Details are recorded in Appendix H but the major headings of expenditure were:—

	£
Plantations	293,019
Natural Regeneration	36,885
Nursery expenses	42,321
Research	27,171
Surveys	17,325
Protection	219,672
Capital improvements	91,704
Tools, tents, supervision, &c.	265,598
Wet time, holidays, leave	182,008
Cartage of rations	14,983
Camping allowance	102,526
Pay Roll Tax	27,060
Worker's Compensation	32,706
Seed collection and storage	2,105
Miscellaneous	48,781
	£1,403,864

The wages staff on reforestation, 1,499 at the beginning of July, increased steadily throughout the year and at the close of the year was 1,582.

ACQUISITION OF LAND.

During the year 1954-1955 an amount of £9,645 9s. 5d. was expended on the acquisition of land for Forestry purposes, as follows:

	£	s.	d.
Purchase of land	7,790	16	5
Compensation paid for Resumptions	362	2	6
Survey and Real Property fees and Stamp duty	1,182	3	4
Miscellaneous	310	7	2
	£9,645	9	5

Ten properties, covering an area of 2,205 acres 3 roods, were purchased and seven areas totalling 55 sq. miles 233 acres and 13 perches were resumed for Forestry purposes.

FIRES.

It was a particularly good year as far as outbreaks of fire on forest reservations were concerned, 69 only being reported as on or threatening forest reservations. Below is a summary of the magnitude of these fires:—

¼ acre or less.	¼ acre to 10 acres.	10 acres to 100 acres.	Over 100 acres.	Unknown.
3	18	17	14	17

FOREST SURVEYS.

Eleven fully-equipped camps operated throughout the year, while six smaller camps were occupied on district surveys as occasion demanded.

Total expenditure for survey work amounted to £43,416 5s. 0d., of which £26,091 2s. 8d. was chargeable against Harvesting and Marketing projects and the balance, £17,325 2s. 4d., against reforestation projects.

As a result 34,686 acres were assessed (Classes 2 and 3); 72,648 acres were subjected to either firebreak, compartment, or soil survey; 54,980 acres were covered by forest inventory survey, entailing the establishment of 631 plots; 1,093 plots were re-measured and 34 detailed yield plots laid down, while 79,862 acres were closely inspected (Class I, Survey).

Mileage completed was :—

	Mls.	Chs.
Theodolite and chain	16	23
Compass and chain	705	22
Strip survey	1,114	56
Grade lines	22	25
Old boundaries	37	00
Cross sections	7	37
Road investigation	11	45

Briefly, operations in each district were :—

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

Class 3 survey on R. 99, Western, was completed by November, and the assessment of the Mount Cooroo Lands occupied a month. Approximately 1,200 acres of Yarrabah Mission (R. 204) were also assessed and completed by December.

Camp then shifted to R. 310, Gadgarra, where compartment and assessment surveys are proceeding.

A second camp was continuously occupied with road location throughout the year. Areas dealt with included R. 756, Charappa and Range, R. 353, Ongera, Culpa Lands, R. 185, Danbulla and R. 194, Barron, involving 22 miles 25 chains of grade lines and 30 miles 46 chains of compass and chain traverse.

A two-man party from No. 1 Camp was engaged in re-opening old boundaries of portions 202, 206 to 209 Japoon.

Mackay—Assessment work continued in the Springsure district until the end of November and the camp then transferred to R. 117, Aspley (Clermont district), where three Logging Areas and fourteen Compartments were run and marked by the middle of April. Compartment survey of R. 127, Blair Athol, was then put in hand, but was temporarily abandoned and camp shifted to the Blackdown Tableland, approximately 23 miles from Dingo. At the end of the report period base camp had been established and Class 2 survey of R. 5, Mimosa, was being carried out from flying camp after packing up Wafer's track.

A small camp stationed at R. 20, Maryvale, continued with compartment surveys on that reserve, while soil surveys were effected on Bayfield Holdings Nos. 3 and 4 and also on Portions 1, 20, and 26, Maryvale.

Reconnaissance of part of Manifold Holding was also carried out.

Maryborough—Soil surveys on State Forest 915, Tahiti and Bidwell, located in the central area, were continued by the two-party camp until the 3rd November, a total of 15,160 acres being dealt with. The Maryborough unit then shifted north and completed an area of 7,684 acres, involving 96 miles of stripping. In addition, 52 miles of compass and chain traverse were run in connection with unplantable boundaries, control lines, &c., and 4 miles 13 chains of theodolite control lines were laid down.

Camp engaged on coastal Forest Inventory Survey re-measured detail plots on R. 57, St. Mary, R. 12, Gungaloon and Fraser Island. On R. 958, Gundiah, 22 F.I.S. plots were also re-measured.

On 26th October camp transferred to R. 169, St. Agnes, and actual Forest Inventory Survey establishment (141 plots) was completed by 30th June.

At Gallangowan (R. 298 and R. 154) 121 Hoop Pine plots were re-measured by a second Forest Inventory Survey camp, also 55 plots on R. 220, 15 on R. 355, and 8 on R. 138.

Local camp has been strengthened for soil survey of R. 779, Gregory, and Vacant Crown Land, where approximately 11,000 acres have been stripped. Miscellaneous surveys included re-survey of eleven experimental plots at R. 355, Kilkivan, and levelling on the Warrah-Kullogum road.

Fraser Island—In addition to the re-measurement of detail plots, 7 miles 72 chains of compass traverse were run by local staff in connection with roads.

Gympie—On their return from R. 915, Tuan, early in November, the Gympie survey unit was engaged in bringing up to date the soil map of R. 1004, Toolara.

On 18th February camp was established on R. 1004, where soil and compartment survey is proceeding.

Minor district surveys were carried out on R. 124, R. 135, R. 242, and R. 451.

On 1st February a new camp was organised and was engaged on the type survey of potential Hoop Pine planting land on certain logging areas on R. 135, Brooloo.

At the end of report period Corby and East Derrier Logging Areas had been completed, plus the greater part of Cliff Logging Area. Sawpit, Doyle, East and West Coonoongibber remain to be done.

A small party ran 13 miles 71 chains of thinning roads in Derrier and West Derrier Logging Areas during the first half of report period.

Dalby—Two camps operated practically throughout the year on forest inventory and compartment survey.

The first continued with the re-measurement of Forest Inventory Survey plots on R. 61, Gideon, R. 328, Yuleba, and R. 368, Combabula, a total of 559 plots being completed. In addition, 25 detailed plots were established before shifting to Inglewood on the 9th June. R. 122, Inglewood, will be the first Warwick reserve to be dealt with by forest inventory survey.

The second camp completed inventory survey of both R. 4, Braemar, and adjoining Reserve 187, Daandine, a total of 99 plots being established. Camp was closed down, owing to sickness of Officer-in-charge, from 19th July until 28th August. On 3rd November camp was shifted to the Nudley group, comprising R. 93, Nudley, R. 288, Jingi Jingi, and R. 266, Canaga, where inventory work is proceeding. From 1st April camp was in charge of a new overseer. By the end of financial year 161 plots had been established.

Brisbane—Main work carried out was the continuation of soil and compartment surveys on R. 611, Beerwah, where 2,100 acres were dealt with. Checking of planting boundaries and other data was done for the completion of standard plan of R. 589, and R. 638. The Caloundra group (Reserves 108, 160, and 442, Bribie) was divided into Compartments and approximately 1,840 acres were stripped for soils in the Coochin Creek area on R. 561, Bribie. Two compartments were also laid out on this area. On Reserve 700 Canning, 2,000 acres were dealt with by soil survey. Miscellaneous surveys for leasing, &c., were effected on R. 525, Beerwah, R. 539, Bribie, R. 370, Durundur, and R. 60, Wararba. From January to the end of April camp worked in two-party units.

In the Kilcoy district, an area of 638 acres was enclosed by surveyed scrub firebreaks on Shallcross and Jenkinson Logging Areas (R. 637, Kilcoy), while areas for scrub felling were demarcated on Davies and Shallcross Logging Areas.

In August, Forest Inventory Camp re-measured 108 plots at Jimna (R. 207, R. 137).

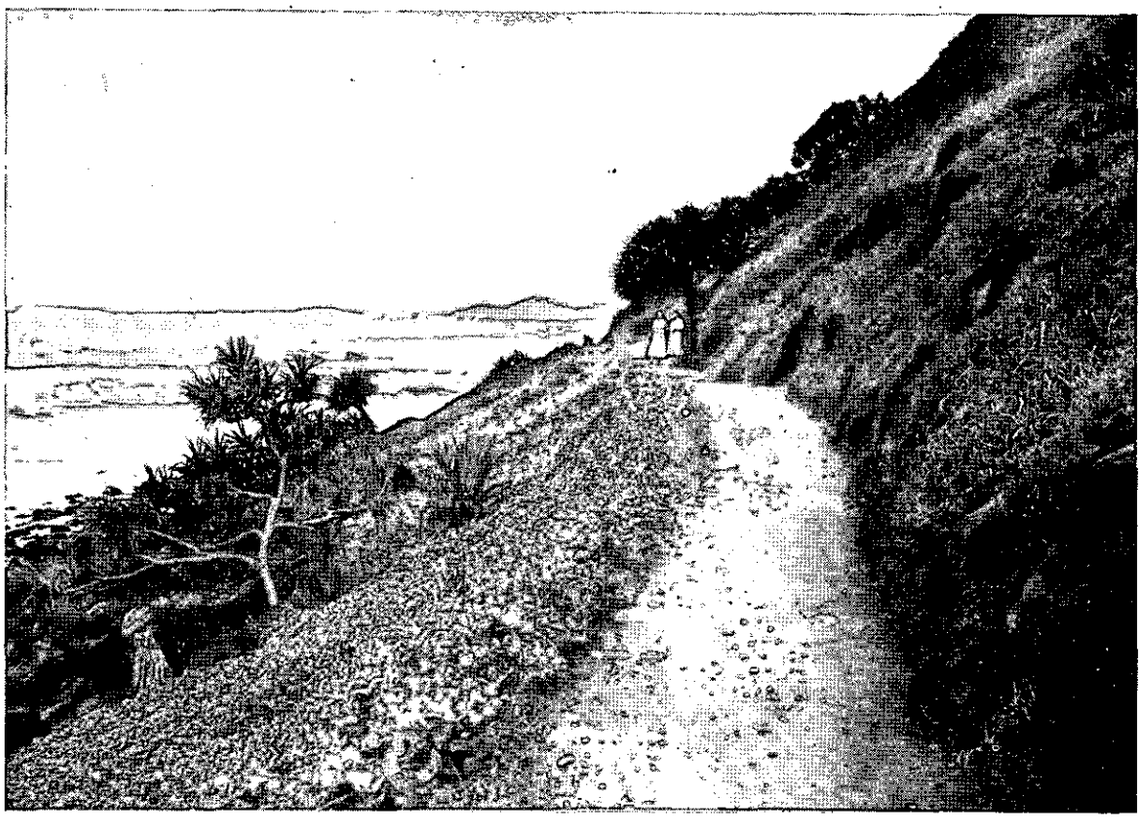
Brisbane Valley—District surveys for scrub felling, roads, firebreaks, overburns and frosted areas were carried out by local staff, while a Forest Inventory Survey Camp re-measured 71 plots on R. 509, 49 on R. 257, and 232 on R. 283. On R. 509, 22 new plots were established.

In addition, approximately 12 miles of theodolite control were run on R. 257, Cooyar (West Logging Area).

Many Peaks—A local camp was engaged on district surveys and the contour survey of Compartment 1, Mossman Logging Area.

From 18th October, Forest Inventory Survey Camp, transferred from Gallangowan, established 23 plots and re-measured 83 plots on R. 95, and also established 5 plots on Archibald Logging Area (R. 67, Bulburin). On the 10th January, Forest Inventory Survey was commenced on R. 28, Coominglah, where 180 plots had been established and approximately 19,000 acres covered at the end of June.

Typical National Park Scene—Wallacha Falls—on Palmerston National Park, North Queensland.



A Graded Walking Track on Burleigh Heads National Park. There are now 225 miles of graded walking tracks on National Parks throughout the State.

NATIONAL PARKS.

National Parks play an important part in the economy of the country because of their use in relation to the tourist industry of the State. They are now amongst the chief tourist attractions of Queensland and each year there is an increasing number of visitors to them.

Last year visitors approximated half a million people and many of them were high in their praise of the Department's policy of complete preservation of these areas in their natural condition. The excellent track systems laid down on many of the National Parks enable visitors to stroll at leisure through these areas and observe their beauties at close quarters.

A large part of the money allotted for work on National Parks during the year just closed was expended on maintenance of the track systems. During the war, when funds and labour were not available, many of these tracks fell into disrepair, but since the end of the war this work has been given special attention within the allotment of funds made available each year. Another militating factor in the work of maintenance was the cyclones over the past 2 years, which did considerable damage to the tracks.

During the past year a most unusual and prolonged heavy wet season, accompanied by cyclonic disturbances, greatly curtailed work on all Parks and caused extensive damage to track systems. In some cases landslides and washaways completely obliterated sections of tracks, which have had to be remade. The cyclonic damage was particularly heavy in Central and Northern divisions.

Apart from this maintenance, work was also carried out on improving the entrances to several of the Parks. An attractive entrance, using local stone in keeping with the Park, has been built at the Canyon Lookout at Warrie National Park, Springbrook. This lookout commands one of the most outstanding views in Queensland and many complimentary remarks have been made by southern visitors and others on the improvement work carried out here. Occasion was taken to incorporate a memorial tablet to the late C. J. Trist when constructing the entrance.

At Palm Grove National Park, Tamborine Mountain, work is almost complete on an entrance, picnic ground and parking area, whilst entrances at Lamington and other Parks have also received attention.

One of the outstanding works of the year was the construction of a well-graded road to the top of Cedar Creek Falls, in the Tamborine district. Other improvements for visitors will be carried out at this area in the coming year.

As from 1st October, 1954, full responsibility for all improvements at Tully Falls National Park was taken over, by the Department, from the Main Roads Commission. It is intended, eventually, to regrade the present track system.

Some other features of the year's work were—

At **Springbrook**—Round-trip track from Canyon entrance via Blackfellow Falls, almost complete.

At **Bunya Mountains**—Track link between Range View Lookout and Paradise Car Park completed.

At **Cunningham's Gap**—West Gap Creek track almost completed.

At **Mount Glorious**—Maiala track extended to Greene's Falls.

At **Noosa Heads**—Loop track from headlands to Noosa Hill completed.

At **Mount Tamborine**—Stock-proof fence and appropriate entrance erected.

At **Kondalilla**—In conjunction with Maroochy Shire Council, graded road and turn-table constructed.

At **Green Island**—Repairs and maintenance to the jetty were carried out by the Cairns Harbour Board on behalf of the Department.

At **Lindeman Island**—Track construction has been carried out from the settlement up a steep hillside to the plateau.

At **Long Island**—New track from Palm Bay towards picturesque beach on West side of Island giving fine views of Whitsunday Channel and Islands.

At **Eungella**—11 chains of track constructed, including concrete crossings over Broken River.

At **South Molle Island**—40 chains track constructed.

At **Hayman Island**—Construction work done on track to a favourite beauty spot, "Blue Pool."

Special attention was given to improving accommodation for men employed on these areas.

The amount expended for the year on all Parks was £45,199, bringing total expenditure since work commenced in 1936–37 to £373,285.

Six new areas, totalling 7,768 acres, were proclaimed National Parks during the year. The chief of these was Magnetic Island, outside Townsville.

The Department acknowledges, with appreciation, gifts of land at Tamborine Mountain for National Park purposes from Mr. F. A. Salisbury and the late Mr. E. Geissmann.

Acknowledgment is also made of the valuable assistance rendered by Honorary Rangers in protecting the Parks, particularly in the organised week-end patrols of the main areas visited by the public.

HARVESTING AND MARKETING.

General.—A heavy demand for all classes of mill timber continued throughout the year. Although weather conditions hampered logging operations to a much greater extent than in most years the cut of 224,466,005 superficial feet was 10,000,000 superficial feet more than the average annual cut of the preceding five years.

The smaller cut of Hoop and Bunya Pine, which was 15,000,000 superficial feet less than in the previous year, was due, partly, to the difficulties created by abnormal rain in the rain forest areas. As stands of these valuable species are fast becoming cut out, the quantity available for milling each year can be expected to fall progressively.

The cut of forest hardwoods showed an advance of 5,000,000 superficial feet and plantations yielded an additional 3,000,000 superficial feet.

14,000,000 superficial feet of plantation thinnings represents an appreciable part of the total timber cut. At the end of the report period steps had been taken to offer sales which would yield a further 6,500,000 superficial feet annually from plantation areas.

Log prices were adjusted for Cypress Pine, and for scrubwood logs in the Mackay and Proserpine areas. Increased prices were gazetted for the larger sizes in plantation thinnings which are now becoming available. No other adjustments became necessary and logging costs also remained stable.

Strong competition continued to be a feature at auction sales of Crown timber in the Moreton area, where a large part of the State's sawmilling capacity is concentrated. Privately owned timber stands, now in heavily cut-over condition, have supplied the bulk of hardwood logs for the industry in this area for many years.

The supply of sleepers and other items of constructional timber for railway purposes was seriously affected by abnormal periods of wet weather and water-logging of the areas. Labour offering for the work of supplying railway timbers was insufficient under the circumstances.

