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**ANNUAL REPORT**

**OF THE**

**SUB-DEPARTMENT OF FORESTRY**

**FOR THE**

**YEAR 1936-37.**

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[Photo. A. E. Brimblecombe.]

PLANTATION OF HOOP PINE (*Araucaria cunninghamii*) WITH WHITE BEECH (*Gmelina leichhardtii*). 13 YEARS OLD.

During the year 2,058 acres of Plantation were Established.

## Report of the Director of Forests for the Year ended 30th June, 1937.

### INTRODUCTION.

The past financial year has been characterised by even greater activity in all sections than the previous years.

The total log cut from Crown lands, nearly 162,000,000 superficial feet, the largest annual cut yet recorded, exceeded the best previous figure (in 1935-36) by over 13,000,000 superficial feet, and represented approximately 63 per cent. of the total log cut of the State.

Because of the increasing demand for Crown supplies, it has been found necessary to increase the road construction programme, not only to make further timber stands available, but also to speed up the rate of delivery by mechanical haulage. The total expenditure on roads for the year amounted to £85,774, of which £50,943 was contributed by the Department of Labour and Industry from relief funds. The major projects, i.e., the Kirrama, Danbulla, and Kuranda roads, were undertaken on behalf of the Sub-Department of Forestry by the Public Estate Improvement Branch, and will make available large stands of kauri pine, maple, oak, walnut, and hickory.

It is pleasing again to record increased reforestation operations. It has been found possible to concentrate still further on the urgent work of the improvement and regeneration of natural hardwood and cypress pine areas, and the protection thereof. The main feature of the year's work has been the great improvement in the forest fire protection system, some 600,000 acres now being within the fireline system. Some 932 miles of new firebreaks were prepared, a further 950 miles maintained, whilst 110 miles of telephone were constructed, and 20 fire lookouts are now in operation. Despite the exceptionally bad fire season last year, a surprisingly small portion of the protected area was burned over, and it is expected that even better results will be achieved in future.

The improvement and regeneration treatment covered 41,700 acres of forest not previously under management, making 110,750 acres so treated for the past three years, an area in excess of the total of the previous ten years' operations.

Despite the very dry conditions, excellent establishment figures were recorded in the plantation operations.



Good progress has been made during the past three years, during which period over 35 per cent. of the present planted area of 17,000 acres has been established.

The more sympathetic consideration accorded to reforestation work during the last five years must be acknowledged.

In order, however, to produce a sustained yield equal to the pine cut of last year, an area of pine plantations six or seven times the present area would be required, and very valuable reproductive work could be performed, by increasing the rate of replanting the hoop pine lands as they are cut out of virgin timber.

Our local pine species possess not only outstanding quality but also a very rapid growth rate, much more rapid than in the case of European conifers, e.g., firs, spruce and pines. Throughout the world there remain relatively small quantities of the large virgin softwood stands which took centuries to develop. The supplies of the future will be produced from man-made forests, from logs of small dimensions grown in short rotations.

To-day Europe depends for her softwood needs upon the product of such small trees, grown profitably on rotations much longer than are required to produce similar sized material in Queensland.

South Australia is producing millions of feet of very serviceable timber from pine plantations 20 years of age. Even in Queensland large quantities of the pine being milled from the natural stands is comprised in logs of very small diameter.

It may be surprising to know that one Hoop pine plantation 12 years of age carries over 12,000 superficial feet per acre—a larger volume than the average stand in the virgin Hoop pine scrubs, and that marketable thinnings have already been cut from a *Pinus taeda* plantation 9 years of age.

Our standards of utilization must be revised, and the quality of timber used adjusted more closely to the purpose and requirements of the particular use.

If the local industry is to endeavour to continue producing Queensland's timber needs, various actions are indicated:—

- (1) Accelerated pine planting programme as indicated above.
- (2) The use of hardwoods for many purposes where pine is now specified. This practice is growing and should be extended. Improved utilization and seasoning methods will be required, and for this purpose the Department is now carrying out extensive air and kiln seasoning experimental work on hardwoods.
- (3) An increase in the hardwood area permanently reserved in State forests and managed for hardwood production.

Unfortunately considerable areas of land, the best use of which is the production of hardwood, are not reserved for timber

so are not protected and managed for timber production and consequently produce very little of the hardwood they are capable of producing.

- (4) Increased utilization of cypress pine. This species has many values which warrant its more extended use. The present forests are calculated to be capable of not only maintaining the present cut, but of increasing it considerably.
- (5) Continuation of the present silvicultural operations on hardwood and cypress pine reserves. During recent years considerable progress has been made in bringing these areas under management for timber production.

The past year marked the initiation of an active policy of development and protection of the National Parks, with the object of making the recreational and educational values of the parks more readily available to the public. It is felt that a more intensive development of our parks would not only enable our people to enjoy these areas more fully, but would also materially assist our expanding tourist industry.

The Director was afforded the opportunity of accompanying the Hon. the Minister for Lands on a visit to Canada and United States of America during the past year to investigate the administration of forests and national parks.

The itinerary happily provided for the arrival in Portland, Oregon, as the Western Forestry and Conservation Association's Annual Conference commenced, to be followed immediately by the Annual Conference of the Society of American Foresters. This opportunity, not only of hearing the papers and discussion by many of the foremost foresters of America, but also of meeting them and discussing mutual problems with them, was very valuable indeed. Visits paid to forests, experiment stations, the Forest Products Laboratory at Madison, and administrative headquarters at Washington and Ottawa enabled the collection of much information, which will prove of value to the administration in Queensland.

Enquiry was made into the very efficient fire prevention, detection, and fighting organisation in United States of America, and the same principles and methods are, as far as practicable, being introduced into Queensland.

As the question of the better stabilisation of the timber industry in Queensland has been under consideration, every opportunity was taken of discussing with lumbermen and forest officers the operations of the Lumber Code under the National Industrial Recovery Act.

Very extensive work in developing the recreational facilities of National Parks and National Forests in United States of America and Canada has taken place in recent years. Representative parks and forests were visited, and policies and methods discussed. Action has already been taken to adopt a similar policy to that adopted in United States of America and Canada for the future administration of National Parks in Queensland.

## HARVESTING AND MARKETING.

### The Timber Market—

*Mill Logs.*—The demand for all classes of mill logs was unprecedentedly heavy. There was a further sharp rise in the quantity of logs cut, even as compared with the high total of the previous year, and these additional demands are imposing a heavy strain on the Crown forests.

### THE TIMBER BUSINESS, 1936-37.

#### A RECORD YEAR.

##### CROWN SALES—MILL LOGS. (Previous highest figures shown in parentheses).

Hoop and Bunya Pine ..	105,100,000 super feet	(1935-36, 98,500,000 s. ft.)
Hardwoods .. ..	25,900,000 super feet	(1935-36, 22,200,000 s. ft.)
Cypress Pine .. ..	4,900,000 super feet	(1935-36, 4,800,000 s. ft.)
Kauri Pine .. ..	9,300,000 super feet	(1935-36, 6,693,000 s. ft.)
Total Crown Mill Logs ..	161,900,000 super feet	(1935-36, 148,200,000 s. ft.)
Gross Revenue .. ..	£669,457	(1935-36, £660,455)
Net Revenue .. ..	£323,550	(1934-35, £307,776)
Payments for Haulage ..	£220,019	(1935-36, £204,592)
Quantity of Timber Hauled ..	77,000,000 super feet	(1935-36, 80,000,000 s. ft.)