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

Year.	Queensland Grown.							Imported.	Total.
	Hoop and Bunya Pine.	Kauri Pine.	Plantation Thinnings.	Cypress Pine.	Hardwood.	Cabinet Woods.	Miscellaneous.		
	(1,000 superficial feet.)								
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	64,374	6,327	6,322	52,834	275,491	24,913	37,148	2,735	470,144
1953–54	62,289	5,825	11,117	59,067	259,764	29,315	45,878	6,628	479,883
1954–55 (estimated).	47,000	5,000	14,000	50,000	260,000	26,000	50,000	13,000	465,000

Mill Logs—Crown Lands.—The following are the annual quantities of logs obtained from Crown lands as from 1944–45 :

	super ft.		super ft.
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	1953–54	240,000,000
1948–49	208,000,000	1954–55	224,000,000
1949–50	202,000,000		

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

Year.	Hoop and Bunya Pine.	Kauri Pine.	Cypress Pine.	Forest Hardwoods.	Scrub Hardwoods.	Cabinet Woods.	Miscellaneous.	Plantation Timbers.
	(1,000 superficial feet.)							
1950–51	46,588	5,055	15,667	61,618	7,907	13,337	24,948	12,313
1951–52	57,680	7,677	25,883	70,227	9,809	18,406	32,991	15,666
1952–53	60,755	5,577	25,151	62,063	10,228	19,385	17,728	5,121
1953–54	60,269	5,821	31,259	71,251	12,258	24,914	23,510	11,455
1954–55	44,984	4,799	28,129	76,090	9,455	21,185	25,712	14,111

The Timber Business.

	1953–54.	1954–55.
(a) Mill Logs—		
Hoop and Bunya Pine ..	**60,269,000 super. feet**	**44,984,000 super. feet**
Forest Hardwoods ..	**71,251,000 super. feet**	**76,090,000 super. feet**
Scrub Hardwoods ..	**12,258,000 super. feet**	**9,455,000 super. feet**
Cypress Pine	**31,259,000 super. feet**	**28,129,000 super. feet**
Kauri Pine	**5,821,000 super. feet**	**4,799,000 super. feet**
Cabinet Woods	**24,876,000 super. feet**	**21,128,000 super. feet**
Miscellaneous Species ..	**23,510,000 super. feet**	**25,712,000 super. feet**
Plantation Timbers ..	**11,455,000 super. feet**	**14,111,000 super. feet**
Stumps and Flitches ..	**38,000 super. feet**	**58,000 super. feet**
Total Crown Mill Logs ..	**240,737,000 super. feet**	**224,466,000 super. feet**
(b) Construction Timbers—		
Headstocks, Transoms, Crossings, Braces ..	**534,084 super. feet**	**347,617 super. feet**
Sleepers	**878,448 pieces**	**649,818 pieces**
Girders, Corbels, Piles, Sills and Girder Logs	**83,296 lineal feet** / **291,993 super. feet**	**90,879 lineal feet** / **368,943 super. feet**
Poles	**461,189 lineal feet**	**578,732 lineal feet**
House Blocks	**310,793 lineal feet**	**286,457 lineal feet**
Mining Timbers	**337,977 lineal feet**	**300,924 lineal feet**
Mining Timbers	**53,103 pieces**	**49,404 pieces**
Gross Receipts from Timber Sales	**£2,513,058**	**£2,046,786**
Net Revenue	**£1,523,909**	**£1,205,318**

Logging.—During 1954–55 the following quantities were hauled by, and payment made to, contractors to the Department:

Class.	Quantity.	Expenditure.
	Super. feet.	£ s. d.
South Queensland—		
Hoop and Bunya Pine	22,858,974	
Kauri Pine	162	
Forest Hardwoods	1,126,433	
Scrub Hardwoods	171,672	
Miscellaneous	403,943	
Cedar	10,939	
	24,572,123	231,068 12 1
North Queensland—		
Kauri Pine	259,551	
Cabinet Woods	5,113,770	
Forest Hardwoods	924,449	
Scrub Hardwoods	1,199,046	
Miscellaneous	3,517,469	
Cedar	65,413	
	11,079,698	112,071 2 7
Totals	35,651,821	343,139 14 8

Sandalwood and Rosewood.—No Sandalwood or Rosewood was purchased or exported during the year. Stocks of Rosewood on hand at 30th June, 1955, totalled 215 tons 9 cwt.

The Plywood Industry.—Manufactured deliveries from plywood and veneer mills during the year 1954–55, as compared with the previous year, were as follows:

	1953–54. Square feet.	1954–55. Square feet.
Through the Southern Board	69,468,212	75,336,255
Through the Northern Board	52,076,480	55,852,374
	121,544,692	131,188,629

Distribution of production for 1954–55 was as follows:

—	Southern Board.	Northern Board.	Total.
	Sq. ft.	Sq. ft.	Sq. ft.
Queensland	20,145,293	16,980,565	37,125,858
Interstate	54,941,366	38,859,419	93,800,785
Overseas	249,596	12,390	261,986
Total	75,336,255	55,852,374	131,188,629

Timber Felling and Timber Getting Award—State.—During the twelve months under review the basic wage under the above award remained at £11 11s. which was the wage declared on 12th February, 1954.

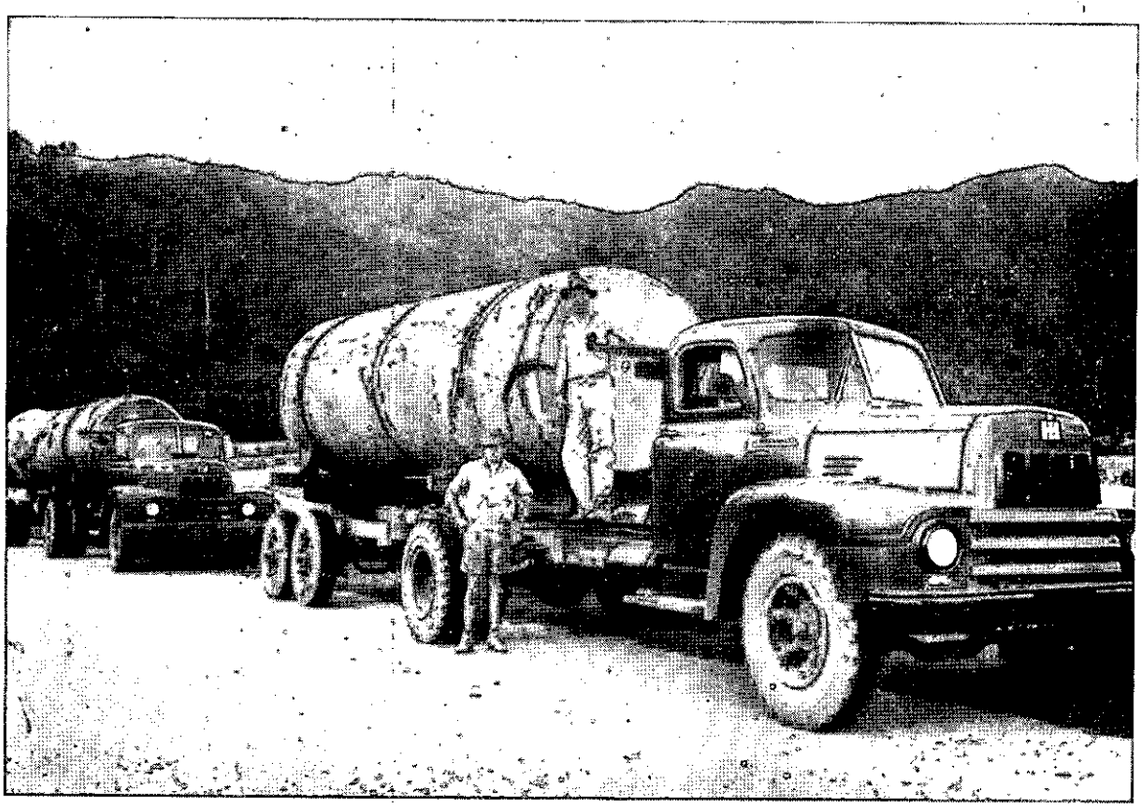
Hewn Timber Prices.—During the twelve months under review the prices of hewn timbers have been increased as follows:

Class of Timber.	As at 1–7–54.	From 1–3–55.
	£ s. d.	£ s. d.
Sleepers—squared 7 feet per 100 pieces	56 7 3	61 5 0
Sleepers—hogback 7 feet per 100 pieces	46 1 11	51 5 0
Crossing timbers per 100 super. feet	3 8 4	4 2 6
Transoms per 100 super. feet	3 19 0	4 12 6
Braces per 100 super. feet	3 10 9	4 5 0
Headstocks per 100 super. feet 12 inches by 6 inches	4 2 3	4 17 6

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.	1952–53.	1953–54.	1954–55.
Sleepers	1,103,453 pieces	559,786 pieces	412,742 pieces
Crossings	266,436 super. feet	280,601 super. feet	115,805 super. feet
Transoms	226,789 super. feet	130,326 super. feet	125,058 super. feet
Bridge timber (round)	51,780 lineal feet	16,658 lineal feet	37,259 lineal feet
Bridge timber (square)	25,674 super. feet	16,154 super. feet	31,086 super. feet

NATURE'S PRODUCT.



The Growth of Centuries—Two Kauri Pine Logs containing 10,350 super feet. The total cut of Hoop, Bunya, and Kauri pine from Crown lands has fallen from 155,640,000 super feet in 1940-41 to 49,783,000 super feet in 1954-55.

MAN-MADE FOREST.

Kauri Pine Plantation—Age 19 years. The total area of pine plantation established in the past year was 5,072 acres, bringing the total area to date to 63,134 acres.

Logging Roads—1954–55.

Expenditure by Main Roads Department :—

	£
Construction	49,471
Maintenance	53,830

Forestry Department road programme for the year constituted 85 miles 61 chains of construction. Location and working surveys covering 131 miles were carried out.

Expenditure from Forestry votes was as follows :

	£
Construction	148,376
Maintenance	45,386
Subsidies to Shire Councils	18,002
Investigation Surveys	2,108
Workers' Compensation	226
Pay Roll Tax	1,870
	£215,968

SAWMILL LICENSES.

The policy was continued of granting new Licenses only after the fullest consideration, with particular regard being paid to the effect the granting of such applications would have on the existing industry.

Over the year an average of 730 mills were in operation.

The following table sets out the position of current licenses at the beginning and end of the year, new licenses issued and the number that have not been renewed :

Number of Licenses as at 30th June, 1954.	Sawmill Classification.	New Licenses Granted.	Licenses not Renewed.	Mills Re-licensed.	Restrictions Withdrawn.	Formerly Restricted now Unrestricted.	As at 30th June, 1955.
1,008	General Mills	6	171	..	..	..	843
32	Case Mills	2	12	..	..	..	22
40	Sleeper Mills	5	16	..	..	..	29
20	Other restricted	1	9	..	..	..	12
61	Resaw and dressing	3	9	..	..	..	55
1,161		17	217	..	..	..	961

These figures reveal a retirement of 200 mills from the industry. This is due principally to the increasing shortage of log supplies. Throughout most of Queensland the forests are incapable of the permanent support of the already existing industry and until the growth capacity of the forests has been increased, the difficulties of securing log supplies will be accentuated yearly.

OFFENCES.

During the year ended 30th June, 1955, officers reported on 246 cases of breaches of Acts and Regulations administered by the Department.

Proceedings were successfully instituted against 19 people. Of these, 11 were proceeded against for unauthorised cutting or removal of timber, 3 were prosecuted for unauthorised fires, one for unauthorised ringbarking and 4 for breaches of the Timber Users' Protection Act. Fines totalling £170 were imposed.

In addition, the Police instituted proceedings against 3 persons, as a result of which fines totalling £12 were imposed.

In 76 cases of unauthorised timber operations, where it was considered offences did not warrant proceedings, the value of timber was collected and warnings issued, whilst in 21 instances of minor offences no action was taken other than to issue warnings. In 17 cases of unauthorised ringbarking, appropriate action was taken.

As a result of action in all cases, an amount of £4,334 was recovered by the Crown in timber revenue.

The number of complaints received from householders under the Timber Users' Protection Act in respect of the use of lyctus susceptible timber showed a decrease of 30 on last year's figures, 81 cases being investigated by officers of the Department.

The Department continued its policy of encouraging the builder to remedy the position and in 46 of these complaints investigations by Forest Officers were responsible for having the defects remedied. In most cases this consisted of having the affected timber replaced.

In 4 cases it was necessary to take proceedings and fines totalling £80 were imposed.

In 19 instances it was found that complaints were either of a minor nature or not within the scope of the Act. The remaining cases are still receiving attention.

FOREST PRODUCTS RESEARCH.

The year's work has been directed to three avenues—

1. Extension activities in saw and plymill practice and seasoning.
2. Studies in sawmill economics to determine real log values and provide lines of action for extension work.
3. Studies of physical properties of the wood of plantation conifers, with special reference to anatomical features and the Department's tree breeding programmes.

Close co-operation has been maintained with Division of Forest Products, C.S.I.R.O., the Government Botanist and Standards Association of Australia. Acknowledgement is due to various trade associations and individual firms for assistance in several phases of this work.

The appointment of a qualified officer to North Queensland has proved of considerable benefit to the local industry. Technical help and advice has enabled individual mills, sensible of the advantage to be gained, to increase their efficiency.

Limitations in the recruitment of properly trained staff have, however, constrained the scope and quantity of extension and research work and, as a result, work of value both to the Department and the industry has had, perforce, to be left undone.

Engineering and Sawmill Economics—1. Extension Services.—Attention to efficient sawmill practices was continued during the year, particularly in the hardwood industry. Designs were prepared for four McCashney incinerators, and attention given to economic methods of waste disposal.

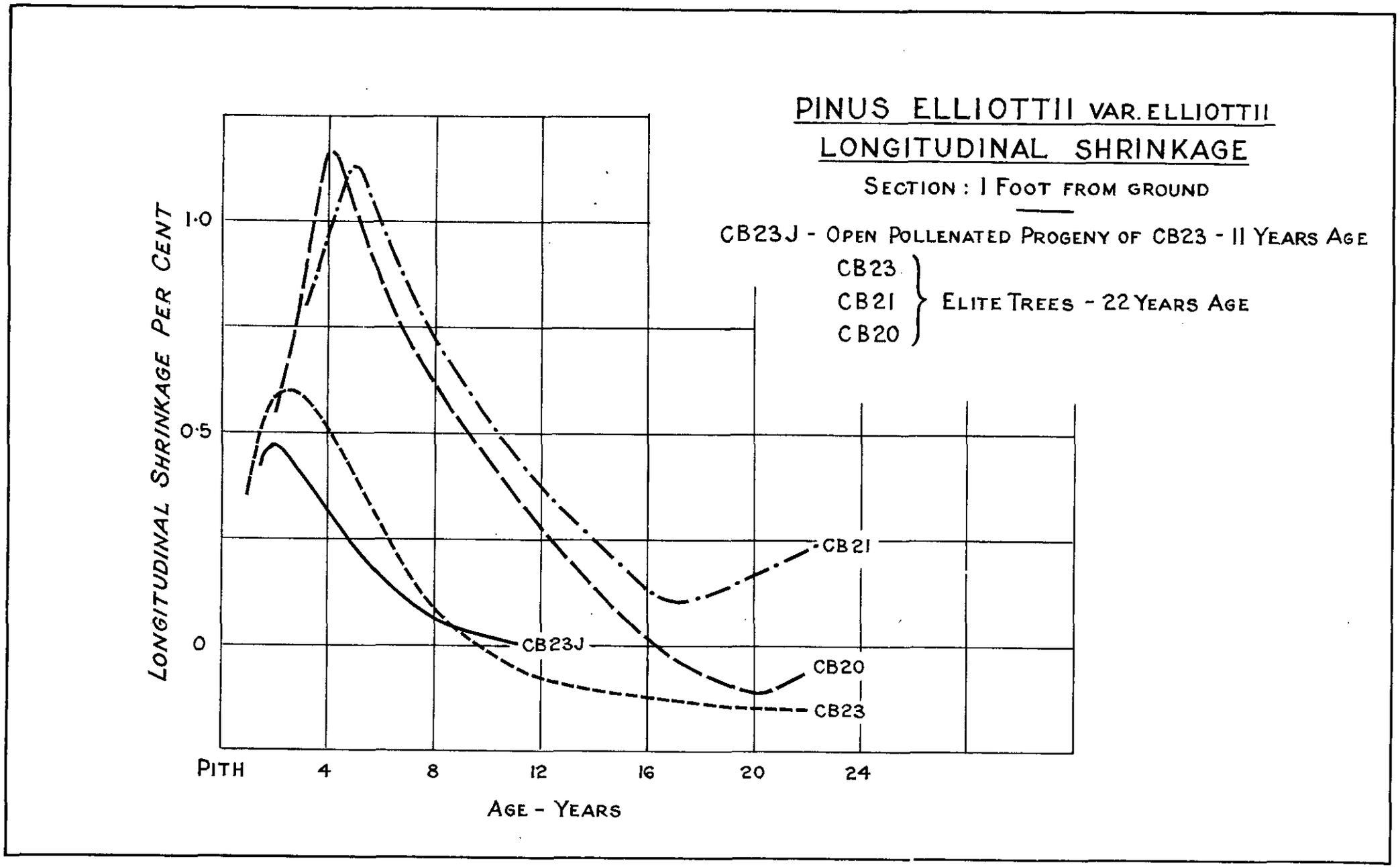
It is pleasing to record the installation of a modern precision log breakdown carriage at Messrs. Hyne and Sons' Maryborough mill, designed to handle hardwood logs. This is the most significant advance in the industry in Queensland for many years. While there is little opportunity for the use of a fully mechanised carriage of this nature in the majority of mills, because their limited log input does not warrant the capital expenditure, the technique and sawing patterns adopted should quite easily be used to very great advantage in the hardwood industry. They are essentially simple, but call for mechanically accurate carriages.