##### CONSTRUCTIONAL TIMBERS :—

Headstocks, transoms, crossings ..	798,000 super feet	(1935-36, 652,000 s. ft.)
Sleepers .. .. .	408,000 pieces	.. (1934-35, 428,000 pcs.)
Girders corbels, piles, sills ..	199,000 lineal feet	(1923, 144,000 l. ft.)
Poles .. .. .	176,000 lineal feet	(1925-26, 198,000 l. ft.)
Houseblocks .. ..	172,000 lineal feet	(1925-26, 193,000 l. ft.)
Mining timbers .. ..	228,000 pieces	.. (1935-36, 60,000 pcs.)
	124,000 lineal feet	(1924, 461,000 l. ft.)

During 1936-37 nearly 162,000,000 superficial feet of logs were removed from Crown areas as against 148,000,000 for 1935-36 and 35,000,000 superficial feet for the depression year of 1930-31.

The figures for the five-year periods ended 30th June, 1927; 30th June, 1932; and 30th June, 1937, illustrate strikingly the additional demand now imposed on the State's forest areas:—

5 years ended 30th June, 1927 ..	326,000,000 super feet
5 years ended 30th June, 1932 ..	252,000,000 super feet
5 years ended 30th June, 1937 ..	594,000,000 super feet

The actual yearly figures are:—

Year.											Logs from Crown Forests.
											Super Ft.
1925-26	..	..	..	..	..	..	..	..	..	..	72,000,000
1926-27	..	..	..	..	..	..	..	..	..	..	71,000,000
1927-28	..	..	..	..	..	..	..	..	..	..	56,000,000
1928-29	..	..	..	..	..	..	..	..	..	..	65,000,000
1929-30	..	..	..	..	..	..	..	..	..	..	57,000,000
1930-31	..	..	..	..	..	..	..	..	..	..	35,000,000
1931-32	..	..	..	..	..	..	..	..	..	..	39,000,000
1932-33	..	..	..	..	..	..	..	..	..	..	60,000,000
1933-34	..	..	..	..	..	..	..	..	..	..	81,000,000
1934-35	..	..	..	..	..	..	..	..	..	..	143,000,000
1935-36	..	..	..	..	..	..	..	..	..	..	148,000,000
1936-37	..	..	..	..	..	..	..	..	..	..	162,000,000

From this table it is seen that during the last five years, Crown forests have yielded more logs than in the preceding ten years. The figures also indicate that not only has there been a considerable recovery from the depression, but also, comparing the last five years with the five years ended 30th June, 1927, a much greater dependence is placed on Crown forests for log supplies than was hitherto the case. This is due, as mentioned in my last annual report, to the cutting out of areas of forest which had passed into private ownership.

During the five-year periods ended 30th June, 1927; 30th June, 1932; and 30th June, 1937; the total quantities of mill logs cut were approximately 1,032,000,000 super feet; 703,000,000 super feet; and 933,000,000 super feet respectively.

The following table gives the quantity of logs cut by Queensland Sawmills and Ply Mills for the last fifteen years:—

Year.	Softwoods (Hoop, Bunya, Kauri, Cypress Pine).	Hardwoods (principally Eucalyptus spp.).	Other Timbers.	Total.
	Super Ft.	Super Ft.	Super Ft.	Super Ft.
1922	107,237,000	61,637,000	18,656,000	187,530,000
1923	110,541,000	76,667,000	24,983,000	212,191,000
1924-25	111,565,000	91,500,000	24,500,000	227,565,000
1925-26	90,615,000	87,600,000	31,960,000	210,175,000
1926-27	90,832,000	80,320,000	23,330,000	194,482,000
1927-28	73,499,000	80,570,000	19,250,000	173,319,000
1928-29	85,109,000	72,660,000	20,190,000	177,959,000
1929-30	70,411,000	63,350,000	19,460,000	153,221,000
1930-31	42,711,000	46,120,000	14,700,000	103,531,000
1931-32	41,459,000	39,960,000	13,220,000	94,639,000
1932-33	60,920,000	44,230,000	13,800,000	118,950,000
1933-34	70,700,000	44,860,000	14,200,000	129,760,000
1934-35	105,000,000	71,200,000	29,000,000	205,000,000
1935-36	121,170,000	75,530,000	24,690,000	221,390,000
1936-37	137,500,000	90,000,000	30,000,000	257,500,000

At the time of writing the demand for logs remains very heavy, both for general sawmilling and plywood purposes. During depression years, provision of housing was inadequate, and the deficiency has not yet been made up.

The actions of the Government in making large sums available for loan to intending home builders has materially assisted towards the recovery of the industry.

The value of building permits in Brisbane is used by the Bureau of Industry as an index to the state of activity of the building industry. The relative indices are:—

3 months ended August, 1931	.. ..	21.7
3 months ended June, 1937	.. ..	76.5

Southern markets for Queensland timbers remain very firm. Important factors contributing to this are the firming of prices of Hemlock and Oregon, of which a large quantity is imported to Australia, the shortage of shipping space between America and Australia, and the curtailment by New Zealand of exports to Australia of White Pine for butter boxes.

#### Revenue—

The greater log sales were reflected in the revenues of the Department which are largely derived therefrom. In 1936-37 the gross receipts of the Sub-Department were £669,457, as against £660,455 in the previous year, whilst the net figures were £323,550, against £302,777.

#### Hoop and Bunya Pine—

The cut of Hoop and Bunya Pine from Crown forests was over 105,000,000 superficial feet during 1936-37. Since 1925-26 the yearly cut of these species has been:—

Year.	1,000 super ft.	Year.	1,000 super ft.
1925-26 .. ..	53,100	1931-32 .. ..	26,000
1926-27 .. ..	52,100	1932-33 .. ..	42,500
1927-28 .. ..	41,200	1933-34 .. ..	59,000
1928-29 .. ..	44,700	1934-35 .. ..	95,000
1929-30 .. ..	36,500	1935-36 .. ..	98,000
1930-31 .. ..	22,100	1936-37 .. ..	105,000

As this table shows, the cut for the last three years exceeded that for the seven years previously.

At this rate of cutting, caused largely by the depletion of private land supplies, the Hoop and Bunya Pine forests cannot last more than a few years.

The approaching shortage is making itself apparent in the number of deputations and representations being made by district milling organisations depending on Hoop and Bunya Pine logs. Every effort is being made by the Department to give equitable treatment to all by allocating blocks to important country sawmills and by reserving others for marketing to city mills.