Too little thought is given by industry to efficient use and maintenance of breakdown equipment and, consequently, man hour production is far too low. Inefficiency cannot continue to be covered by price increases for sawn timber, for it is now apparent that rising costs can only be countered by increased man hour production.

The necessity for better management and organisation can be illustrated by the following table, which has been developed from previous studies of hardwood milling in Southern Queensland.

The efficiency index quoted was developed from a consideration of average wholesale price received for the sawn product, production rate per man hour, recovery as a percentage of gross Hoppus volume, log quality and size.

Mill.	Production Rate Super. ft./man hr.	Recovery Per cent. G.H.V.	Efficiency Rating.
1	55·7	45·5	148·2
2	43·0	46·3	112·5
3	44·1	47·6	112·3
4	46·6	48·9	110·8
5	43·2	46·7	105·5
6	43·1	48·5	100·8
7	39·7	45·6	98·9
8	39·3	47·6	95·6
9	40·4	48·3	94·8
10	37·1	47·1	92·1
11	34·0	45·1	83·6
12	34·5	48·6	80·0
13	32·1	46·4	79·3
Average	40·8	47·1	100·0


PINUS ELLIOTTII VAR. ELLIOTTII
LONGITUDINAL SHRINKAGE
SECTION : 1 FOOT FROM GROUND
CB23J - OPEN POLLENATED PROGENY OF CB23 - 11 YEARS AGE
CB23
CB21
CB20
ELITE TREES - 22 YEARS AGE
LONGITUDINAL SHRINKAGE PER CENT
1·0
0·5
0
CB21
CB23J
CB20
CB23
PITH
4
8
12
16
20
24
AGE - YEARS

The difference between mills 1 and 13 amounts to approximately 20s. at present cost levels, and it is quite apparent that it is not due to log quality or size, nor is it due to any significant differences in basic milling equipment. It is a reflection of superior operational control and attention to accuracy and planned technique in the head saw rig.

The opportunities for savings in milling costs are all too apparent.

2. Sawmill Economics,

Five mill studies were carried out during the year, namely:—

(1.) **Plantation Thinnings—P. taeda and P. elliottii.** This study sought tree values for various site qualities (as reflected in predominant height) and various girth breast high classes.

(2.) **Silky Oak (C. sublimis)** North Queensland. To determine sawn recoveries and production rates by log girth classes.

(3.) **Mackay Rain Forest Species.** Determination of sawn recoveries and production rates by log girth classes for eight rain forest species. The two principal species were White Cheesewood (*Alstonia scholaris*) and Red Siris (*Albizia toona*).

(4.) **Forest Red Gum (E. tereticornis)—Mackay.** To determine average recovery of sawn timber and effect of excessive hidden defect (which occurs in this species in the Mackay areas) on log price structure.

(5.) **Cypress Pine.** A special study was made to provide specific information on production deficiencies for a particular mill, as a basis for redesign of break-down facilities and reorganisation of the mill.

The co-operation of individual mills and trade organisations in these studies is freely acknowledged.

3. Research.—Little progress was made in engineering research because of the difficulty of obtaining qualified technical staff. It was necessary to confine work to the further investigation of sawing patterns for plantation thinnings and special sawing projects required for investigation of physical properties of elite plantation trees.

Seasoning and Timber Physics—1. Seasoning.—It has not been possible to obtain a suitably qualified officer to take charge of seasoning work. No research work was undertaken and efforts had, perforce, to be concentrated on the maintenance of extension services.

The demand from the building trade and general public for moisture content determinations was maintained, 1450 samples being tested.

Climatic conditions during the year were unfavourable to air seasoning and this was reflected in the high level of moisture content in dressed flooring, chamfer boards and joinery material submitted for test.

This, again, highlights the generally poor standard of seasoning in the industry, and points to the need for adequate dry kiln capacity for general building and joinery timbers.

It has been known for a number of years that combined air and kiln seasoning of hardwood is not only practicable but is less costly than complete air or kiln seasoning. Until the industry installs adequate drying facilities the chronic shortage of dry dressed lines will continue.

Extension activities have revealed that, in too many mills where kilns are installed, there is a serious lack of knowledge of elementary principles of drying on the part of management and operators. In some instances wet and dry bulb thermometers were not in working order and most unsuitable rule of thumb schedules were in use, to the detriment of the quality and reputation of quite useful timbers.

Interest has been shown in North Queensland veneer mills in the C.S.I.R.O. screen drier for veneer, and designs have been provided for 3 driers of this type.

Considerable improvement was effected in veneer quality in several mills by recommendations for 2″ spacing of sheets in vertical racking for air-drying instead of the customary 1″. Due to the more even drying obtained this recommendation has halved the drying time and produced veneer with considerably less buckling and end splitting.

2. Timber Physics. P. elliottii var. elliottii—Inheritance of Physical Properties.—As a result of the severe cyclone of February, 1954, three good phenotypes (CB20, 21 and 23) of *Pinus elliottii* var. *elliottii*, each 22 years old, which had been selected on external morphological characters for breeding purposes, were blown down. Opportunity was taken to salvage the merchantable logs for studies of physical properties of the wood and seasoning behaviour of the sawn product.

Sample discs at various heights above ground level were forwarded to Division of Forest Products, C.S.I.R.O., for study of basic density, longitudinal shrinkage, fibre length and micellar angle. Parallel local studies of basic density and longitudinal shrinkage and any occurrence of spiral grain were undertaken, and the logs sawn to a pattern designed to subsequently correlate stability and seasoning behaviour with position of board in the tree.

Two open pollenated progeny of Tree CB23, each aged 11 years, were also included in these studies.

Points of interest in the results are—

(1.) Little or no evidence of spiral grain was found in any parent or the two progeny.

(2.) Provided sawn material was free of pith its stability and seasoning behaviour were entirely satisfactory. Pieces containing pith were subject to severe twist and were unsatisfactory for any use except low grade case manufacture.

(3.) Considering longitudinal shrinkage, tree CB23 was better than the other two. It is of interest to note that CB23 was rated on external characters as the best of the three parents, followed by CB21 and CB20 in that order.

(4) A close similarity in the trends of basic density and longitudinal shrinkage exists between the parent (CB23) and its progeny.

The trends of longitudinal shrinkage are illustrated on graph facing page No. 22 and while they are hardly evidence of transmission of these characters, or that significant differences exist between parents, they are sufficiently interesting to warrant further study. It is, therefore, proposed to examine a range of parent trees and their progeny resulting from both " selfing " and cross pollenation.

P. elliottii var. elliottii—Development of Compression Wood.—During the February, 1954, cyclone large numbers of stems in the plantations of this species were blown from the vertical to varying degrees of lean. In these circumstances, the resulting compression wood in the leaning stems could become a serious defect.

Opportunity was taken to set up a series of field observations, and examination of two of the trees showed that by July, 1954, a distinct band of compression wood had appeared on the under side of the stem. Observations at regular intervals indicate that the whole tree axis is moving towards the vertical. This is illustrated by the photographs facing page No. 24. The height of this tree at July, 1954, was 25 feet and at this stage the tree had a 12½° lean. A plumb bob was suspended from a point 15 feet high. It will be observed that the plumb line has moved nearer to the base of the tree. This movement amounted to 22· 8 inches by June, 1955—a period of 12 months.

Araucaria cunninghamii.—Observations have been commenced on 25 select high pruned stems from a " plus " stand of Hoop Pine at Cpt. 13a Fraser L. A., Brooloo State Forest.

These stems had been removed in a thinning designed to encourage seed production from elite trees. They are representative of the better quality stems of this stand and ranged from 17·2 inches to 35·3 inches g.b.h.o.b. Observations of basic density and longitudinal shrinkage are progressing. All stems exhibited spiral grain to some degree—the majority to a minor extent. The trends are that spirality increases with increasing height and decreases with increasing diameter and thus seems to form a " core " of spiral grain. The maximum spirality observed was 1 inch departure in 6 inches length.

Due to the nature of the bark of Hoop Pine no external indications of spiral grain can be observed and special technique will have to be developed to determine its presence or absence in trees which may be selected for breeding.

Wood Anatomy and Utilisation.—Increase in the supply of imported woods and increasing use of lesser known rain forest species has maintained public demand for identification of wood specimens—some 2,027 samples being received during the year.

PHOTOGRAPHS ILLUSTRATING RECOVERY OF A LEANING TREE TOWARDS ITS ORIGINAL VERTICAL POSITION.

JULY, 1954. DECEMBER, 1954. JUNE, 1955.

PINUS ELLIOTTII—Development of Compression Wood.

400 botanical specimens, principally from field collections in North Queensland, were identified by the Government Botanist. Many of these were added to the Department's reference herbarium. 81 authentic wood samples backed by botanical identification were despatched to Division of Forest Products, C.S.I.R.O.

Two check lists of standard trade names and botanical identity for North and South Queensland timbers were issued to field staff during the year in order to encourage the use of standard names.

Collections of wood, bark and leaves for the phytochemical survey being undertaken by Division of Plant Industry, C.S.I.R.O. were continued, as was the supply of authentic material for research purposes by the Division of Forest Products.

Flood control in the Brisbane River by the Somerset Dam has resulted in low salinities for prolonged periods in the tidal reaches of the Brisbane River, and the danger of serious attack by Nausitoria on unprotected Turpentine (*Syncarpia laurifolia*) piles in valuable wharf structures has been increased considerably thereby.

If present salinity conditions continue it will probably be unwise to use any unprotected Turpentine piles above Pinkenba and permanent protection should be given to existing structures not previously attacked by Nausitoria.

Extension services in utilisation and preservation were maintained and a large number of enquiries concerning qualities and uses of native and imported timbers were received.

Wood Chemistry and Preservation.—1. Preservation.—Field tests of various oil borne preservatives have been commenced by the installation of some 1,600 treated and control stakes in two exposure sites.

Routine inspection of treatment plants operating, under the Timber Users' Protection Act of 1949, for preservation against attack by *Lyctus brunneus* Steph. was continued, particularly to check on maintenance of suitable toxic levels by operators.

Five new immunisation plants were brought into operation during the year, and numerous enquiries were received for advice in design and construction.

Two service tests of preservative treated railway sleepers were reinspected and experimental retreatments applied. Results are beginning to show the advantage of preservation. A survey of condemned sleepers withdrawn from service has been continued to determine the causes of failure. Analysis of the survey for the metropolitan area shows that the prime cause of failure is mechanical, through spike kill and splitting, and that plating of sleepers in heavy traffic lines could result in an increase in service life and an appreciable reduction in the annual maintenance requirement for sleepers.

Fungal decay was not a prime cause of failure in the durable species commonly used for sleepers, but it could become more serious as less durable species come into service. In view of the overall supply position, it appears that serious consideration must be given to the application of high pressure preservative treatment to sleepers and other permanent way timbers.

Preliminary arrangements have been made with Division of Forest Products, C.S.I.R.O., for high pressure treatment of experimental sleepers which will, subsequently, be placed in main line service for test.

There has been some interest on the part of Regional Electricity authorities in pole preservation, and a suitable hot-cold diffusion treatment plant has been designed for Cairns Regional authority.

Under the control of a special Committee, representative of the Department, Department of Agriculture and Stock and Housing Commission, close inspection of imported housing was intensified during the year, to determine the extent of infestation by the European House Borer (*Hylotrupes bajulus*). Three hundred and fifteen houses have been examined and in approximately 10 per cent. of the houses attack was detected. The number of houses in which emergence of adults has occurred is regarded as sufficient for mating to have taken place if many of the emergences were concurrent.

So far there is no evidence of any reproduction or re-infestation. The position is under close scrutiny and consideration is being given to control measures.

2. Timber Users' Protection Act.—During the year 81 complaints were received of offences against the Act by builders and sawmillers. An intensive inspection of current building activities in the metropolitan area and country towns was maintained. 270 buildings under construction were inspected and builders and contractors advised of their responsibilities under the Act. Three imported timbers susceptible to Lyctus attack were brought within the provisions of the Act.

3. Plywood and Veneer.—The industry has shown marked interest in the technique of manufacture of "hot" press plywood. However, unless the standard of veneer seasoning is raised and much better control maintained over moisture content, serious faults in hot press plywood must continue to occur.

Difficulties in delivery of special laboratory equipment ordered during the year have curtailed experimental work on the application of urea formaldehyde and phenolic resins to local species and conditions. Pilot experiments in glued laminated construction of beams using plantation grown *Pinus elliottii* were undertaken, with promising results.

Special veneer paper boards and veneer-metal sheets were tested to A.S.T.M. Standards for industry and reports issued to interested mills.

4. Laboratory.—Laboratory work was again affected by an inefficient ventilating system and it was found necessary to conduct specific experiments as a basis for design of an efficient scrubber to remove hydrochloric acid vapour from the system.

The following analyses were made during the year:

Preservation	810
Plywood and veneer	2,746
Soil and water	355

Experimental Yard.—Operations and staff remained at a satisfactory level during the year, but it is even more apparent that lack of space at its present site is restricting efficient working. It is hoped that an early start on the new buildings at Rocklea can be made in the forthcoming year.

The fancy wood section handled only material becoming available from experimental projects, and stocks were kept at a low level. During the year custom dressing of hardwood flooring for Department of Public Works and kiln drying of special charges for private industry on a semi-experimental basis, kept plant and equipment occupied for otherwise idle time and provided credit against the overall expenditure incurred in the maintenance of the yard.

STAFF.

At 30th June, 1955 there were 312 salaried officers on the staff as against 311 at 30th June, 1954. The number of wages men increased from 1,765 to 1,900.

There were thirty-three resignations during the year, including that of Forest Ranger H. L. Geisel (Dalby district). Mr. Geisel retired after twenty years of efficient service, during which he rose from the rank of workman to that of Forest Ranger.

Two officers were retired after long and meritorious service—Mr. C. W. Corfield (Gympie) on 30th June, 1955, and Forest Ranger J. H. Bull (Brisbane), on account of ill-health on 29th March, 1955.

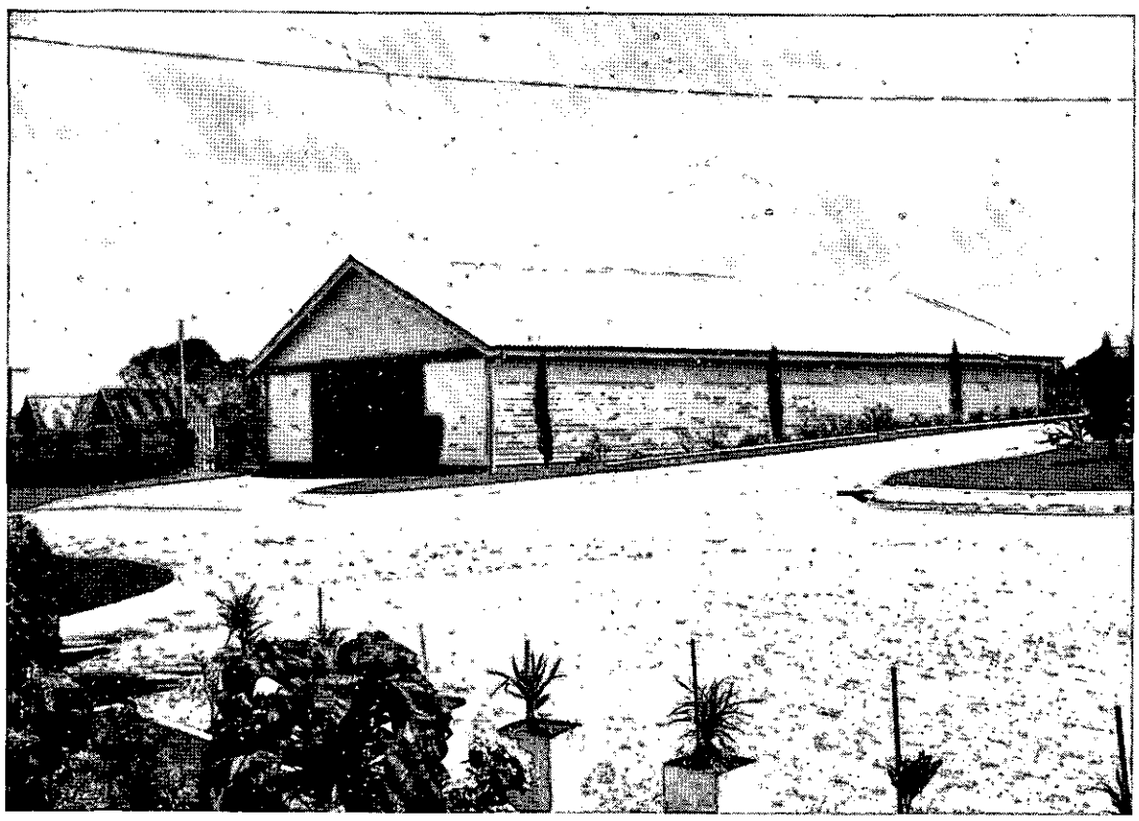
With the death of Forest Ranger E. J. Pickford, Maryborough, in March, the Department lost the services of a valuable officer. Mr. Pickford, who died at the early age of 41 years, joined the Department in 1938.

ACKNOWLEDGEMENT.

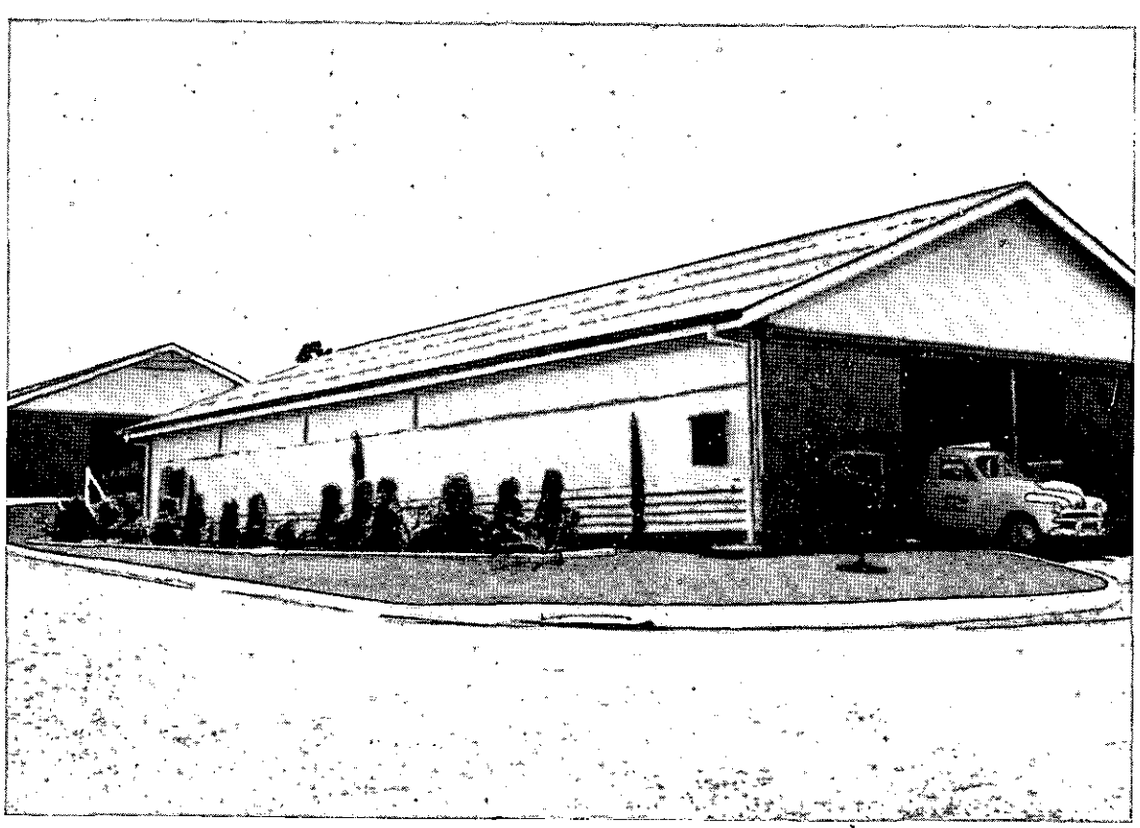
I desire to acknowledge a loyal and sustained effort on the part of officers and employees during the year.

V. GRENNING,
Director of Forests.

TWO VIEWS OF PART OF THE DEPARTMENT'S DEPOT AT SALISBURY, BRISBANE.



Bulk Store, with Nursery in background. Last year 34,547 trees were supplied from this nursery to the general public.



Storeroom and Workshop. From here stocks are supplied for the Forestry programme throughout the State.

Appendices.

APPENDIX A.

Return of Timber, &c., Removed from Crown Lands during the Year ended 30th June, 1955.

Species	Quantity. Super. feet.	Super. feet.
Milling Timber—		
Hoop and Bunya Pine—		
Ply	5,717,096	
Logs	21,219,206	
Tops	18,047,575	
		44,983,877
Kauri Pine	4,798,895	
Cypress Pine	28,129,254	
Forest Hardwoods	76,090,018	
Scrub Hardwoods	9,454,770	
Cabinet Woods	21,128,043	
Miscellaneous Species	25,712,450	
Limb Logs, Head Logs, Stumps and Flitches	57,607	
		165,371,037
Plantation Thinnings—		
Hoop Pine	8,890,355	
Bunya Pine	8,583	
Kauri Pine	181,081	
**Pinus elliottii*	3,143,217	
Pinus taeda	1,248,639	
Pinus patula	526,145	
Pinus radiata	81,185	
Pinus insularis	656	
Pinus longifolia	2,147	
Pinus echinata	2,512	
Pinus canariensis	449	
Cedrela mexicana	9,710	
Cupressus lusitanica	3,731	
Callitris species	8,535	
Silky Oak	4,146	
		14,111,091
		224,466,005

* Slash Pine - referred to as P. caribaea in earlier reports.

Other Classes—		Expressed as Superficial Feet (Hoppus) Log Measure.
Sleepers	345,135 pieces	13,115,130
Sleeper Blocks (as sleepers contained)	304,683 pieces	10,968,588
Transoms, Crossings, Headstocks, Longitudinals	347,617 superficial feet	556,187
Girders, Corbels, Piles, Sills, Kerb Logs	90,879 lineal feet	1,635,822
Girder Logs	368,943 superficial feet	368,943
Poles	578,732 lineal feet	4,051,124
House Blocks, Round Posts	286,457 lineal feet	1,718,742
Fencing Material—Split	348,849 pieces	3,139,641
Fencing Material—Round	62,733 lineal feet	156,832
Hewn and Bridge Timbers	101,437 superficial feet	162,299
Mining Timbers—Split	49,404 pieces	197,616
Mining Timbers—Round	300,924 lineal feet	601,848
Stakes	1,680 pieces	13,440
Miscellaneous Sawn Timber (offcuts)	5,249 superficial feet	8,398
		36,694,610
Fuel	61,131 tons	
Charcoal	33,705 bags	
Trees and Plants (Number)	213,563	
Sand, Gravel, Soil, &c.	128,187 cubic yards	
Lawyer Cane	40 tons	
Shell Grit	75 tons	
Staghorns and Ferns	82 pieces	
Ti-tree Bark	4 tons	
Wattle Bark	2 tons	
Peat	48 bags	
Mulga Wood	11 tons	

APPENDIX B.

Annual Cut—Pine—Financial Year ended 30th June, 1955.

Forestry District.	Ply.	Logs.	Tops.	Total.
	Super. feet.	Super. feet.	Super. feet.	Super. feet.
Atherton	..	4,260	4,260	8,520
Brisbane	56,361	2,983,199	2,122,234	5,161,794
Brisbane Valley	3,359,373	8,580,344	8,619,282	20,558,999
Gympie	182,401	1,303,348	710,097	2,195,846
Mackay	..	234,912	168,694	403,606
Monto	631,895	1,754,680	1,440,841	3,827,416
Maryborough	1,487,066	5,995,321	4,752,568	12,234,955
Warwick	..	363,142	229,599	592,741
Total	5,717,096	21,219,206	18,047,575	44,983,877

APPENDIX C.

Receipts under the *State Forests and Timber and Quarry Regulations* for the Year ended 30th June, 1955.

Districts.	Totals. £	s	d
Group 1—South Queensland (Brisbane, Bundaberg, Gympie, Monto, Maryborough, Toowoomba, Yarraman)	1,110,093	13	4
Group 2—Goondiwindi, Inglewood, St. George, Stanthorpe, Warwick	74,412	3	8
Group 3—Dalby	73,585	13	9
Group 4—Charleville, Cunnamulla, Roma, Quilpie	287	3	10
Group 5—Barcaldine, Blackall, Jundah, Longreach, Muttaburra, Stonehenge, Winton, Aramac, Isisford, Jericho	728	16	6
Group 6—Clermont, Emerald, Springsure	4,123	14	7
Group 7—Gayndah, Gladstone, Taroom, Theodore, Mundubbera	774	1	11
Group 8—Rockhampton	1,664	7	2
Group 9—Mackay	10,535	14	1
Group 10—Bowen	3,142	17	3
Group 11—Townsville	3,964	12	6
Group 12—Charters Towers, Ravenswood	236	14	5
Group 13—Hughenden	95	9	2
Group 14—Cloncurry, Boulia, Kynuna, Mackinlay	202	19	1
Group 15—North Queensland (Atherton, Herberton, Cooktown, Port Douglas, Cairns, Innisfail, Ingham)	538,278	6	4
Group 16—Burketown, Coen, Croydon, Georgetown, Normanton, Thursday Island	4	4	0
	£1,822,130	11	7
Receipts—Forestry and Lumbering	197,526	17	2
Sale of Plants, Material, &c.	19,165	15	7
Licenses* (See note after Appendix D)	2,186	14	3
Rents and Grazing Dues	6,934	16	5
	£2,047,944	15	0
Less Treasury Refunds	1,159	1	6
	£2,046,785	13	6

Comparisons with Totals of Previous Years.

1950–51.	1951–52.	1952–53.	1953–54.	1954–55.
£1,279,446	£2,182,406	£2,541,904	£2,513,058	£2,046,786

APPENDIX D.

Proceeds of Sales of Timber, &c., for the Period 1st July, 1951, to 30th June, 1955.

Districts.	1951–52. £	s.	d.	1952–53. £	s.	d.	1953–54. £	s.	d.	1954–55. £	s.	d.
Group 1	1,330,134	10	2	1,311,804	7	9	1,362,611	3	2	1,110,093	13	4
Group 2	31,837	17	2	43,160	10	1	60,107	9	8	74,412	3	8
Group 3	34,212	15	5	37,932	1	7	44,163	14	11	73,585	13	9
Group 4	458	14	8	485	15	1	712	3	2	287	3	10
Group 5	1,797	12	11	905	9	5	508	9	3	728	16	6
Group 6	4,435	18	0	2,556	8	10	3,750	7	4	4,123	14	7
Group 7	235	11	10	62	2	8	39	13	8	774	1	11
Group 8	2,692	17	0	2,403	14	7	1,937	16	2	1,664	7	2
Group 9	7,711	6	4	7,478	19	0	7,206	7	4	10,535	14	1
Group 10	5,701	5	6	3,239	19	3	4,637	9	8	3,142	17	3
Group 11	16,139	6	9	8,037	19	4	14,317	14	8	3,964	12	6
Group 12	232	14	5	450	2	1	137	19	11	236	14	5
Group 13	397	6	7	380	17	7	120	15	6	95	9	2
Group 14	461	10	3	220	13	2	211	10	4	202	19	1
Group 15	446,715	17	11	549,294	2	4	705,698	2	7	538,278	6	4
Group 16	3	3	4	1	10	0	..			4	4	0
	1,883,168	8	3	1,968,414	12	9	2,206,160	17	4	1,822,130	11	7
Receipts—Forestry and Lumbering	285,073	18	4	558,492	1	7	289,912	3	2	197,526	17	2
Sale of Plants, Material, &c.	27,909	5	3	13,296	7	11	10,920	8	4	19,165	15	7
Licenses*	Not previously recorded separately						2,374	8	5	2,186	14	3
Rents and Grazing Dues	5,475	16	11	6,078	2	7	6,426	0	5	6,934	16	5
	2,201,627	8	9	2,546,281	4	10	2,515,793	17	8	2,047,944	15	0
Less Treasury Refunds	19,220	18	9	4,377	2	10	2,735	9	11	1,159	1	6
Total	2,182,406	10	0	2,541,904	2	0	2,513,058	7	9	2,046,785	13	6

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

APPENDIX E.

The following Schedule illustrates the market price of logs during the year 1st July, 1954, to 30th June, 1955:—

Species—Standard Trade Names. (Botanical Names and Common Names in Brackets).	Log Class.	Delivery.	Price per 100 super. feet (Hoppus measure). As at 1-7-54.	Price per 100 super. feet (Hoppus measure). From 7-8-54.
			s. *d.*	*s.* *d.*
Red Tulip Oak (*Argyrodendron peralatum*)	8 ft. plus	F.o.r. Cairns	35 5	35 5
		F.o.r. Townsville	35 5	35 5
Red Cedar (*Cedrela toona*)	8 ft. plus	F.o.r. Cairns	65 5	65 5
	6 ft. plus	F.o.r. Brisbane	73 4	73 4
North Queensland Kauri Pine (*Agathis palmerstoni*)	8 ft. plus	F.o.r. Cairns	55 5	55 5
		F.o.r. Townsville	55 5	55 5
Queensland Walnut (*Endiandra palmerstoni*)	8 ft. to 8 ft. 11 in.	F.o.r. Cairns	46 4	46 4
		F.o.r. Townsville	46 4	46 4
Northern Silky Oak (*Cardwellia sublimis*)	8 ft. plus	F.o.r. Cairns	55 5	55 5
		F.o.r. Townsville	55 5	55 5
Queensland Maple (*Flindersia brayleyana*)	8 ft. to 8 ft. 11 in.	F.o.r. Cairns	60 5	60 5
		F.o.r. Townsville	60 5	60 5
Black Pine (*Podocarpus amara*)	8 ft. plus	F.o.r. Cairns	45 5	45 5
		F.o.r. Townsville	45 5	45 5
Silver Silkwood (Putts Pine) (*Flindersia acuminata*)	8 ft. plus	F.o.r. Cairns	55 5	55 5
		F.o.r. Townsville	55 5	55 5
White Beech (*Gmelina leichhardtii*) (*Gmelina fasciculiflora*)	8 ft. plus	F.o.r. Cairns	55 5	55 5
		F.o.r. Townsville	55 5	55 5
	6 ft. plus	F.o.r. Brisbane	58 4	58 4
Hickory Ash (Hickory) (*Flindersia ifflaiana*)	8 ft. plus	F.o.r. Cairns	45 5	45 5
Northern Silver Ash (White Ash) (*Flindersia pubescens*)	8 ft. plus	F.o.r. Cairns	55 5	55 5
		F.o.r. Townsville	55 5	55 5
Queensland Silver Ash (Ash) (*Flindersia bourjotiana*)	8 ft. plus	F.o.r. Cairns	55 5	55 5
		F.o.r. Townsville	55 5	55 5
Bolly Silkwood (Tarzali Silkwood) (*Cryptocarya oblata*)	8 ft. plus	F.o.r. Cairns	35 5	35 5
		F.o.r. Townsville	35 5	35 5
Satin Sycamore (*Ceratopetalum succirubrum*)	8 ft. plus	F.o.r. Cairns	35 5	35 5
		F.o.r. Townsville	35 5	35 5
Yellow Walnut (*Beilschmiedia bancroftii*)	8 ft. plus	F.o.r. Cairns	35 5	35 5
		F.o.r. Townsville	35 5	35 5
Hardwoods	6 ft. plus	F.o.r. Brisbane, Warwick	30 5	30 5
Hardwoods	6 ft. plus	F.o.r. Maryborough, Bundaberg	29 11	29 11
Hardwoods	6 ft. plus	F.o.r. Rockhampton	34 7	34 7
Hardwoods	6 ft. to 6 ft. 11 in.	F.o.r. Townsville	32 11	32 11
Hardwoods	6 ft. plus	F.o.r. Mackay	33 2	33 2
Hoop Pine Ply	7 ft. plus	F.o.r. Brisbane	81 9	81 9
Hoop Pine "A" Quality Logs	7 ft. plus	F.o.r. Brisbane	66 1	66 1
Bunya Pine Logs	7 ft. plus	F.o.r. Brisbane	64 7	64 7
Hoop Pine "C" Quality Logs	7 ft. plus	F.o.r. Brisbane	42 10	42 10
Hoop Pine "D" Quality Logs	7 ft. plus	F.o.r. Brisbane	40 6	40 6
Bunya Pine Tops	7 ft. plus	F.o.r. Brisbane	40 6	40 6
Cypress Pine—1st Class	28 in. plus	F.o.r. Brisbane	29 4	34 7
		F.o.r. Gympie, Maryborough, and Bundaberg	26 4	31 7
South Queensland Scrubwoods—				
Case and Building Timbers Group (*a*)	6 ft. plus	F.o.r. Brisbane	33 7	33 7
Common Cabinetwoods Group (*b*)	6 ft. plus	F.o.r. Brisbane	35 6	35 6
Special Purpose Timbers Group (*c*)	6 ft. plus	F.o.r. Brisbane	37 5	37 5

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

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

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

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

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

Crows Ash (*Flindersia australis*)
Ivorywood (*Siphonodon australe*)
Southern Silver Ash (Bumpy Ash) (*Flindersia schottiana*)
Yellowwood (*Flindersia xanthoxyla*)
Yellow Boxwood (*Planchonella pohlmaniana*)

APPENDIX F.

Constructional Timber supplied during Financial Year 1954-55 under Forestry and Lumbering Operations.

Class of Timber.	Quantity.	Sales Value.
		£ s. d.
Sawn Crossings	2,552 superficial feet	99 17 2
Hewn Crossings	113,253 superficial feet	4,742 11 10
Headstocks, Longitudinals and Braces	31,086 superficial feet	1,382 7 11
Hewn Transoms	121,910 superficial feet	5,570 15 4
Sawn Transoms	3,148 superficial feet	131 11 8
Girders—Dressed	9,952 lineal feet	6,965 7 0
Piles	24,730 lineal feet	7,162 4 1
Sills	2,577 lineal feet	684 4 8
Poles	16,405 lineal feet	2,448 9 5
Round Posts	3,653 lineal feet	486 12 6
Split Posts and Rails	34,401 pieces	3,976 8 7
Hewn Sleepers	74,619 pieces	39,217 6 5
Sawn Sleepers	33,440 pieces	15,953 17 4
Sleeper Blocks (as sleepers contained)	304,683 pieces	121,469 11 8
Total		£210,291 5 7

APPENDIX G.

Comparative Statement of Expenditure for Years 1953-54 and 1954-55.