**Veneers and Plywoods—**

The market for these continued very brisk and during the year South Queensland factories produced approximately 48,000,000 square feet of plywood three-sixteenths inches basis, of a value of £360,000. Of this, 41,000,000 square feet found markets outside Queensland.

Figures for North Queensland mills, or for fancy plywoods produced, are not yet available.

Production of plywood since 1927-28 is shown in the following table:—

Year.	Log Timber.	Producing—	
		Plywood.	Veneers.
	Super Ft.	Sq. Ft.	Sq. Ft.
1927-28 .. .. .	4,769,822	19,434,306	..
1928-29 .. .. .	6,862,314	24,901,448	..
1929-30 .. .. .	5,875,253	21,376,034	..
1930-31 .. .. .	3,546,483	12,942,476	..
1931-32 .. .. .	5,309,652	17,029,995	..
1932-33 .. .. .	10,115,492	31,652,667	6,275,696
1933-34 .. .. .	11,775,345	39,673,813	12,999,216
1934-35 .. .. .	18,367,677	56,669,610	11,056,256
1935-36 .. .. .	19,428,089	69,619,946	10,911,952

Sales of Hoop and Bunya Pine ply logs harvested by the Department's logging contractors amounted to 6,582,000 superficial feet.

The periods of appointment of the Plywood and Veneer Boards, which control plywood and veneer marketing in South and North Queensland, were extended for a further year.

The Department has been co-operating with the Boards in the matter of research into plywood and approval was given for a Departmental subsidy of £500 to assist in the provision of a laboratory for the work. The Council for Scientific and Industrial Research is also co-operating.

**Hardwood Market—**

What are known as "hardwoods" in Queensland are the Eucalyptus or other Myrtaceous species cut for milling purposes, the timbers of which are utilised in general building, for framing, sheeting, flooring, panelling, etc.

There has been a steady increase in the demand for these logs from the State's forests, and during 1936-37 over 25,940,000 superficial feet were sold, as compared with 22,200,000 superficial feet in the previous financial year.

Depletion of accessible private supplies is very largely responsible for the greater demand for Crown logs, but as yet privately held forests supply the bulk of the demand. The total quantity of hardwood logs cut by sawmills in 1936-37 was approximately 90,000,000 superficial feet (estimated from sawmill returns to hand), so that the percentage supplied by Crown forests is about 28.8 per cent. It is expected that this figure will show an increase in the current financial year.

**North Queensland Timbers—**

The main feature of the year was the greatly increased demand for Kauri Pine, of which no less than 9,147,000 superficial feet was sold from Crown forests. This quantity is over 2,400,000 superficial feet greater than in 1935-36, and over three times the quantity sold in 1932-33.

It is also very pleasing to record an increase in the sale of "secondary" woods. The North Queensland jungles contain a large variety of species, and exploitation has been by cursory selection of the best species for marketing prior to the jungle being felled to utilise the land for dairying or other farm use. Red Cedar was the only species sought after originally, but as the Cedar was cut out Maple, Silky Oak, and Walnut came in for attention and instead of being waste products in the way of the farmer, such of these trees as had escaped the axe were a source of wealth to him.

To-day the process is going still further and it is unlikely that even yet we are marketing all species that will ultimately be marketed.

This Sub-Department's view is that if the so called "cut out" areas are held for the "secondary" species alone (to say nothing of the advance growth of present day commercial species) they will present a source of wealth for many years; and that if they are now sacrificed as "cut out" a great deal of valuable timber will be wasted which will be badly needed by the timber industry and by Queensland at a later date.

The sales of North Queensland species for several years are as follows:—

Species.	1932/33.	1933/34.	1934/35.	1935/36.	1936/37.
	Super Ft.	Super Ft.	Super Ft.	Super Ft.	Super Ft.
Kauri Pine .. .. .	2,665,868	4,143,779	6,320,284	7,000,824	9,167,935
Maple .. .. .	656,659	1,219,407	3,995,491	4,616,245	3,717,905
Walnut .. .. .	549,468	437,944	1,117,376	2,311,511	2,043,144
Silky Oak .. .. .	1,217,141	541,967	7,359,912	3,455,324	4,782,049
Hickory .. .. .	39,146	557,187	809,593	876,278	888,324
Other Cabinet Woods (in- cluding Cedar) .. ..	196,138	587,396	1,572,046	1,232,484	1,447,557
Scrubwoods .. .. .	465,641	327,409	1,145,935	1,824,823	2,235,506

**Cypress Pine—**

This species has been the main building timber in South-West Queensland, and with hoop pine supplies diminishing, the markets for cypress pine will certainly become more extensive.

During the year some attention was given by coastal sawmillers to the possibility of establishing in cypress pine regions, and as the stand of this species is sufficient to support a greater annual cut on a sustained yield basis, there is opportunity for further mills to seek employment in this direction.

The Crown cut of cypress pine mill logs during 1936-37 was nearly 5,000,000 super feet, which exceeds the previous highest figure, realised in the preceding year by over 100,000 superficial feet.

From sawmill returns available, it is estimated that the total cut of mill logs from both Crown and private lands for the year was 11,300,000 superficial feet.





[Photo. by J. Reis, Yungaburra.

**LOGGING KAURI PINE IN NORTH QUEENSLAND.**

The record quantity of 161,900,000 superficial feet of logs was cut from Crown lands during the year.



[Photo. J. A. Lunn.

**KAURI PINE LOGS AT A NORTH QUEENSLAND PLYWOOD MILL.**

For 1936-37, 630 mills cut 260,000,000 superficial feet of Crown and private logs.

### Constructional Timbers—

Operations for direct supply of bush timbers for constructional purposes were well maintained during the year, which, taken on the whole, has not been an unsatisfactory one for broadaxemen. A comparison of the principal specifications supplied as against those of the previous year are shown in the following table:—

Specification.	1935/36.	1936/37.
Sleepers .. .. .	149,478 pieces	174,952 pieces
Crossings .. .. .	92,631 super ft.	205,606 super ft.
Transoms .. .. .	217,997 super ft.	177,534 super ft.
Bridge Timbers .. .. .	50,864 lineal ft.	23,408 lineal ft.

Orders fulfilled included the Railway Department's requirements in maintenance timbers from Crown lands, bridge timbers for Main Roads Commission and Public Estates Improvement Branch, miscellaneous and wharf timbers for Brisbane City Council, Fairymead Sugar Company, Townsville Harbour Board, and Taylor Bros., Newstead Wharf.

In the coastal area—Brisbane to Maryborough—where the Railway Department ceased purchasing shortly after Christmas, certain of the more experienced cutters were kept in employment on wharf timbers. Whilst unemployment to some extent was felt by sleeper-cutters in this area during the last five months of the year, orders were not lacking in other districts. This was particularly so in the Central Division, where the opportunity was taken on Reserves 80 and 49, Littabella, to work up all suitable sleeper trees to a face under the direction of an overseer. State Forest Reserve 28, Coominglyah, near Monto, was drawn on heavily for girder requirements in the North. The indications are that whilst fairly plentiful supplies of sleepers are still available on private lands in the Brisbane to Maryborough coastal areas, outside of these and for other specifications the greater resort is now to Crown lands. The Departmental contractors engaged in these direct operations during 1936-37 totalled 499, and it is estimated that about fifty carriers would benefit in carting timber supplied by these men.