	1953–54.	1954–55.
	£	£
Revenue—		
Salaries	229,579	243,803
Travelling and Incidentals	26,094	28,701
Extra Living Allowances	1,628	1,722
Fares, Printing, Stores, &c.	5,377	6,872
Cash Equivalent Extended Leave	2,553	1,244
National Parks	29,643	45,199
Reforestation	8,916	..
Access Roads	78,405	138,271
Forestry Roads	40,000*	..
Purchase of Plant	61,131	117,712
Loan—		
Reforestation	1,059,000	1,371,656
Acquisition of Land for Forestry Purposes	4,175	9,645
Trust—		
Hardwood Supplies to Railway Department and Others	247,800	190,886
Harvesting and Marketing Timber	667,072	540,675
Access Roads—Maintenance and Subsidies	45,898	77,698
Maintenance of Capital Improvements	28,379	32,208
Total £	2,535,650	2,806,292

* Special grant made under Forestry vote for this year. The amount was expended by the Main Roads Department on behalf of the Forestry Department on access roads in North Queensland.

APPENDIX H.

Summary of Reforestation Expenditure, 1954-55.

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-Roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
BRISBANE WORKING PLAN AREA.														
Reserve 69	..	..	..	..	..	1,020 3 3	52 19 7	..	203 13 10	400 0 7	31 6 4	..	..	1,708 3 7
Reserve 215	..	10 3 5	..	..	..	549 0 11	..	..	22 0 6	174 19 2	..	33 13 6	..	789 17 6
Reserve 309	..	504 18 2	..	..	5 3 0	2,093 5 2	..	1,042 18 1	1,974 9 4	1,282 18 7	84 4 0	158 16 6	..	7,146 12 10
Reserve 359	700 0 0	..	..	..	..	..	..	..	..	..	..	..	..	700 0 0
Reserve 494	..	449 10 4	..	..	..	464 19 11	6 12 6	..	257 15 5	211 7 2	74 5 0	135 16 0	..	1,600 6 4
Reserve 571	..	..	..	..	8 5 3	659 19 7	16 17 11	150 18 8	302 2 0	318 13 5	..	72 13 0	..	1,529 9 10
Reserve 593	332 7 0	..	..	..	..	17 16 1	9 1 0	54 19 9	218 2 11	122 14 10	..	..	..	755 1 7
Reserve 667	17 16 0	26 14 6	..	..	..	197 13 2	..	..	61 2 2	244 9 3	10 0 1	..	..	557 15 2
Reserve 702	..	258 14 1	..	..	..	744 16 0	41 14 3	2,017 9 1	883 0 6	764 12 2	22 17 9	344 13 8	..	5,027 17 6
Reserve 727	..	226 10 3	..	..	..	305 0 5	..	..	53 6 1	121 17 9	..	..	..	706 14 6
Reserve 1355	..	..	..	..	..	..	..	..	5 3 4	..	..	..	..	5 3 4
Reserve 1376	..	611 14 0	..	..	..	332 14 0	..	..	64 8 10	202 13 0	..	..	..	1,211 9 10
Reserve 1526	..	..	..	..	0 6 8	1,156 6 5	..	..	262 4 8	11 0 5	1 17 1	4 11 0	..	1,436 6 3
Administration	..	..	..	..	..	..	..	..	512 5 7	..	..	..	..	512 5 7
Firefighting and Patrol	..	..	..	..	..	812 6 7	..	..	..	..	..	..	..	812 6 7
Experiments	..	..	..	15 17 5	..	..	..	..	..	..	..	..	..	15 17 5
Miscellaneous Surveys	..	..	..	..	*Cr.* 31 11 6	..	..	..	..	..	..	..	..	*Cr.* 31 11 6
Drum Account	..	..	..	..	..	..	..	..	*Cr.* 176 19 0	..	..	..	..	*Cr.* 176 19 0
	1,050 3 0	2,088 4 9	..	15 17 5	*Cr.* 17 16 7	8,354 1 6	127 5 3	3,266 5 7	4,502 16 2	3,855 6 4	224 10 3	750 3 8	..	24,306 17 4
KILCOY WORKING PLAN AREA.														
Reserve 137/207	16,093 17 5	..	3,086 17 7	..	328 12 9	4,106 12 6	353 0 10	1,914 4 1	9,668 2 1	9,025 12 11	..	5,480 1 6	..	50,057 1 8
Reserve 274	..	..	..	..	..	2 2 10	..	..	0 5 10	..	..	..	..	2 8 8
Reserve 434	..	..	..	..	..	1 16 6	..	..	0 12 2	..	..	..	..	2 8 8
Reserve 480	..	..	..	..	4 18 1	..	..	..	..	..	..	..	..	4 18 1
Reserve 370	..	146 6 5	..	..	32 19 0	978 14 2	7 4 0	1,328 0 8	1,069 7 6	457 1 6	62 14 3	280 10 0	..	4,362 17 6
Reserve 637	..	..	..	..	160 16 7	35 17 4	4 0 9	382 19 8	307 9 6	114 0 7	4 8 10	68 5 6	..	1,077 18 9
Reserve 753	..	..	..	..	..	100 14 6	..	..	28 3 4	8 7 5	..	6 3 0	..	143 8 3
Reserve 893	..	..	..	..	..	2,846 0 3	24 6 4	130 18 7	462 6 0	660 10 1	163 14 10	356 15 0	..	4,644 11 1
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	1,014 10 5	1,014 10 5
Administration	..	..	..	..	..	236 14 0	..	..	1,016 6 11	..	..	..	..	1,016 6 11
Firefighting	..	..	..	..	..	..	..	..	..	..	..	..	..	236 14 0
Experiments	..	..	..	136 4 2	..	..	..	..	..	..	..	..	..	136 4 2
	16,093 17 5	146 6 5	3,086 17 7	136 4 2	527 6 5	8,308 12 1	388 11 11	3,756 3 0	12,552 13 4	10,265 12 6	230 17 11	6,191 15 0	1,014 10 5	62,699 8 2

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.
NORTH COAST WORKING PLAN AREA.														
Reserve 60	..	456 4 11	..	..	17 14 8	801 18 2	835 1 10	299 16 7	170 6 6	554 10 7	..	0 6 6	..	3,135 19 9
Reserve 108	671 2 4	..	..	..	134 18 6	739 0 8	249 19 9	..	164 18 6	100 4 11	13 13 0	48 4 0	..	2,122 1 8
Reserve 173	..	368 6 2	..	..	..	3,274 11 1	128 0 0	185 10 9	952 2 3	1,001 4 5	61 2 0	123 4 0	..	6,094 0 8
Reserve 249	..	115 9 0	..	..	..	1,415 7 8	223 18 7	..	166 16 1	343 2 5	..	..	..	2,264 13 9
Reserve 313	..	..	..	..	..	478 14 11	7 19 4	26 7 9	43 12 11	158 13 10	..	54 12 0	..	770 0 9
Reserve 318	..	289 17 7	..	..	1 6 10	2,363 4 3	428 3 7	0 6 8	1,218 2 10	1,034 18 10	226 7 9	477 2 0	..	6,039 10 4
Reserve 445	..	..	..	..	..	1,928 0 2	169 15 10	..	806 1 11	686 19 1	..	25 16 11	..	3,617 2 11
Beerwah State Forest	859 5 0	..	1,771 13 7	..	797 11 6	2,354 7 1	1,327 2 3	754 0 11	3,396 18 5	2,089 2 10	..	1,089 16 6	..	14,439 18 1
Beerburrum State Forest	32,565 0 0	..	1,892 17 1	..	2,716 16 5	16,194 1 7	5,271 10 8	1,778 2 1	15,200 13 0	11,160 10 3	17 10 2	6,877 13 6	..	93,674 14 9
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	2,494 16 2	2,494 16 2
Administration	..	..	..	..	..	..	..	..	376 13 11	..	..	..	..	376 13 11
Firefighting and Patrol	..	..	..	..	..	3,972 13 9	..	..	..	..	..	..	..	3,972 13 9
Experiments	..	..	..	9,365 9 0	..	..	..	..	..	..	..	..	..	9,365 9 0
Miscellaneous Surveys	..	..	..	..	17 0 3	..	..	..	..	..	..	..	..	17 0 3
	34,095 7 4	1,229 17 8	3,664 10 8	9,365 9 0	3,685 8 2	33,521 19 4	8,641 11 10	3,044 4 9	22,496 15 4	17,129 7 2	318 12 11	8,696 15 5	2,494 16 2	148,384 15 9
BRISBANE VALLEY WORKING PLAN AREA.														
Reserve 120	11,761 2 4	..	..	..	86 7 5	1,866 7 3	11 8 10	217 4 3	4,363 17 6	2,357 8 11	..	0 6 6	..	20,664 3 0
Reserve 151	537 19 9	..	165 15 1	..	10 12 2	1,157 17 0	108 5 9	10 18 10	1,174 17 9	609 0 1	166 19 11	411 4 6	..	4,353 10 10
Reserve 257	8,133 14 3	..	1,325 16 10	..	284 11 10	1,551 8 0	500 17 1	1,280 17 1	6,302 13 9	3,531 0 11	14 0 6	2,524 14 0	..	25,449 14 3
Reserve 258	3,534 19 4	..	777 5 9	..	34 2 11	727 4 8	157 15 7	425 9 1	2,750 2 10	1,619 19 3	424 13 5	1,078 7 6	..	11,530 0 4
Reserve 283	17,995 0 5	47 8 9	2,450 18 10	..	313 18 1	4,028 5 10	926 1 4	627 16 10	12,189 5 11	9,357 9 8	..	4,522 14 0	..	52,458 19 8
Reserve 289	10,707 8 5	..	3,522 5 4	..	392 17 5	2,318 3 6	1,611 6 4	1,159 12 8	5,819 16 5	5,775 10 9	78 0 0	3,519 11 0	..	34,904 11 10
Reserve 299	8,165 5 5	..	1,748 6 0	..	224 6 0	2,276 12 6	621 0 8	384 3 6	5,619 2 3	3,547 19 3	79 2 0	1,871 15 0	..	24,537 12 7
Reserve 316	..	..	..	..	..	4 8 0	..	..	20 6 5	..	..	..	..	24 14 5
Reserve 328/9/474	110 2 3	..	490 10 2	..	29 7 6	27 7 9	219 12 11	206 8 1	540 11 0	136 13 9	43 10 0	170 8 0	..	1,974 11 5
Reserve 379	432 17 0	..	..	..	40 17 10	876 9 8	..	91 0 10	303 8 5	162 7 2	..	0 13 0	..	1,907 13 11
Reserve 509	2,843 7 8	..	1,318 19 4	..	13 14 4	2,099 17 2	210 19 2	0 5 4	2,575 6 8	2,348 8 9	17 14 10	299 0 10	..	11,727 14 1
Reserve 527/8/9	..	520 0 3	..	..	3 11 3	940 2 0	257 0 6	0 15 2	981 4 4	398 7 5	288 6 10	325 16 6	..	3,715 4 3
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	4,079 0 4	4,079 0 4
Administration	..	..	..	..	..	..	..	..	645 13 0	..	..	..	..	645 13 0
Firefighting and Patrol	..	..	..	..	..	1,250 1 0	..	..	..	..	..	..	..	1,250 1 0
Experiments	..	..	..	2,675 5 7	..	..	..	..	..	..	..	..	..	2,675 5 7
Miscellaneous Surveys	..	..	..	..	4 16 10	..	..	..	..	..	..	..	..	4 16 10
Drum Account	..	..	..	..	..	..	..	..	43 0 0	..	..	..	..	43 0 0
	64,221 16 10	567 9 0	11,799 17 4	2,675 5 7	1,439 3 7	19,124 4 4	4,624 8 2	4,404 11 8	43,329 6 3	29,844 5 11	1,112 7 6	14,724 10 10	4,079 0 4	201,946 7 4

APPENDIX H—*continued.*

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay Roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
DALBY WORKING PLAN AREA.														
Reserve 4	..	..	..	..	..	2,858 17 1	29 4 8	529 14 3	1,233 17 2	592 8 7	438 3 4	543 4 0	..	6,225 9 1
Reserve 16 Ballon	..	..	..	..	..	9,257 4 2	775 2 9	1,502 19 0	4,577 18 1	1,825 8 2	832 14 2	2,082 17 0	..	20,854 3 4
Reserve 16 Malcolm	..	4,860 11 2	..	..	..	4,636 5 11	289 13 0	474 15 11	4,492 14 4	2,444 15 4	998 13 9	2,135 14 0	..	20,333 3 5
Reserve 78, etc.	..	5,182 3 0	..	..	..	3,892 11 9	57 19 3	58 12 4	4,061 12 10	1,986 19 11	813 17 9	1,669 18 0	..	17,723 14 10
Reserve 83/106	..	377 2 3	..	..	..	2,145 1 9	100 7 6	..	795 15 0	592 19 11	243 6 6	392 18 6	..	4,647 11 5
Reserve 93	..	775 13 8	..	..	..	2,159 19 5	153 17 5	241 9 0	1,511 18 2	616 4 11	210 1 9	606 0 0	..	6,275 4 4
Reserve 126	..	53 18 7	..	..	..	590 6 5	..	..	336 2 0	229 7 5	54 17 7	117 1 0	..	1,381 13 0
Reserve 150	..	115 5 6	..	..	..	2,843 19 11	443 16 5	676 13 5	1,440 15 4	597 13 0	110 6 2	683 5 0	..	6,911 14 9
Reserve 154	..	1,943 0 4	..	..	18 5 2	5,438 5 3	504 3 0	1,773 9 1	3,242 15 3	1,713 5 2	625 6 11	2,025 15 0	..	17,284 5 2
Reserve 155	..	354 10 3	..	..	2 13 8	2,489 9 0	722 19 7	859 10 8	1,198 3 10	448 15 11	262 8 4	644 12 6	..	6,083 3 9
Reserve 389	..	..	..	..	..	32 7 7	..	294 18 0	198 13 2	35 16 8	2 2 11	55 12 6	..	619 10 10
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	2,105 6 0	2,105 6 0
Administration	..	..	..	..	..	..	..	..	1,011 2 9	..	..	..	..	1,011 2 9
Firefighting and Patrol	..	..	..	..	..	1,646 17 5	..	..	..	..	..	..	..	1,646 17 5
Experiments	..	..	..	765 11 2	..	..	..	..	..	..	..	..	..	765 11 2
Drum Account	..	..	..	..	..	..	..	..	94 0 0	..	..	..	..	94 0 0
	..	13,662 4 9	..	765 11 2	20 18 10	37,991 5 8	3,077 3 7	6,412 1 8	24,195 7 11	11,083 15 0	4,591 19 2	10,956 17 6	2,105 6 0	114,862 11 3
FRASER ISLAND WORKING PLAN AREA.														
Reserve 3/12	..	1,191 14 8	..	..	328 0 11	1,535 4 11	747 0 1	..	2,370 11 11	1,047 2 10	339 7 0	844 9 6	..	8,403 11 10
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	166 10 9	166 10 9
Administration	..	..	..	..	..	..	..	..	115 4 8	..	..	..	..	115 4 8
Firefighting and Patrol	..	..	..	..	..	92 19 7	..	..	..	..	..	..	..	92 19 7
Experiments	..	..	..	178 9 11	..	..	..	..	..	..	..	..	..	178 9 11
Drum Account	..	..	..	..	..	..	..	..	Cr. 74 0 0	..	..	..	..	Cr. 74 0 0
	..	1,191 14 8	..	178 9 11	328 0 11	1,628 4 6	747 0 1	..	2,411 16 7	1,047 2 10	339 7 0	844 9 6	166 10 9	8,882 16 9