The following table shows the total quantity of constructional timbers sold by the Department both at stump and from operations of Departmental contractors for the year in review and the two preceding it.

Specification.	1934/35.	1935/36.	1936/37.
Sleepers .. .. . pieces	428,054	279,743	408,221
Headstocks, transoms, crossings .. .. super ft	557,443	651,551	797,767
Girders, corbels, piles, sills .. .. lin. ft.	134,040	122,494	198,701
Poles .. .. . lin. ft.	144,876	159,052	176,453
House blocks .. .. . lin. ft.	163,933	159,584	172,542
Mining timbers .. .. . lin. ft.	150,443	149,031	124,389
Mining timbers .. .. . pieces	30,507	60,151	228,373

**Sandalwood—**

The market for this species was very dull. Unrest in China has greatly reduced the demand for sandalwood, and it was possible only to dispose of 148 tons during the year.

It was deemed advisable to continue, with slight amendments, the marketing agreement between the Australian Sandalwood Co. and the Government for a further period of one year.

**Licensing of Sawmills—**

The Timber Advisory Committee has on several occasions recommended that as a measure of control of the industry all sawmills should be licensed, and during the 1936 session an Act was passed giving effect to this recommendation.

This Act has been administered by the Forestry Board on the advice of a Sawmills Licensing Committee of the Sub-Department, and 600 sawmills were registered at 30th June, 1937.

The Chairman of the Timber Advisory Committee (Mr. Duffy) has been Chairman of the Sawmills Licensing Committee.

These sawmills are licensed according to the maximum quantity of logs they can cut in a working day of eight hours, and the number of mills in each capacity class is as follows:—

Capacity of—		
	Under 1,000 super feet	.. 134
	1,000 super feet and under 2,500 super feet	.. 175
	2,500 super feet and under 5,000 super feet	.. 130
	5,000 super feet and under 10,000 super feet	.. 104
	10,000 super feet and under 15,000 super feet	.. 26
	15,000 super feet and under 20,000 super feet	.. 6
	20,000 super feet and over	.. 25
		600

In addition to the above, 29 exemptions from sawmill licenses were allowed to persons and firms cutting timber for their own requirements only.

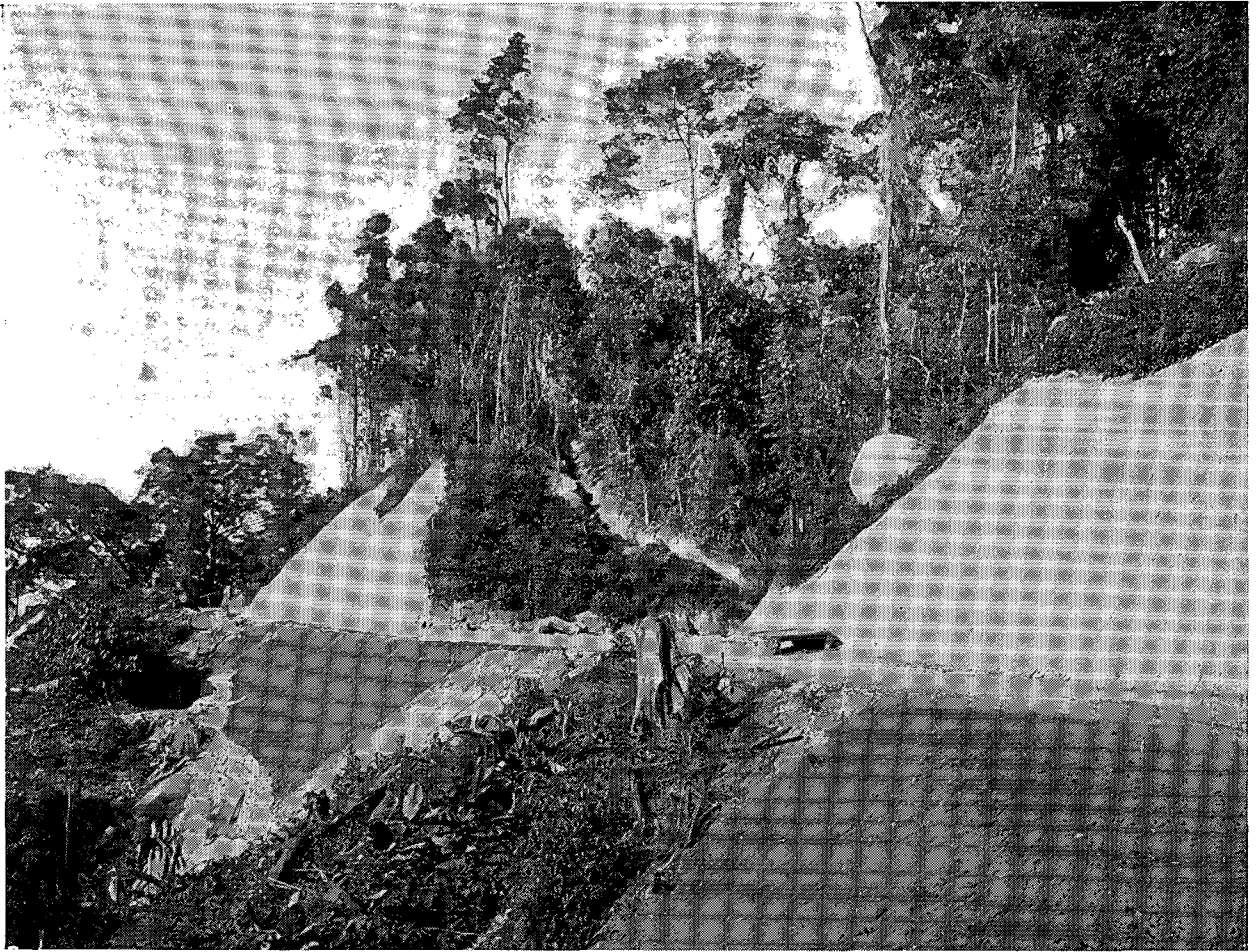
At the end of the year 64 applications remained to be dealt with; 38 of these have been granted or recommended, 8 granted exemptions, 2 refused, in one case a license is not necessary. The remainder—15—are still under consideration.

**Logging—**

Logging operations by Departmental contractors in 1936-37 were very heavy, about 77,000,000 super feet being hauled. Payments on account of timber haulages amounted to £220,019.

The weather during the year was very favourable for mechanical logging, but severe drought conditions militated against animal transport. The occurrence of a disease known as "three days sickness" also had serious effects on teams and disorganised logging in some districts for several weeks.





**ROAD UNDER CONSTRUCTION TO KIRRAMA STATE FOREST.**  
The sum of £85,774 was expended during the year on Forestry Access Roads.

[Photo. J. A. Lunn.]



**INTERNAL FIRELINE AND ACCESS TRACK IN CYPRESS PINE FOREST.**  
932 Miles of Fire Lines were constructed and 951 Miles maintained during the year.

[Photo. J. A. Lunn.]

The Department's policy of assisting in construction of all-weather roads to serve forest areas has resulted in logging being greatly facilitated. Without these roads it would have been impossible to cope with the greatly increased demands for logs.

During 1936-37 an amount of £85,774 was expended in road works, and of this £50,943 was provided from Relief funds. Acknowledgment is made of the co-operation displayed by the Department of Labour and Industry, which greatly facilitated the carrying-out of the work.

There is no doubt as to the value of this work as reproductive means of relief employment. The arrangement with the Department of Labour and Industry is being continued in the current financial year.

Assistance was given to local authorities to the extent of £7,888 for the purpose of road construction and improvement work.

The chief road works undertaken were those which the P.E.I. Section is carrying out for this Sub-Department, viz., the Kirrama Range road, Cardwell, the Robson's Creek road, Danbulla, near Kairi, and the Smithfield road, Kuranda.

Other important road works were the road from Kairi to State Forest Reserve 185, Danbulla, and the Top Gate road, State Forest Reserve 475, Danbulla.

Further particulars are shown in Appendix O attached.

#### General—

During the year the Chairman of the Timber Advisory Committee (Mr. G. A. Duffy) visited New Zealand in company with a representative of the timber trade with the object of promoting a better understanding between the two countries. Mr. Duffy also represented the Department at the All-Australian Timber Congress held in Sydney in March last. This conference attracted a strongly representative gathering from all States; many interesting papers were read, problems freely discussed, and a better understanding brought about, between the various State interests and between operators of native timbers and importing interests.

#### Unauthorised Timber Operations.

During the year 188 cases of breaches of the Land Acts and State Forests and National Parks Acts and Regulations thereunder were investigated.

In forty-eight cases the offenders were prosecuted, fines totalling £199 being imposed and revenue to the extent of £217 being recovered as royalty on the timber involved. In addition, four prosecution actions are pending.

Seventy-eight cases occurred where mitigating circumstances were present. These were met by charging royalty, suitable penalty being imposed where warranted, and issuing warning against a repetition of the offence. The revenue collected in such cases amounted to £435. Action in seven similar cases is still incomplete.

In fifteen cases the timber cut without authority was seized, confiscated to the Crown, and disposed of to the best advantage. These sales realised £407.

Timber purchasers in three cases, where uncrowned logs were removed, were suitably warned regarding the seriousness of the offence. Seventeen offenders unwittingly trespassed on Crown areas, and in these instances a warning only was issued.

Other breaches investigated included interference or removal of flora from National parks and scenic areas. These were brought under the notice of the Department of Agriculture and Stock, and in one instance the offender was prosecuted and fined.

The falling of green timber under cover of a Fuel License, and the cutting of cypress pine trees on islands in Moreton Bay, were also investigated. Owing to the value for scenic purposes of these trees their preservation on the islands is particularly desirable, and their destruction by thoughtless campers and picnickers is regrettable.

Operations occurred in nine instances where the offender could not be located.

As a result of action taken in all cases an amount of £1,059 was secured to the Crown in timber revenue.

The assistance of the Police Department in investigating breaches of the law in many of the cases outlined above is acknowledged.

### FOREST PRODUCTS SHOWROOM AND FANCYWOOD SECTION.

In addition to the Department's Showroom at Brisbane, displays for the purpose of promoting and maintaining interest in Queensland timbers were made at the following centres:—

- Royal Agricultural Show, Brisbane.
- Royal Agricultural Show, Sydney.
- Royal Agricultural Show, Melbourne.

Small exhibits were prepared for the Commonwealth Government's displays in Japan, South Africa, and New Zealand.

#### Fancywoods Section—

Stocks of timbers not otherwise generally available were on sale at the Fancywoods Yard.

Sales of sawn timber for the year totalled 60,067 super. feet, value £3,369 1s. 5d., and included the following:—

	Super Feet.
Silver Ash .. .. .	19,327
Red Tulip Oak .. .. .	10,874
Satinay .. .. .	4,970
Cedar .. .. .	4,560
Rose Mahogany .. .. .	5,399
Miscellaneous .. .. .	14,447

In addition, fancy goods to a value of £1,511 18s. 4d. were disposed of.

The total value of all sales was £4,880 19s. 9d.

This covered approximately 5,468 sales for the following works:—

Furniture, joinery, mouldings, floorings, boatbuilding, all classes sporting goods, motor bodies and loads, printers' blocks, musical instruments, aeroplanes and gliders, crutches, stretchers, butter churns, pats, bakers' peels, and many classes of wooden fancy goods.

**Samples—**

Approximately 2,000 samples were issued during the year, including 49 sets to schools, 784 samples to business firms and architects, and 500 to Agent-General's Office, London, for distribution.

### FOREST PRODUCTS INVESTIGATION.

This phase of the Department's activities is devoted to scientific and technical research designed to aid in deriving better and cheaper products from the forests and to lessen waste in logging, sawmilling and utilisation.

The year's activity is reviewed below under the headings:—

- I. General Utilisation.
- II. Wood Structure Research.
- III. Seasoning, and
- IV. Preservation.

**I. General Utilisation—**

(1) *Industrial Studies.*—With Hoop Pine supplies dwindling, special attention is being given to the use of other native timbers in general building. Fortunately, there are fairly extensive areas of hardwoods available, but there is need for propaganda designed to popularise them for such purposes as ceiling, lining, and flooring, and special efforts have been made—with some success—to interest architects and builders in their possibilities.

Walls featuring panelling in spotted gum, luster, rose gum, brush box, and blackbutt have been constructed. The number of inquiries being received for advices in this direction indicate that there is a good future for hardwoods for wall decoration.

The necessity for adequately-seasoned flooring stock is now fairly generally recognised, and, as sagging of ceiling joists is liable to cause cracking in the modern plaster ceilings and walls, there is a growing demand for seasoned joists to reduce this deflection. A number of sawmillers have been approached about regular supply of joists for such uses, and have been persuaded to carry a supply of adequately-seasoned stock.



Supplies of miscellaneous timbers have been made available for special service tests—axe handles, plumbers' turnpins, plasterers' floats, and fishing rods. Other timbers are under test for such purposes as bearings, skis, cases, and boxes, boat oars, boat ribs and decking, artillery waggon wheels and bobbins.

There is a strong demand for beer and wine cask staves in place of the imported European Oak, and several timbers are now under test. Timbers being tested for cooperage work include Rose and Miva Mahogany (*Dysoxylon fraserianum* and *Dysoxylon muelleri*), Forest Sheoak (*Casuarina torulosa*), Silver Ash (*Flindersia* spp.), Grey Carrobean (*Sloanea woolsii*) and White Siris (*Ailanthus malabarica*).