APPENDIX H—*continued.*

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	*New* Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-Roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
GYMPIE WORKING PLAN AREA.														
Reserve 82/242 ..	8,857 15 0	..	1,102 16 9	..	24 6 1	1,693 11 4	129 7 2	879 6 3	5,172 10 4	4,544 18 1	177 10 10	1,727 9 0	..	24,309 10 10
Reserve 124	7,462 8 9	..	1,179 5 5	..	47 5 3	1,067 6 8	151 13 11	694 17 3	5,467 0 6	4,328 14 1	241 10 0	2,108 11 0	..	22,748 12 10
Reserve 234	..	338 5 0	..	..	6 0 10	2,188 0 6	74 3 9	24 6 10	1,189 15 1	911 8 2	3 7 0	348 5 0	..	5,083 12 2
Reserve 392	5,389 15 4	..	..	..	14 6 7	1,796 12 9	60 2 8	762 19 5	3,738 3 6	3,065 4 5	148 8 5	984 13 0	..	15,960 6 1
Reserve 393	42 12 9	..	..	..	..	2,212 15 2	73 6 11	2,180 9 3	2,665 7 7	2,338 8 6	143 15 0	855 10 8	..	10,512 5 10
Reserve 502	162 15 10	219 3 2	..	..	..	2,519 5 1	54 16 5	174 9 9	2,294 18 4	1,570 17 3	40 13 1	629 19 6	..	7,666 18 5
Reserve 627	..	479 16 6	..	..	..	2,398 12 7	..	213 12 0	1,746 8 11	1,993 11 3	19 12 0	370 9 6	..	7,222 2 9
Reserve 451	..	..	..	..	..	..	..	..	6 2 0	..	1 12 0	..	..	7 14 0
Reserve 932	..	..	..	..	..	489 10 4	..	..	180 13 1	73 5 6	..	..	..	743 8 11
Reserve 952	78 16 11	..	31 18 1	..	..	4,902 4 9	211 7 4	917 8 1	2,441 2 2	2,466 16 5	100 0 1	585 3 6	..	11,734 17 4
Reserve 959	..	265 6 3	..	..	..	3,912 4 5	83 8 3	369 7 3	2,005 14 1	1,563 14 7	2 12 0	..	..	8,202 6 10
Reserve 963	..	..	..	..	2 13 6	980 2 4	0 9 3	..	294 18 0	170 11 5	..	8 10 6	..	1,457 5 0
Reserve 983	..	41 4 9	..	..	..	665 0 8	18 1 7	..	120 19 10	232 17 3	4 9 11	..	..	1,082 14 0
Reserve 997	68 8 5	..	..	..	10 5 3	1,021 14 6	59 4 9	370 6 6	467 6 3	153 5 4	17 2 10	95 17 6	..	2,263 11 4
Reserve 1004	22,604 4 0	..	1,956 3 9	..	198 9 11	6,469 12 7	402 9 11	2,243 3 2	16,251 14 6	8,015 2 2	195 2 4	5,067 19 6	..	63,404 1 10
Pay Roll Tax	..	..	..	..	..	..	..	..	1,993 13 5	..	..	..	3,848 9 4	3,848 9 4
Administration	..	..	..	..	..	..	..	..	..	..	..	..	..	1,993 13 5
Electrical Installation Gympie Depot ..	..	..	..	..	..	..	..	34 10 6	..	..	..	..	..	34 10 6
Firefighting and Patrol ..	..	..	..	..	..	1,947 15 10	..	..	..	..	..	..	..	1,947 15 10
Experiments	..	..	..	979 13 7	..	..	..	..	..	..	..	..	..	979 13 7
Drum Account	..	..	..	..	..	..	..	..	*Cr.* 95 7 6	..	..	..	..	*Cr.* 95 7 6
	44,666 17 0	1,343 15 8	4,270 4 0	979 13 7	303 7 5	34,264 9 6	1,318 11 11	8,864 16 3	45,941 0 1	31,428 14 5	1,095 15 6	12,782 8 8	3,848 9 4	191,108 3 4
MARY VALLEY WORKING PLAN AREA.														
Reserve 135	30,175 14 4	..	1,848 1 0	..	717 13 2	3,399 13 6	2,865 13 4	3,052 12 10	19,363 11 11	15,226 4 8	311 7 11	7,769 3 6	..	84,729 16 2
Reserve 135/274 ..	10,836 7 10	..	867 11 4	..	213 0 1	875 16 4	697 15 10	1,729 10 8	4,108 6 6	4,641 17 3	0 6 8	2,980 12 6	..	26,951 5 0
Reserve 256	5,720 2 10	..	..	..	37 17 6	507 13 3	116 17 7	1,375 7 0	1,789 7 8	1,752 16 11	..	1,302 14 0	..	12,602 16 9
Reserve 435	9,426 7 4	..	1,260 15 8	..	47 13 11	2,431 4 11	1,756 4 5	1,898 7 11	8,697 7 8	6,264 17 9	275 16 10	4,175 5 0	..	36,234 1 5
Reserve 546	..	..	..	..	..	..	109 13 6	..	..	..	..	..	..	109 13 6
Pay Roll Tax	..	..	..	..	..	..	..	..	1,261 5 3	..	..	..	3,578 1 0	3,578 1 0
Administration ..	..	..	..	..	..	297 13 6	..	..	..	..	..	..	..	1,261 5 3
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	297 13 6
Experiments	..	..	..	3,768 5 11	..	..	..	..	..	..	..	..	..	3,768 5 11
	56,158 12 4	..	3,976 8 0	3,768 5 11	1,016 4 8	7,512 1 6	5,546 4 8	8,055 18 5	35,219 19 0	27,885 16 7	587 11 5	16,227 15 0	3,578 1 0	169,532 18 6
MACKAY WORKING PLAN AREA.														
Reserve 72	..	..	..	..	156 19 9	..	..	..	9 9 1	..	..	..	..	166 8 10
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	2 6 10	2 6 10
Administration ..	..	..	..	..	..	..	..	..	330 10 1	..	..	..	..	330 10 1
Experiments	..	..	..	179 2 8	24 14 6	..	..	..	..	..	..	..	..	179 2 8
Miscellaneous Surveys..	..	..	..	..	..	..	..	..	66 14 0	..	..	..	..	24 14 6
Drum Account ..	..	..	..	..	..	..	..	..	..	..	..	..	..	66 14 0
	..	..	..	179 2 8	181 14 3	..	..	..	406 13 2	..	..	..	2 6 10	769 16 11

APPENDIX H—*continued.*

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay Roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	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.
CLERMONT WORKING PLAN AREA.														
Reserve 117	..	221 5 5	..	..	1,053 18 0	302 19 6	..	..	333 16 6	186 6 8	68 19 10	94 13 0	..	2,261 18 11
Reserve 127	..	221 0 9	..	..	182 0 1	839 10 8	28 1 3	..	403 6 1	310 14 0	197 8 5	168 6 6	..	2,350 7 9
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	106 7 2	106 7 2
Administration	..	..	..	..	..	..	..	..	141 0 7	..	..	..	..	141 0 7
Firefighting and Patrol	..	..	..	..	..	34 7 8	..	..	..	..	..	..	..	34 7 8
Experiments	..	..	..	23 15 2	..	..	..	..	..	..	..	..	..	23 15 2
	..	442 6 2	..	23 15 2	1,235 18 1	1,176 17 10	28 1 3	..	878 3 2	497 0 8	266 8 3	262 19 6	106 7 2	4,917 17 3
ROCKHAMPTON WORKING PLAN AREA.														
Reserve 20	7,795 18 9	..	1,740 15 6	..	1,480 11 6	6,748 5 10	189 17 6	1,893 4 10	3,759 15 5	3,618 10 10	395 14 3	2,196 4 0	..	29,818 18 5
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	637 13 3	637 13 3
Administration	..	..	..	..	..	..	..	..	39 9 4	..	..	..	..	39 9 4
Firefighting and Patrol	..	..	..	..	..	68 2 10	..	..	..	..	..	..	..	68 2 10
Experiments	..	..	..	325 19 4	..	..	..	..	..	..	..	..	..	325 19 4
	7,795 18 9	..	1,740 15 6	325 19 4	1,480 11 6	6,816 8 8	189 17 6	1,893 4 10	3,799 4 9	3,618 10 10	395 14 3	2,196 4 0	637 13 3	30,890 3 2
MANY PEAKS WORKING PLAN AREA.														
Reserve 28	..	1,996 19 1	..	..	4 7 3	3,163 8 0	402 19 10	55 16 1	2,733 17 5	1,554 18 4	624 18 10	1,331 5 6	..	11,868 10 4
Reserve 67	1,020 0 0	..	716 17 3	..	106 18 10	1,231 3 6	136 1 6	838 4 10	1,559 11 4	1,381 3 3	261 17 1	847 12 0	..	8,099 9 7
Reserve 81	..	..	..	..	..	..	0 14 11	1 2 4	..	..	..	..	..	1 17 3
Reserve 95/179	12,597 10 6	..	2,563 3 8	..	57 13 11	2,193 9 4	1,511 5 1	1,050 15 10	6,502 8 10	5,929 18 8	88 15 7	3,510 17 6	..	36,005 18 11
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	1,153 12 4	1,153 12 4
Administration	..	..	..	..	..	..	..	..	271 14 11	..	..	..	..	271 14 11
Firefighting and Patrol	..	..	..	..	..	304 1 6	..	..	..	..	..	..	..	304 1 6
Experiments	..	..	..	234 8 8	..	..	..	..	..	..	..	..	..	234 8 8
Drum Account	..	..	..	..	..	..	..	..	*Cr.* 74 0 6	..	..	..	..	*Cr.* 74 0 6
	13,617 10 7	1,996 19 1	3,280 0 11	234 8 8	169 0 0	6,892 2 4	2,051 1 4	1,945 19 1	10,993 12 0	8,866 0 3	975 11 6	5,689 15 0	1,153 12 4	57,865 13 0
MARYBOROUGH WORKING PLAN AREA.														
Reserve 8	..	800 16 8	..	..	15 4 6	2,425 11 10	64 14 7	21 7 3	1,443 1 1	774 9 0	122 14 6	459 5 6	..	6,127 4 11
Reserve 12	..	163 10 10	..	..	..	1,036 14 4	28 3 10	2 16 4	700 17 11	242 12 10	68 17 11	154 13 6	..	2,398 7 6
Reserve 27	..	122 14 5	..	..	..	1,180 1 8	72 16 11	411 2 3	1,588 11 0	982 13 9	19 15 4	511 8 0	..	4,889 3 4
Reserve 57	..	1,075 8 10	..	..	19 11 11	2,146 0 2	330 18 2	741 16 4	1,955 10 11	897 18 3	172 10 6	992 6 6	..	8,332 1 7
Reserve 864	..	506 10 5	..	..	..	2,302 10 3	107 13 7	438 1 6	1,081 13 9	1,001 7 10	64 12 9	685 13 9	..	6,188 3 10
Reserve 915	21,866 5 1	..	1,397 2 3	..	5,520 15 4	11,038 7 8	1,119 3 5	284 8 7	14,588 18 5	9,154 9 4	373 5 6	4,152 16 0	..	69,495 11 7
Reserve 958	..	553 12 5	..	..	..	2,539 17 8	84 3 10	93 1 3	1,483 2 10	740 13 11	27 13 9	55 9 6	..	5,582 15 2
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	2,206 8 7	2,206 8 7
Administration	..	..	..	..	..	..	..	..	4,036 2 10	..	..	..	..	4,036 2 10
Firefighting and Patrol	..	..	..	..	..	1,479 7 5	..	..	..	..	..	..	..	1,479 7 5
Miscellaneous Surveys	..	..	..	..	23 14 3	..	..	..	..	..	..	..	..	23 14 3
Construction — Garage, District Forester's Residence	..	..	..	..	..	..	..	36 1 2	..	..	..	..	..	36 1 2
Experiments	..	..	..	2,798 6 10	..	..	..	..	..	..	..	..	..	2,798 6 10
Drum Account	..	..	..	..	..	..	..	..	*Cr.* 96 0 0	..	..	..	..	*Cr.* 96 0 0
	21,866 5 1	3,222 13 7	1,397 2 3	2,798 6 10	5,579 6 0	24,148 11 0	1,807 14 4	2,028 14 8	26,786 18 9	13,794 4 11	849 10 3	7,011 12 9	2,206 8 7	113,497 9 0

APPENDIX H—*continued.*

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	*Maintenance* of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-Roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
BUNDABERG WORKING PLAN AREA.														
Reserve 80	..	164 0 0	..	..	24 19 11	2,792 8 7	666 2 3	413 10 4	1,419 7 7	561 12 9	69 12 11	450 5 0	..	6,561 19 4
Reserve 169	..	..	..	..	117 16 10	1,045 1 3	114 18 9	738 2 4	1,034 11 8	534 19 11	76 0 0	434 14 0	..	4,096 4 9
Reserve 278	..	917 12 11	..	..	..	761 12 9	22 0 6	51 15 9	1,018 18 5	556 14 7	63 17 11	432 14 0	..	3,825 6 10
Reserve 832/7	..	1,023 15 5	..	..	4 12 6	1,378 15 10	93 8 11	500 6 8	1,374 9 8	864 2 5	111 7 2	619 18 0	..	5,970 16 7
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	423 11 7	423 11 7
Administration	..	..	..	..	146 13 5	..	..	..	572 13 7	..	..	..	..	572 13 7
Miscellaneous Surveys	..	..	..	..	..	621 16 1	..	..	..	..	..	..	..	146 13 5
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	621 16 1
Experiments	..	..	..	870 6 3	..	..	..	..	..	..	..	..	..	870 6 3
	..	2,105 8 4	..	870 6 3	294 2 8	6,599 14 6	896 10 5	1,703 15 1	5,420 0 11	2,517 9 8	320 18 0	1,937 11 0	423 11 7	23,089 8 5
KILKIVAN WORKING PLAN AREA.														
Reserve 24	..	237 16 11	..	..	..	1,773 13 8	47 4 0	1,588 2 9	780 3 0	671 19 0	45 0 0	442 16 0	..	5,586 15 4
Reserve 26	..	..	..	..	..	8 4 0	..	..	..	..	..	..	..	8 4 0
Reserve 67	..	..	..	..	..	36 4 2	..	..	3 0 10	12 0 2	1 6 0	4 4 6	..	56 15 8
Reserve 74	..	..	..	..	..	34 0 4	..	..	..	0 17 2	..	..	..	34 17 6
Reserve 97–9	5,447 4 11	..	..	..	..	1,551 8 1	26 11 5	..	1,695 8 4	1,671 0 5	201 14 6	1,250 13 0	..	11,844 0 8
Reserve 138	1,081 13 3	..	..	..	..	38 18 6	..	..	331 0 9	78 8 0	..	..	..	1,530 0 6
Reserve 154	4,946 2 10	..	535 16 4	..	60 1 11	488 18 8	219 10 2	770 14 8	2,642 5 3	1,491 0 9	152 13 2	1,522 9 2	..	12,829 12 11
Reserve 220	2,748 11 9	..	..	..	4 1 0	512 8 10	330 16 6	160 3 10	2,146 10 10	1,277 1 7	210 18 8	844 11 0	..	8,235 4 0
Reserve 221	..	103 10 10	..	..	..	438 16 11	29 2 9	4 8 0	217 5 9	228 13 7	38 11 4	109 17 0	..	1,170 6 2
Reserve 298	12,759 11 11	..	3,251 12 2	..	123 14 0	1,647 1 4	630 9 3	1,634 18 0	4,679 9 9	3,885 17 3	341 0 9	3,982 12 0	..	32,936 6 5
Reserve 355	159 14 4	..	..	..	..	334 15 4	30 11 2	..	85 11 10	159 4 1	79 0 7	30 16 6	..	888 13 10
Reserve 424	..	..	..	..	..	428 18 8	22 13 7	273 9 4	64 5 0	48 15 10	162 14 1	55 14 6	..	1,056 11 0
Reserve 427	..	..	2,331 17 7	..	..	14 17 4	76 8 8	..	592 14 11	511 14 4	197 17 0	359 3 0	..	4,084 12 10
Reserve 673	..	..	..	..	..	0 2 8	..	..	0 6 0	..	..	..	..	0 8 8
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	1,687 11 4	1,687 11 4
Administration	..	..	..	..	..	79 16 10	..	..	721 11 3	..	..	..	..	721 11 3
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	79 16 10
Experiments	..	..	..	250 13 9	..	..	1 7 0	..	..	..	..	..	..	250 13 9
Kilkivan Office	..	..	..	..	..	..	..	..	..	..	..	..	..	1 7 0
	27,142 19 0	341 7 9	6,119 6 1	250 13 9	187 16 11	7,388 5 4	1,414 14 6	4,431 16 7	13,959 13 6	10,036 12 2	1,430 16 1	8,611 16 8	1,687 11 4	83,003 9 8
NORTH QUEENSLAND WORKING PLAN AREA.														
Reserve 99	..	782 18 0	..	..	..	4 7 4	..	382 2 1	672 8 10	979 8 4	73 7 0	317 4 0	..	3,211 15 7
Reserve 185	38 17 9	131 17 11	330 2 0	..	..	83 6 7	4 4 1	4,215 11 1	944 7 8	802 9 7	12 16 6	321 19 0	..	6,885 12 2
Reserve 191	87 11 1	..	1,258 10 0	..	..	45 5 6	63 17 7	..	13 10 2	506 15 5	..	201 2 6	..	2,176 12 3
Reserve 194	..	..	..	..	..	15 14 5	..	241 2 1	4 1 1	..	..	..	..	260 17 7
Reserve 251	..	..	..	..	..	..	..	31 6 0	120 9 8	..	..	..	..	151 15 8
Reserve 310	18 15 7	1,004 6 5	..	..	23 4 7	43 13 6	..	..	1,134 15 10	559 19 8	..	..	..	3,056 1 7
Reserve 315	487 2 9	412 19 2	..	..	0 3 10	82 13 8	..	299 6 5	1,217 8 6	896 7 3	207 12 1	405 18 6	..	4,009 12 2
Reserve 438	..	153 4 3	..	..	..	566 4 6	49 6 11	2,142 0 9	643 6 10	662 7 4	102 6 8	127 3 3	..	4,446 0 6
Reserve 461	..	214 18 11	..	..	..	771 0 3	32 2 3	..	748 19 5	392 15 7	42 7 5	191 19 6	..	2,394 3 4
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	513 10 0	513 10 0
Administration	..	..	..	..	..	347 2 2	..	..	485 9 4	..	..	..	..	485 9 4
Firefighting and Patrol	..	..	..	..	..	..	..	..	..	..	..	..	..	347 2 2
Experiments	..	..	..	4,219 3 1	..	..	..	..	..	..	..	..	..	4,219 3 1
Drum Account	..	..	..	..	..	..	..	..	Cr. 11 15 0	..	..	..	..	Cr. 11 15 0
	632 7 2	2,700 4 8	1,588 12 0	4,219 3 1	23 8 5	1,959 7 11	149 10 10	7,311 8 5	5,973 2 4	4,800 3 2	438 9 8	1,836 12 9	513 10 0	32,146 0 5