(2) *Special Species Studies*.—Studies of Cypress Pine and Blackbutt were made. A survey of the utilisation of Cypress Pine in the Dalby and Inglewood areas revealed that this timber is used very successfully for any building purpose—from house blocks to high-grade parquetry floors. The Department is working towards securing its greater utilisation on the Brisbane market. A number of Cypress floors have already been laid in coastal towns.

A comparison study between timber from large mature Blackbutt trees and that from fast-grown trees was made during the year, and it was found that with respect to sawn yield, seasoning and milling, fast-grown Blackbutt was in every way comparable with the older stock. Service tests on floors, lining, joinery, skis, furniture, corestock, and bentwood are now being carried out with the material from the young trees.

(3) *Sawn Timber Classification*.—The Department has maintained a close interest in the work of the Standards Association of Australia, and a considerable amount of time has been spent in drafting and reviewing proposed standards. Grading rules for flooring, lining, and ceiling in Pine and Hardwoods, together with rules for hardwood weather and chamfer boards have now been completed. Given the co-operation of the industry this work will be of considerable benefit to the public.

(4) *Inquiries*.—Samples numbering 135 were received for identification and recommendations for uses. Other inquirers sought methods of eradicating white ants and other borers, and advices regarding essential oils, gums, resins, and tan barks.

(5) *Botanical Identifications*.—Acknowledgment is made of the co-operation of the Government Botanist in the identification of a large number of botanical specimens.

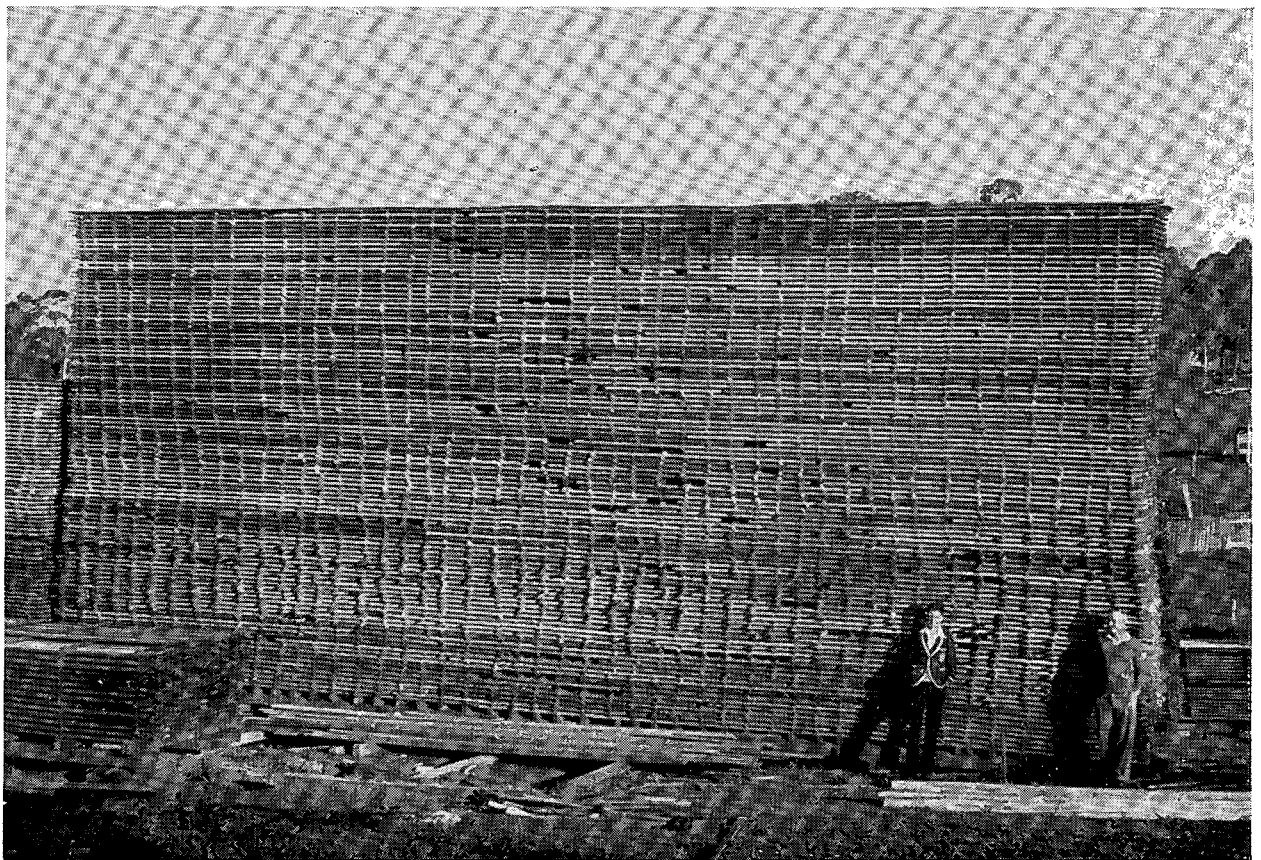
(6) *Forest Products other than Timber*.—This Sub-Department has co-operated with the various research authorities in investigations into the essential oils of leaves of timbers, tannins, resins and other products, the supplying of material for examination and in supplying information to inquirers on these subjects.



[Photo. Survey Office.]

**PORTION OF FOREST SERVICE DISPLAY AT BRISBANE EXHIBITION.**

Exhibits were also staged at Sydney and Melbourne Shows.



[Photo. J. W. Gottstein.]

**SAWN HARDWOOD IN STRIPS AT COUNTRY SAWMILL.**

Air and Kiln Seasoning Studies were continued during the year.

During the year, leaf material of three species was secured and supplied to the Technological Museum, Sydney, seven to the Queensland University, and one to the Division of Forest Products, Council for Scientific and Industrial Research. A number of samples of Kauri Gum were also procured at the request of the Council for Scientific and Industrial Research for research purposes.

## II. Wood Structure Research—

Assistance was given to the Division of Forest Products, Council for Scientific and Industrial Research, in providing a number of authentic wood samples, backed by botanical material.

With the co-operation of the Division of Wood Technology of the New South Wales Forestry Commission, the Universal Wood Index was revised and considerably improved for rapid microscopic identifications by the inclusion of several new identification factors.

During the visit to Australia of Dr. L. Chalk, the well-known wood anatomist from the Imperial Institute, Oxford, a conference of Australian wood anatomists was held in Sydney to consider a new simplified card system for timber identification, using both macroscopic and microscopic factors. The conference, at which this Sub-Department was represented, resulted in a detailed identification system being drawn up for future use.

## III. Seasoning—

(1) *Kiln Installations in Queensland.*—There are now twenty-six firms operating artificial driers, there being sixty-four timber drying kilns, three steaming chambers, nineteen veneer kilns and eleven re-driers in operation. All except two of the firms were visited during the year, and every assistance was given to operators on these visits. A number of firms have sent their operators to our experimental yard to secure a first hand experience of our kiln operation and to learn the more fundamental technicalities of kiln drying. In addition, assistance has been given to six other firms who are contemplating the erection of kilns. In these instances, officers have visited the yards and given recommendations on layout, type of kiln recommended, and have supplied any other information required.