APPENDIX H—*continued.*

Reserves.	Reforestation.				Surveys.	Protection, Firefighting, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Overhead Expenses.				Pay-Roll Tax.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.					Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Cartage of Rations, &c.	Camping Allowance.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
WARWICK WORKING PLAN AREA.														
Reserve 263	2,828 1 10	..	1,183 9 3	..	..	2,453 18 11	155 6 3	343 15 10	1,696 7 0	1,525 1 0	128 4 5	911 4 1	..	11,225 8 7
Reserve 316	2,015 8 9	..	..	..	..	2,537 13 0	99 3 7	1,355 7 5	1,190 5 5	945 14 1	111 6 10	807 18 8	..	9,062 17 9
Reserve 321	834 1 9	..	..	..	..	972 1 1	..	..	297 13 4	429 9 1	..	3 7 3	..	2,536 12 6
Reserve 444	..	105 6 6	..	..	..	193 19 4	14 11 8	62 12 0	218 5 0	70 16 1	100 1 7	3 5 0	..	768 17 2
Reserve 574	..	676 5 2	..	..	..	417 19 7	6 1 6	28 14 4	402 19 1	204 19 8	65 2 11	142 15 6	..	1,944 17 9
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	526 13 3	526 13 3
Administration	..	..	..	..	..	..	..	..	998 5 11	..	..	..	..	998 5 11
Firefighting and Patrol	..	..	..	..	..	458 10 1	..	..	..	..	..	..	..	458 10 1
Experiments	..	..	..	290 7 10	..	..	..	..	..	..	..	..	..	290 7 10
Drum Account	..	..	..	..	..	..	..	..	81 16 0	..	..	..	..	81 16 0
	5,677 12 4	781 11 8	1,183 9 3	290 7 10	..	7,034 2 0	275 3 0	1,790 9 7	4,885 11 9	3,175 19 11	404 15 9	1,868 10 6	526 13 3	27,894 6 10
INGLEWOOD WORKING PLAN AREA.														
Reserve 48	..	254 0 1	..	..	0 9 0	77 9 2	20 2 4	102 4 4	266 9 0	82 10 11	236 1 0	89 7 0	..	1,128 12 10
Reserve 79	..	1,212 4 6	..	..	..	986 12 5	38 1 10	3 12 0	1,163 7 9	463 3 10	415 4 6	393 12 2	..	4,675 19 0
Reserve 81	..	337 4 2	..	..	..	2,561 15 4	20 19 2	..	1,283 6 5	599 0 9	278 19 0	510 7 0	..	5,591 11 10
Reserve 101	..	558 16 5	..	..	..	264 7 9	77 15 0	368 17 9	393 14 11	173 10 4	185 0 1	106 18 0	..	2,129 0 3
Reserve 122	..	1,525 1 6	..	..	182 16 10	682 3 0	35 12 8	373 15 10	629 15 7	456 7 3	107 1 1	422 15 0	..	4,415 8 9
Reserve 132	..	..	..	..	..	232 15 11	..	..	54 17 9	27 2 9	5 11 0	49 16 6	..	370 3 11
Reserve 134	..	1,177 11 10	..	..	..	436 5 11	93 9 1	375 18 5	516 14 4	359 13 1	171 12 6	363 15 6	..	3,495 0 8
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	415 14 1	415 14 1
Administration	..	..	..	..	..	..	..	..	590 6 6	..	..	..	..	590 6 6
Firefighting and Patrol	..	..	..	..	..	489 18 11	..	..	..	..	..	..	..	489 18 11
Experiments	..	..	..	68 17 1	..	..	..	..	..	..	..	..	..	68 17 1
	..	5,064 18 6	..	68 17 1	183 5 10	5,731 8 5	286 0 1	1,224 8 4	4,898 12 3	2,161 8 11	1,399 9 2	1,936 11 2	415 14 1	23,370 13 10
MISCELLANEOUS.														
Pay Roll Tax	..	..	..	..	..	..	..	..	..	..	..	..	2,100 4 4	2,100 4 4
Experiments	..	..	..	25 4 0	..	..	..	..	..	..	..	..	..	25 4 0
Radio Equipment	..	..	..	..	..	776 15 2	..	..	..	..	..	..	..	776 15 2
Nursery—Salisbury	..	..	213 17 11	..	..	..	..	..	..	..	..	..	..	213 17 11
Storeroom Expenses	..	..	..	..	..	..	..	..	2,569 15 7	..	..	..	..	2,569 15 7
Depot Stock, Salisbury	..	..	..	..	..	..	..	..	*Cr.*5,713 2 4	..	..	..	..	*Cr.* 5,713 2 4
Aerial Photography, Maps, &c.	..	..	..	..	687 5 3	..	..	..	..	..	..	..	..	687 5 3
Construction Firefighting Unit	..	..	..	..	..	443 6 10	..	..	..	..	..	..	..	443 6 10
	..	..	213 17 11	25 4 0	687 5 3	1,220 2 0	..	..	*Cr.*3,143 6 9	..	..	..	2,100 4 4	1,103 6 9
Totals	293,019 6 9	36,885 2 8	42,321 1 6	27,171 1 5	17,325 2 4	219,671 18 5	31,569 10 8	60,133 17 11	265,598 0 6	182,007 11 3	14,982 14 7	102,526 8 11	27,060 6 9	1,320,272 3 8

SOURCES OF FUNDS.

	£ s. d.
Loan	1,371,655 11 9
Trust	32,208 9 5
	1,403,864 1 2

	£ s. d.
Administration	1,796 11 0
Fares and Freights	10,684 16 0
Collection and Storage of Seed	2,105 0 4
Workers' Compensation	32,706 0 2
Resumption—Danbulla Lands	36,299 10 0
	1,403,864 1 2

APPENDIX I.

Net Area of Plantation Established 1st April, 1954, to 31st March, 1955.

Species.	Brisbane.	Brisbane Valley.	Gympie.	Mackay.	Mary-borough.	Monto.	Warwick.	Queens-land Totals.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Softwoods.								
A. Native Conifers—								
Hoop Pine	197·3	577·0	505·5	..	108·6	165·4	..	1,553·8
Bunya Pine	2·0	..	..	..	..	..	..	2·0
Other Native Conifers	0·3	..	..	..	..	..	..	0·3
B. Exotic Conifers—								
*P. elliottii**	1,136·0	..	773·7	228·3	832·6	4·3	10·0	2,984,9
P. taeda	13·0	..	..	..	..	..	..	13·0
P. patula	7·0	188·0	..	..	2·5	..	..	197·5
P. caribaea	..	..	..	168·3	2·5	..	..	170·8
P. radiata	..	117·0	..	..	..	..	18·0	135·0
P. palustris	0·6	..	..	4·7	0·5	..	..	5·8
Others	8·0	..	..	0·6	0·5	..	..	9·1
C. Broadleaved Softwoods—								
Maple	..	..	5·0	..	..	..	..	5·0
Red Cedar	..	..	10·0	..	..	..	..	10·0
Others	..	..	5·0	..	..	..	..	5·0
Total—Softwoods	1,364·2	882·0	1,299·2	401·9	947·2	169·7	28·0	5,092·2
Eucalypts.								
Euc. saligna	..	..	..	..	..	..	..	Nil
Other Eucalypts	2·6	..	..	..	..	..	..	2·6
Total—*Eucalypts*	2·6	..	..	..	..	..	..	2·6
Total—All Species	1,366·8	882·0	1,299·2	401·9	947·2	169·7	28·0	5,094·8

* Slash Pine—in earlier Annual Reports referred to as *P. caribaea*.

APPENDIX J.

Net Area of Effective Plantation Classified into Forestry Districts to 31st March, 1955.

Species.	North Queens-land.	Brisbane.	Brisbane Valley.	Gympie.	Mackay.	Mary-borough.	Monto.	Warwick.	Fraser Island.	Queens-land Totals.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Softwoods.										
A. Native Conifers—										
Hoop Pine	574·2	2,305·8	12,956·1	13,320·4	15·4	4,186·0	1,839·1	..	126·1	35,323·1
Kauri Pine	285·0	1·7	..	1,460·6	0·7	..	..	..	69·7	1,817·7
Bunya Pine	0·8	23·8	8·0	242·4	1·7	14·8	..	..	0·7	292·2
Others	0·6	4·9	0·4	45·4	0·6	1·1	..	..	0·6	53·6
B. Exotic Conifers—										
*P. elliottii**	7·8	7,381·3	916·4	3,410·0	1,182·1	3,984·7	66·6	443·5	6·7	17,399·1
P. taeda	13·7	3,224·6	41·4	102·1	9·8	84·9	1·0	220·7	2·4	3,700·6
P. patula	43·6	67·3	2,294·4	22·2	7·6	79·8	22·5	667·3	3·4	3,208·1
P. caribaea	..	..	..	2·7	234·1	11·4	..	..	..	248·2
P. radiata	..	..	215·5	..	..	..	..	419·4	..	634·9
P. palustris	..	246·2	2·6	1·2	5·8	1·0	..	8·2	..	265·0
Others	8·1	72·2	20·6	12·4	36·1	10·0	2·1	23·3	6·8	191·6
C. Broadleaved Softwoods—										
Silky Oak	31·7	..	675·5	175·9	..	32·1	..	..	..	915·2
Maple	202·3	..	..	48·0	..	..	..	..	..	250·3
Red Cedar	29·2	..	..	12·5	..	..	..	..	..	41·7
Others	92·2	0·1	..	91·3	..	1·2	..	..	0·4	185·2
Total Softwoods	1,289·2	13,327·9	17,130·9	18,947·1	1,493·9	8,407·0	1,931·3	1,782·4	216·8	64,526·5
Eucalypts.										
Euc. saligna	0·7	36·2	215·7	892·2	..	33·7	..	..	..	1,178·5
Euc. paniculata	35·6	228·3	459·3	216·2	..	75·3	..	..	..	1,014·7
Euc. microcorys	27·7	215·4	28·7	17·5	..	..	..	..	..	289·3
Euc. pilularis	0·2	160·9	..	..	..	..	..	..	..	161·1
Other Eucalypts	4·0	19·6	12·7	66·9	..	..	..	..	..	103·2
Total—Eucalypts	68·2	660·4	716·4	1,192·8	..	109·0	..	..	..	2,746·8
Total—All Species	1,357·4	13,988·3	17,847·3	20,139·9	1,493·9	8,516·0	1,931·3	1,782·4	216·8	67,273·3

* Slash Pine—in earlier Annual Reports referred to as *P. caribaea*.

APPENDIX K.

Net Area of Plantation Effective at 31st March, 1955, 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.	1951-54.	Total.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Softwoods.									
A. Native Conifers—									
Hoop Pine	21·0	184·5	1,784·5	4,320·5	9,611·6	2,238·7	10,697·8	6,464·5	35,323·1
Kauri Pine	7·1	55·0	18·7	125·2	1,137·5	237·4	224·8	12·0	1,817·7
Bunya Pine ..	6·0	28·8	74·8	0·9	123·9	..	2·3	55·5	292·2
Others	..	3·7	42·6	2·4	4·6	..	..	0·3	53·6
B. Exotic Conifers—									
*P. elliottii**	..	6·7	48·1	1,991·6	1,130·8	506·5	3,683·4	10,032·0	17,399·1
P. taeda	..	..	32·5	561·3	550·1	453·0	1,284·7	819·0	3,700·6
P. patula	..	1·0	21·0	160·1	462·4	189·0	1,356·7	1,017·9	3,208·1
P. caribaea	..	..	..	..	..	..	2·1	246·1	248·2
P. radiata	..	0·4	67·8	151·9	1·9	..	131·5	281·4	634·9
P. palustris	..	..	0·2	28·1	108·7	44·1	45·8	38·1	265·0
Others	..	1·6	18·8	38·5	20·5	1·0	47·3	63·9	191·6
C. Broadleaved Softwoods—									
Silky Oak	..	3·1	538·8	286·7	86·6	..	..	..	915·2
Maple	0·8	11·9	49·1	93·6	63·4	..	14·0	17·5	250·3
Red Cedar	9·0	..	4·0	0·6	0·6	0·5	..	27·0	41·7
Others	0·7	14·7	106·0	35·1	5·7	8·8	1·7	12·5	185·2
Total—Softwoods	44·6	311·4	2,806·9	7,796·5	13,308·3	3,679·0	17,492·1	19,087·7	64,526·5
Eucalypts.									
Euc. saligna	..	..	1·0	1·2	145·0	129·3	756·7	145·3	1,178·5
Euc. paniculata	..	..	1·4	532·1	402·1	77·3	1·8	..	1,014·7
Euc. microcorys	..	..	5·3	90·0	194·0	..	..	..	289·3
Euc. pilularis	..	..	0·2	97·9	56·9	..	6·1	..	161·1
Other Eucalypts ..	..	..	0·5	6·4	22·7	9·4	35·1	29·1	103·2
Total—Eucalypts	..	..	8·4	727·6	820·7	216·0	799·7	174·4	2,746·8
Total—All Species	44·6	311·4	2,815·3	8,524·1	14,129·0	3,895·0	18,291·8	19,262·1	67,273·3

* Slash Pine—in earlier Annual Reports referred to as *P. caribaea*.

APPENDIX L.

Areas of Natural Forest Treated.

Working Plan Area.	Reserve No.	Eucalypts. (Acres.)			Softwoods. (Acres.)			Other Species. (Acres.)			All Species. (Acres.)
		Treated 1954–55.	First Treatment 1954–55.	Total as at 30th June, 1955.	Treated 1954–55.	First Treatment 1954–55.	Total as at 30th June, 1955.	Treated 1954–55.	First Treatment 1954–55.	Total as at 30th June, 1955.	Total as at 30th June, 1955.
Brisbane	69	..	..	1,535	..	..	..	..	..	..	1,535
	1,376	334	..	1,450	..	..	..	..	..	..	1,450
	215	..	..	925	..	..	..	..	..	..	925
	702	110	..	2,060	..	..	..	..	..	..	2,060
	494	300	..	934	..	..	..	..	..	..	934
	446	..	..	1,094	..	..	..	..	..	..	1,094
	667	8	..	914	..	..	..	..	..	..	914
	309	262	..	3,073	..	..	..	..	..	..	3,073
	1,355	..	..	1,625	..	..	..	..	..	..	1,625
	727	205	..	976	..	..	..	..	..	..	976
		1,219	..	14,586	..	..	..	..	..	..	14,586
Brisbane Valley and Nanango	283	11	1	1,881	..	..	..	..	..	40	1,921
	257	..	..	125	..	..	..	..	..	66	191
	299	..	..	50	..	..	..	..	..	..	50
	527/8/9	606	90	5,476	..	..	..	..	..	..	5,476
		617	91	7,532	..	..	..	..	..	106	7,638
Bundaberg	80	236	92	9,298	..	..	..	..	..	..	9,298
	723	..	..	564	..	..	..	..	..	..	564
	832/837	1,573	770	15,114	..	..	..	..	..	..	15,114
	278	..	..	..	845	845	1,066	..	..	..	1,066
		1,809	862	24,976	845	845	1,066	..	..	..	26,042
Clermont	117	514	..	10,820	..	..	..	..	..	..	10,820
	127	455	350	19,284	..	..	..	..	..	..	19,284
		969	350	30,140	..	..	..	..	..	..	30,104
Dalby	93	1,006	1,006	18,998	47	47	1,975	..	..	..	20,973
	4	..	..	11,063	..	..	280	..	..	..	11,343
	83	..	..	4,876	..	..	..	..	..	..	4,876
	78 &c.	..	..	1,130	4,835	3,598	55,620	..	..	..	56,750
	34	..	..	1,270	..	..	2,496	..	..	..	3,766
	150	..	..	..	100	100	6,344	..	..	..	6,344
	16 M	..	..	6,576	3,794	3,794	29,019	..	..	..	35,595
	127	..	..	..	..	..	710	..	..	..	710
	126–135	..	..	..	80	40	3,740	..	..	..	3,740
	154	..	..	..	1,306	1,306	28,108	..	..	..	28,108
	155	..	..	..	221	221	2,509	..	..	..	2,509
	16 B	..	..	2,004	..	..	..	..	..	..	2,004
	106	175	175	1,204	208	208	275	..	..	..	1,479
		1,181	1,181	47,121	10,591	9,314	131,076	..	..	..	178,197
Fraser Island ..	3	614	206	18,363	50	50	4,424	..	..	..	22,787
Gympie	393	..	..	3,020	..	..	..	..	..	..	3,020
	234	144	..	1,730	..	..	..	..	..	..	1,730
	502	102	..	1,568	..	..	..	..	..	..	1,568
	627	180	..	2,423	..	..	..	..	..	..	2,423
	700	..	..	3,672	..	..	..	..	..	..	3,672
	124	..	..	770	..	..	..	..	..	..	770
	959	122	122	1,087	..	..	..	..	..	..	1,087
	950/1	25	25	1,160	..	..	..	..	..	..	1,160
		573	147	15,430	..	..	..	..	..	..	15,430
Inglewood	79	..	..	..	299	299	31,824	..	..	..	31,824
	122	..	..	..	..	..	18,300	..	..	..	18,300
	101	..	..	8,512	..	..	540	..	..	..	9,052
	134	..	..	..	..	..	14,790	..	..	..	14,790
	81	..	..	7,490	186	186	5,335	..	..	..	12,825
	48	..	..	..	174	174	4,573	..	..	..	4,573
	132	..	..	207	..	..	..	..	..	..	207
	120	..	..	298	..	..	515	..	..	..	813
		..	..	16,507	659	659	75,877	..	..	..	92,384

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 1954-55.	First Treatment 1954-55.	Total as at 30th June, 1955.	Treated 1954-55.	First Treatment 1954-55.	Total as at 30th June, 1955.	Treated 1954-55.	First Treatment 1954-55.	Total as at 30th June, 1955.	Total as at 30th June, 1955.
Kilcoy	370	66	66	3,276	..	..	..	..	..	..	3,276
	893	..	..	3,195	..	..	..	..	..	..	3,195
	637	..	..	1,168	..	..	..	..	..	..	1,168
		66	66	7,639	..	..	..	..	..	..	7,639
Kilkivan	221	492	492	2,414	..	..	..	..	..	..	2,414
	12/24	415	415	15,399	..	..	..	..	..	..	15,399
	424/7	..	..	80	..	..	..	..	..	..	80
		907	907	17,893	..	..	..	..	..	..	17,893
Many Peaks ..	28	1,028	422	7,174	..	..	..	..	..	..	7,174
	150	..	..	1,811	..	..	..	..	..	..	1,811
		1,028	422	8,985	..	..	..	..	..	..	8,985
Maryborough ..	958	800	..	15,926	..	..	..	..	..	..	15,926
	57	1,274	..	23,720	..	..	..	..	..	..	23,720
	12	250	..	5,426	..	..	..	..	..	..	5,426
	8	1,505	..	14,483	..	..	..	..	..	..	14,483
	27	158	74	7,124	..	..	..	..	..	..	7,124
	1	..	..	1,632	..	..	..	..	..	..	1,632
	191/864	930	..	13,155	..	..	..	..	..	..	13,155
		4,917	74	81,466	..	..	..	..	..	..	81,466
Mary Valley ..	135	..	..	159	..	..	..	..	..	..	159
North Coast ..	318										
	445	50	50	8,960	..	..	..	..	..	..	8,960
	583										
	313	..	..	1,650	..	..	..	..	..	..	1,650
	249	35	35	1,085	..	..	..	..	..	..	1,085
	60	175	175	1,555	..	..	..	..	..	..	1,555
	108	..	..	1,772	..	..	..	..	..	..	1,772
	173	..	..	3,135	..	..	..	..	..	..	3,135
	531	..	..	200	..	..	..	..	..	..	200
	351	..	..	580	..	..	..	..	..	..	580
	689	..	..	340	..	..	..	..	..	..	340
		260	260	19,277	..	..	..	..	..	..	19,277
North Queensland ..	194	..	..	175	..	..	..	..	..	..	175
	243	..	..	1,457	..	..	..	..	..	..	1,457
	245	..	..	339	..	..	..	..	..	..	339
	343	..	..	200	..	..	..	..	..	..	200
	438	240	..	1,577	..	..	..	..	..	..	1,577
	461	300	300	1,268	..	..	..	..	..	..	1,268
		540	300	5,016	..	..	..	..	..	..	5,016
Warwick	444	85	85	4,445	..	..	..	..	..	..	4,445
	574	879	576	5,306	..	..	..	..	..	..	5,306
		964	661	9,751	..	..	..	..	..	..	9,751
Grand Totals ..		15,664	5,527	324,805	12,145	10,868	212,443	..	..	106	537,354

Areas of Northern Rain Forest and Natural Hoop Pine treated are now shown under Appendix M.