(2) *Experimental Kiln—Newstead.*—During the year, twenty-six charges were put through the kiln, the species represented being Hoop Pine, Silky Oak, *Pinus taeda* and *P. caribæa*, Blackbutt, Red Tulip Oak, Rose Gum, Cypress Pine, Brush Box and Tallowwood. The results of this work have been made available to the industry in a series of kiln circulars, but the technical aspects have not yet been published. In the work on Hoop Pine, it has become apparent that normal stock presents little difficulty in drying, but that in a certain type of abnormal stock, usually characterised by a darker colour, drying is very slow. It has been established that the former (1 inch) can be dried in about sixty hours, but that the latter requires more than 120 hours.

Density tests of the two types reveal no differences, and microscopic studies are now under way. These observations are of considerable interest to manufacturers of core stock, in the manufacture of which it is essential that all timber be dried to a uniform moisture content.

Small batches of Ironbark, Blackbutt, Hoop Pine, Silky Oak, *Pinus taeda* and *Pinus caribæa* from plantations were dried during the year, but only

in Blackbutt was sufficient material secured to enable definite conclusions to be drawn. It was determined that fast-grown Blackbutt presented no unusual difficulties in seasoning.

Further observations were made on Cypress Pine. On a mild schedule, eight-days (of twenty-four hours each) were required to dry 1 inch boards to a moisture content of 12 per cent. The final product was practically free from degrade, but extensive face checking occurred early in the run, and it is doubtful if the drying time can be reduced. The general impression in the western districts is that Cypress Pine dries very fast, but our observations are that this timber cannot be dried on a severe schedule without extensive face checking which may persist through to the finished article.

Perhaps the most interesting work of the year has been the study of the combined air and kiln drying of hardwoods—Tallowwood, Rose Gum, Brush Box and Luster. These timbers—green off saw—require from ten to twenty-eight days to dry, but such an operation is unprofitable.

However, after a short period of air drying the kiln time can be reduced to a matter of three to seven days.

Experiments on reconditioning have been confined to Maple, Silky Oak and Brush Box. Collapse in the first named two occurs not infrequently. It was demonstrated that such collapse can be removed readily by steaming for a period of from five to eight hours at a temperature of 212 degrees F. Brush Box, on the other hand, does not collapse so characteristically, but is prone to "twist." Experiments proved conclusively that twisted boards could be permanently straightened by a steaming treatment, which, however, accentuates deep face checking. This latter is believed to occur initially during air seasoning, but further studies to check this point are proposed.

(3) *Air Seasoning.*—Although the modern kiln has reduced the drying time from months to days, the possibilities of air seasoning alone have not been fully investigated. During the last twelve months a number of studies have been made on air seasoning. The table below summarises the observations to date on full-sized stacks of 1 inch timber.

Species.	Initial Date.	Average Moisture Content Per Cent.					Remarks.
		Days.					
		0	30	60	90	120	
Luster .. ..	September ..	70	26	..	..	..	Newstead 21 per cent. at 40 days
Blackbutt .. ..	June .. ..	57	29	19	16	15	Newstead
Blackbutt .. ..	June .. ..	55	33	23	..	..	Newstead
Rose Gum .. ..	September ..	62	31	19	16	15	Newstead
Rose Gum .. ..	May .. ..	66	34	27	20	..	South Brisbane
Brush Box .. ..	August .. ..	70	30	21	..	..	Newstead
Brush Box .. ..	November ..	75	40	24	19	15	Newstead
Brush Box .. ..	August .. ..	73	29	..	..	..	Newstead
Brush Box .. ..	August .. ..	73	25	14	13	13	Newstead

A study of the air seasoning of 1 inch Hoop Pine conducted at Dugandan and Brisbane revealed that this timber can dry to 12 per cent. in twenty-one days. However, wet weather retards the drying. It has been found, for instance, that timber which is at 12 per cent moisture content in twenty-one days may pick up from 4 to 5 per cent. after several days of rainy weather. Thus timber stripped for twenty-one days may be adequately seasoned, but, if left to the vagaries of the weather, at six weeks or six months it may not be fit for use.

An experiment was made of the rate of drying of sample boards (hardwoods) in a full sized stack, under cover, compared with matched boards stripped apart. It was found that for the first twenty days the stack dried slightly slower, but that thereafter there was no appreciable difference.

(4) *General*.—Many enquiries from the trade, architects and builders were received. The type of enquiry being received indicated the growing realisation of the importance of moisture content in timber utilisation.

During the year over four hundred moisture content determinations were made.

#### IV. Preservation—

(1) *General*.—The work in hand includes service tests on non-durable timber treated with various insecticides and fungicides. There are under observation specimens of treated Blackbutt and Brush Box for sleepers, Blackbutt bridge decking, charred and creosoted Hoop Pine, Red Tulip Oak and Grey Satinash, fence posts of Blackbutt, Spotted Gum, Rose Gum, Grey Box, Turpentine and Cypress Pine. Inspections are made annually. The oldest station, established in 1932, is situated at Home Hill, and already there is ample evidence that tank treatment with creosote is a very effective preservative against the termites of that area.

At Gadgarra (North Queensland), butt treatments by the open-tank method, using both creosote and arsenic-zinc chloride are so far satisfactory in Rose Gum, but severe decay has occurred in Red Tulip Oak and Grey Satinash. Decay has occurred in the heartwood above the ground line in less than two years after treatment.

Studies in the life cycle of the Hoop Pine Beetle (*Calymnaderus incisus*) which were initiated in the previous year, were delayed on account of the difficulty experienced in obtaining live insects, and in keeping them alive in the laboratory. The technique necessary for the study has been reviewed, and it is hoped that definite progress will be reported in the coming year.

(2) *Marine Borers*.—This work was continued under three main heads:—

- (a) Survey of the types of marine borers and their method of attack in Queensland and other ports where Queensland piling could be used;
- (b) Service tests of untreated Queensland timbers to determine their relative powers of resisting attack; and
- (c) Service tests of Queensland timbers treated with preservatives.

Through the active co-operation of the Port authorities, and Queensland Railway Department, testing stations under (a), (b), and (c) have been established at four sites in the Brisbane River and Moreton Bay, and for (a) and (b) at Bundaberg, Gladstone, Townsville, Herbert and Seymour Rivers, and Cairns. With the assistance of the Maritime Services Board, Sydney, and Division of Forest Products, Council for Scientific and Industrial Research, test sites have been established at Sydney and Melbourne with regard to (b). Untreated Queensland piling timbers are also under test in the Panama Canal Zone.

The relative values of untreated timbers for Brisbane conditions has now been established for a large number of timbers, and considerable new information has been secured regarding marine conditions in other parts of the State and overseas ports.

Service tests, some now a number of years old, have been continued on timbers which have been pressure, tank and brush creosoted, and treated by other means to retard or prevent attack. Full reports of all phases of the work are available.