APPENDIX M.

Areas of Natural Rain Forest Treated.

Working Plan Area.	Reserve No.	Northern Rain Forests.						Natural Hoop Pine Forests.						All species.
		Treated 1954–55.				First treatment 1954–55.	Total as at 30th June, 1955.	Treated 1954–55.				First treatment 1954–55.	Total as at 30th June, 1955.	Total as at 30th June, 1955.
		Brushed.	Ringbarked and thinned.	Logged under tree-marking conditions.	No. of trees interplanted.			Brushed.	Ringbarked and thinned.	Logged under tree-marking conditions.	No. of trees interplanted.			
		Acres.	Acres.	Acres.		Acres.	Acres.	Acres.	Acres.	Acres.		Acres.	Acres.	Acres.
Bundaberg	169	..	..	..	..	..	..	375	..	..	..	..	9,902	9,902
North Queensland	99	140	120	208	2,075	260	513	..	..	..	..	..	..	513
	185	12	..	12	..	12	291	..	..	..	..	..	..	291
	191	25	..	..	..	25	101	..	..	..	..	..	..	101
	310	216	..	..	2,650	216	394	..	..	..	..	..	..	394
	315	50	45	..	..	50	50	..	..	..	..	..	..	50
	418	..	..	..	..	..	43	..	..	..	..	..	..	43
	452	..	..	..	..	..	20	..	..	..	..	..	..	20
		443	165	220	4,725	563	1,412	..	..	..	..	..	..	1,412
Grand Total		443	165	220	4,725	563	1,412	375	..	..	..	..	9,902	11,314

APPENDIX N.

Summary of Forest Survey Work—Year Ended 30th June, 1955.

Reserve or Portion.	Parish.	Area in Acres.
Class 1.—Inspections of Vacant Crown Lands and Timber Reserves.		
Portions 12, 13, 18	Sirius	22,739
Portion 3	Aldebaran	9,631
Portion 3^{A}_{V}	Albinia	20,265
Portion 1	Pallas	27,227
Deepdale Holding	Freitag	..
Manifold Holding	Manifold	..
	Total	79,862
Class 2.—Assessment Surveys.		
Reserve 204	Trinity	1,200
Reserve 13	Cardbeign	4,300
Reserve 114	Albinia	..
Reserve 5	Mimosa (proceeding)	..
Mount Cooroo Lands	Glady	1,600
Portion 2	Consuelo	2,500
Portion 17 (part)	Sirius	1,115
Portion 4v (part)	Cardbeign	443
Portion 2	Albinia	9,280
Morilla Holding (part)	Aldebaran	10,744
Peawaddy Holding (part)	Consuelo	1,278
	Total	32,460
Class 3.—Intensive Contour and Assessment Survey.		
Reserve 310	Gadgarra	1,200
Reserve 99	Western	1,000
Reserve 67	Bulburin	26
	Total	2,226

Forest Inventory Survey.

Reserve.	Parish.	Area in Acres.
4	Braemar	17,640
187	Daandine	2,555
93	Nudley (proceeding)	10,000
288	Jingi Jingi	2,492
266	Canaga	2,929
28	Coominglah (proceeding)	..
122	Inglewood (proceeding)	..
169	St. Agnes	19,364
57	St. Mary (re-measure)	..
12	Gungaloon (re-measure)	..
958	Gundiah (re-measure)	..
3	Fraser Island (re-measure)	..
58	Tchanning (re-measure)	..
61	Gideon (re-measure)	..
328	Yuleba (re-measure)	..
368	Combabula (re-measure)	..
283	Colinton (re-measure)	..
257	Cooyar (re-measure)	..
509	Crow's Nest (re-measure)	..
154, 298	Gallangowan (re-measure)	..
137, 207	Yabba (re-measure)	..
220	Kilkivan (re-measure)	..
355	Kilkivan (re-measure)	..
138	*Manumbar (re-measure)*	..
67	Bulburin (establish)	..
95	New Cannindah (establish and re-measure)	..
	Total	54,980

APPENDIX N.—*continued.*

COMPARTMENT, FIREBREAK AND SOIL SURVEYS.

Reserve.	Parish.	Type.	Area in Acres.
915	Tahiti, Bidwell	Soil	15,160
915	Tahiti, Bidwell	Firebreak	7,684
1004	Toolara	Soil and Firebreak	1,240
257	Cooyar	Check	..
124	Glastonbury	Firebreak	106
135	Brooloo (part)	Type	4,670
117	Apsley	Compartment	14,500
127	Blair Athol	Compartment	..
20	Maryvale	Compartment	1,608
108, 160, 442	Bribie	Compartment	2,085
611	Beerwah	Soil and Compartment	2,100
561 (Coochin)	Bribie	Soil and Compartment	1,840
700	Canning	Soil	2,800
589, 638	Beerwah	Check	..
637	Kilcoy	Firebreak	638
779 and V.C.L.	Gregory	Soil	11,000
Bayfield Holding	Bayfield	Soil	4,000
Portion 1	Maryvale	Soil	1,862
Portion 20	Maryvale	Soil	956
Portion 26	Maryvale	Soil	347
135	Brooloo	Firebreak	52
257	Cooyar	Firebreak, &c.	..
258	Cooyar	Firebreak, &c.	..
289	Cooyar	Firebreak, &c.	..
120	Neumgna	Firebreak, &c.	..
151	Neumgna	Firebreak, &c.	..
283	Colinton	Firebreak, &c.	..
379	Cooyar	Firebreak, &c.	..
299	Avoca	Firebreak, &c.	..
		Total	72,648

APPENDIX O.

State Forests, Timber Reserves, and National Parks at 30th June, 1955.

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	65,556 0 3	7	46,469 2 26	6	3,565 3 34
Bowen	..	..	7	90,880 0 0	36	118,587 0 0
Brisbane	68	236,504 0 15	41	68,370 1 22	43	79,211 0 9
Bundaberg	20	148,258 2 39	38	167,723 2 28	..	..
Cairns	7	118,859 0 36	15	486,561 2 0	20	92,300 3 24
Charleville	..	..	2	68,397 0 0	..	..
Charters Towers	..	..	1	125,000 0 0	..	..
Clermont	3	132,378 3 35	3	45,324 1 0	..	..
Cloncurry	..	..	1	3,950 0 0	..	..
Cooktown	..	..	8	623,460 0 0	7	10,691 0 0
Dalby	27	1,020,697 2 19	4	16,359 0 0	1	13,145 0 0
Gayndah	2	38,639 0 0	16	63,511 0 32	..	..
Gladstone	6	37,242 0 0	26	86,706 1 14	4	127 0 0
Goondiwindi	5	149,981 1 0	6	41,894 2 20	..	..
Gympie	49	444,436 2 34	14	51,000 0 21	5	922 2 7
Herberton	10	76,615 2 36	11	76,635 1 7	5	3,361 3 28
Ingham	1	43,620 0 0	3	59,340 0 0	4	18,495 0 0
Inglewood	15	185,942 3 35	4	8,407 1 8	..	..
Innisfail	2	65,167 0 0	11	364,623 2 18	23	106,807 1 31
Ipswich	33	171,618 2 14	24	67,765 2 33·2	4	5,589 0 0
Jundah	..	..	1	25,600 0 0	..	..
Mackay	1	19,855 0 0	19	148,193 3 0	53	149,085 2 29
Maryborough	59	697,442 2 28	25	30,461 0 13	4	8,185 0 0
Monto	10	196,227 3 20	11	75,042 2 32·6	..	..
Nanango	45	222,029 2 34	13	8,182 2 26	2	11,116 1 18
Rockhampton	8	183,053 1 0	17	140,538 1 22	15	2,597 0 0
Roma	11	128,180 1 22	1	8,600 0 0	..	..
Springsure	..	..	5	115,888 1 0	1	66,480 0 0
Stanthorpe	3	11,370 2 14	1	2,269 0 27	6	12,604 3 0
Taroom	3	22,186 0 0	5	48,864 2 0	1	11,400 0 0
Toowoomba	22	259,522 0 2	16	29,629 1 15	5	3,214 3 0
Townsville	1	23,123 0 0	2	17,199 1 31	3	70,520 0 0
Total	425	4,698,508 1 26	358	3,212,848 3 35·8	248	788,007 1 20

At 30th June, 1955—

	A.	R.	P.
Total area *reserved for*—			
State Forests	4,698,508	1	26
Timber Reserves	3,212,848	3	35·8
National Parks	788,007	1	20
Total Reservations	8,699,364	3	1·8

APPENDIX P.

Reservations for the Year Ended 30th June, 1955.

State Forests.—Five (5) new State Forests, with a total of 26,870 acres, were proclaimed during the year. These are as follows :—

Acres.		Land Agent's District.
16,680	Reserve 546, Kandanga	Gympie
7,890	Reserve 845, Electra and Booyal	Bundaberg
1,725	Reserve 137, Targinie	Gladstone
451	Reserve 321, Marsh	Stanthorpe
124	Reserve 753, Durundur	Brisbane

4,995 acres were added to existing reserves, and 142 acres were released. Two reserves were cancelled for inclusion in adjoining State Forests.

Timber Reserves.—At 30th June, 1955, the number of Timber Reserves was 358 compared with 359 at 30th June, 1954.

Six (6) new areas, with a total of of 17,854 acres, were reserved, the largest being—

Acres.		Land Agent's District.
14,799	Reserve 78, Brovinia	Gayndah
2,269	Reserve 322, Stanthorpe	Stanthorpe
760	Reserve 149, Targinie	Gladstone

25 acres were added to existing reserves.

Five (5) reserves, totalling 27,349 acres, were converted to State Forests, and two reserves, area 1,021 acres, were cancelled.

National Parks.—Six (6) new areas, totalling 7,768 acres, were proclaimed, these being—

Acres.		Land Agent's District.
6,260	Reserve 456, Magnetic (Magnetic Island)	Townsville
720	Reserve 233, Beerwah (Tibrogargan)	Brisbane
320	Reserve 750, Beerwah (Mount Beerwah)	Brisbane
280	Reserve 749, Beerwah (Mount Coonowrin)	Brisbane
120	Reserve 127, Beerwah (Mount Ngungun)	Brisbane
68	Reserve 793, Tamborine (Henderson's Knob)	Brisbane

1,787 acres were added to existing reserves. Recomputation of areas accounted for a reduction of 97 acres.

1st JULY, 1954, to 30th JUNE, 1955.

State Forests.

	No.	A.	R.	P.
At 1st July, 1954	422	4,666,786	0	38
Proclaimed 1–7–54 to 30–6–55	5	26,869	2	14
V.C.L. added to existing reserves	..	4,995	0	14
	427	4,698,650	3	26
Reserves cancelled and areas released	2	142	2	0
Total at 30th June, 1955	425	4,698,508	1	26

Timber Reserves.

	No.	A.	R.	P.
At 1st July, 1954	359	3,223,339	3	23·8
Proclaimed 1–7–54 to 30–6–55	6	17,854	0	3
V.C.L. added to existing reserves	..	25	0	0
	365	3,241,218	3	26·8
5 reserves converted to State Forests		27,348	3	32
2 reserves cancelled		1,020	3	39
7	7	28,369	3	31
Total at 30th June, 1955	358	3,212,848	3	35·8

National Parks.

At 1st July, 1954	242	778,548	3	33
Proclaimed 1–7–54 to 30–6–55	6	7,768	1	27
V.C.L. added to existing reserves	..	1,787	0	0
	248	788,104	1	20
Recomputation of areas	..	97	0	0
Total at 30th June, 1955	248	788,007	1	20
Total reservations at 30th June, 1955	..	8,699,364	3	1·8

APPENDIX Q.

Expenditure, Surveys, Year Ended 30th June, 1955.

Particulars of Survey—	£	s.	d.
Harvesting and Marketing Project—			
Aerial Photography	12	8	7
Survey Prints, Maps &c.	674	16	8
Forest Inventory Survey, Brisbane Valley	1,528	16	5
Forest Inventory Survey, Reserve 169, Bundaberg	2,114	7	4
Class 2 Survey, Springsure	1,889	1	1
Firebreak Survey, Reserve 117, Clermont	94	4	0
Forest Inventory Survey, Reserve 4, Dalby	1,995	4	5
Forest Inventory Survey, Reserve 78, Dalby	3,574	11	2
Forest Inventory Survey, Reserve 93, Dalby	3,234	17	0
Forest Inventory Survey, Dalby	15	5	8
Forest Inventory Survey, Yield Plots, Reserve 3, Fraser Is.	420	8	7
Miscellaneous Surveys, Reserves 3 and 12, Fraser Is.	1	5	6
Forest Inventory Survey, Gympie	62	2	5
Forest Inventory Survey, Reserves 137/207, Kilcoy	318	4	11
Miscellaneous Surveys, Kilkivan	1	6	0
Forest Inventory Survey, Reserve 138, Kilkivan	29	13	8
Forest Inventory Survey, Reserve 220, Kilkivan	182	19	8
Forest Inventory Survey, Reserve 298, Kilkivan	265	0	4
Forest Inventory Surveys, Reserve 355, Kilkivan	60	8	5
Soil and Type Surveys, Hecate Holding, Mackay	10	16	4
Soil and Type Surveys, Demeter, Mackay	24	7	2
Forest Inventory Survey, Mackay	1	5	0
Road Survey, Reserve 72, Conway	39	1	5
Forest Inventory Survey, Reserve 28, Many Peaks	2,385	7	8
Forest Inventory Survey, Reserve 67, Many Peaks	18	12	0
Forest Inventory Survey, Reserve 95, Many Peaks	456	17	11
Forest Inventory Survey, Maryborough	219	12	10
Forest Inventory Survey, Reserve 958, Maryborough	431	7	7
Forest Inventory Survey, Mary Valley	57	7	6
Miscellaneous Surveys, Reserves 589/638, North Coast	0	19	0
Forest Inventory Survey, Reserve 318, North Coast	*Cr* 106	8	0
Forest Inventory Survey, Reserve 445, North Coast	*Cr.* 262	10	2
Class 2 Surveys, Reserve 55, North Queensland	162	16	0
Class 3 Surveys, Reserve 99, North Queensland	1,485	1	2
Miscellaneous Surveys, Reserve 185, North Queensland	122	19	2
Miscellaneous Surveys, Reserve 194, North Queensland	11	12	0
Class 2 Survey, Reserve 204, Trinity, North Queensland	181	6	5
Class 3 Surveys, Reserve 310, North Queensland	1,778	4	2
Miscellaneous Surveys, Reserve 310, North Queensland	11	4	0
Road Surveys, Danbulla	71	10	1
Road Survey, Reserve 756, North Queensland	600	14	2
Class 2 Survey, V.C.L., Glady, Mt. Cooroo	298	9	7
Class 3 Survey, V.C.L., Ramleh	666	8	11
Miscellaneous Surveys, V.C.L., Ramleh	557	18	4
Class 2 Surveys, Mimosa, Rockhampton	391	0	7
	£26,091	2	8
Reforestation Branch Projects—			
As Detailed in Appendix H.	17,325	2	4
Total Expenditure	£43,416	5	0

APPENDIX R.

Distribution of Personnel, 30th June, 1955.

Salaried Officers	312
Other Employees	1,900
	2,212

By Authority: A. H. TUCKER, Government Printer, Brisbane.