(3) *Powder Post Borers*.—Considerable public and trade interest in the prevention of attack by *Lyctus* was manifested during the year. A forward step in the treatment of veneers was marked by the Division of Forest Products, Council for Scientific and Industrial Research, by the demonstration of a method of treatment at a Brisbane Plywood factory. The Department has secured full details of the treatment and has already discussed with other Brisbane firms the application of this treatment to their own yards.

The possibility of using the same preservative in a hot-cold tank treatment of sawn boards has been investigated by the Department. Protection was not entirely satisfactory, although probably adequate for flooring stock. There are several practical difficulties still to be overcome, but the promising results of the veneer treatments suggest that the diffusion treatment should be investigated under laboratory conditions. A different line of approach has been studied by ringbarking the standing tree. It has been demonstrated that the portion below the ring is gradually depleted of starch and as a consequence is totally immune to the Powder Post Borer. Experiments on Spotted Gum on an area near Goodna indicated that starch depletion is complete in the relatively short time of between six to ten months. The results are sufficiently promising to justify extension of the work to North Queensland on the more valuable cabinet timbers.

(4) *White Ants*.—On behalf of the Division of Economic Entomology, Council for Scientific and Industrial Research, specimens of termites for systematic study at Canberra were collected by officers of the Department throughout Queensland. The Division's work is of particular interest to this State, where termites are so widely distributed. In this work a close liaison with the entomologists of the Department of Agriculture and Stock is being maintained.

## SILVICULTURE AND MANAGEMENT.

An increase of £9,700 over the previous highest financial allotment made for a year's work brought reforestation activity to a new high level and maintained the appreciable increase shown during each of the past few years. The table below sets out the related statistics of major operations:—

	1935-36.	1936-37.
	£	£
Total funds expended on reforestation .. .. .	114,311	123,983
Area planted during year (acres) .. .. .	2,364.1	2,058.5
Area of hardwood and cypress pine forest intensively treated (acres)	40,281	52,305
Firelines constructed (miles) .. .. .	650.1	931.8
Firelines maintained (miles) .. .. .	750.0	950.8

### REFORESTATION ACTIVITIES.

Permanent Forest Stations, 30th June, 1937 .. .. .	47
Forest Plantations established .. .. . (acres)	2,058
Total, 30th June, 1937 .. .. . (acres)	17,013
Plantations Tended, 1936/37 .. .. . (acres)	12,943
Softwood Plantations established .. .. . (acres)	1,688
Total, 30th June, 1937 .. .. . (acres)	15,119
Number of trees planted 1936/37 .. .. .	1,300,000
Plants in stock, 30th June, 1937 .. .. .	4,600,000
Number of nurseries .. .. .	22
Natural Forests treated .. .. . (acres)	52,305
Total, 30th June, 1937 .. .. . (acres)	225,013
Firelines constructed .. .. . (miles)	932
Firelines maintained .. .. . (miles)	951
Telephone lines constructed .. .. . (miles)	110
New reserves placed under management during year.. .. .	11
Expenditure .. .. .	£123,983

(This is the greatest annual provision yet made.)

All new planting was completed this year prior to 30th June.

The reduction in area planted is occasioned partly by the heavy refilling of 60 acres of exotic pines at R. 263 Pikedale, which failed to withstand the extremely severe drought conditions and largely by the lag in production of nursery stock of indigenous species inevitable with a sudden acceleration of programme.



However, the native trees planted—hoop and kauri pines, grey iron-bark, tallowwood, and blackbutt—as well as the exotics, *Pinus caribæa* and *P. taeda*, on coastal areas—have survived the extreme drought in amazing fashion. No plantation established in 1936-37 with these species can be regarded as not being highly successful at date, thus further demonstrating in the field the efficiency of the planting technique developed by research.

The Department's objective of growing quality as well as quantity in wood was greatly advanced with the adoption of routine pruning and thinning operations in the pine plantations large enough for the purpose. This work was effected over 560 acres pruned and 260 acres thinned. Clear timber will be the major proportion of the mill product from these pruned pine trees.

Research work has expanded in keeping with silvicultural operations and is definitely showing the way to improved practices in many phases of silvicultural management.

The opportunity was grasped to extend operations on the many hardwood forests awaiting treatment and protection. Eleven new hardwood forests received their first protection development, while one cypress pine-hardwood forest was included.

All of these forests are of good quality, while one, State Forest Reserve 444, Parish of Palgrave, in the Warwick district, has high local importance. In part it is suitable for girder production, and has been devoted accordingly. Another section will be of large value for pole and railway timbers other than girders, while the forest is practically surrounded by non-forested downs or other farming country. This reserve also served to demonstrate a ready appreciation of timber values and a large public spirit on the part of neighbouring land holders, who, through the co-operative effort of the Land Commissioner, have readily agreed to the addition to the State Forest of part of their holdings, carrying spotted gum forest of quality, while retaining the grazing values of the area under Forest Grazing Lease tenures. This addition, when finalised, will greatly enhance the value of the Palgrave forest as a timber-producing unit.

The expenditure of £5,301 on firefighting and patrol denotes the year under report as the worst fire year in the history of the Department. It does not disclose in full the extremely severe fire weather experienced—viz., drought and record low humidity combined with high temperatures and strong northerly and westerly winds. Two major fire losses are reported:—(1) 380 acres of pine plantation at State Forest Reserve 509, Crow's Nest; and (2) 82 acres of hardwood plantation at State Forest Reserve 393, Woondum.

In each case wind of near-gale force during hot, dry weather was the largest factor causing loss. Prosecutions for breaches of the Rural Fires Act on adjacent farm lands on the particular days of outbreak of the fires were successful.

Although other severe fires were reported, generally the damage to the forest estate under protection system was considerably less than might be expected. The unflinching efforts of the field staff and labour force are responsible in large measure for the lessening of the fire damage.

Following last year's fires, an effort has been made to secure the co-operation of neighbouring farmers in controlling the clearing fires which are a feature of farm management in many parts of Eastern Queensland. Co-operative control will protect both the forest and the property of the farmers from conflagrations similar to those of last spring. Indications of a successful response to the suggestion on the part of the farmers have been received.

During the year the protection system has been further advanced. Three fire-towers for detection purposes were constructed; three observation cabins on mountains were completed, while sites for three further towers have been located as well as other observation points.

Results with ultra-high frequency radio-phones over an area of 100,000 acres were not successful owing to the limitation of this type of set in respect of other than optical ray communication. However, tests have been eminently successful over a forest area of 25,000 acres on which considerable time and expense in fire location will be saved by their use. Other types of radio-phones are now being obtained for trial on the larger reserves.

A labour force of approximately 90 youths was continued in employment under the combined State-Commonwealth Aid to Forestry scheme, to which the Federal Government contributed £15,000; while the allotment of £25,000 from the Unemployed Relief Fund to reforestation secured the treatment of 25,725 acres of natural forest; the tending of 1,100 acres of plantation, work of various kinds in all on 1,000 miles of new fire break, and fireline maintenance on 850 miles of line. Of the total expenditure only 6.3 per cent. was absorbed in tools, cartage, camping gear, etc., constant employment being found throughout the year for 105 men with a further 250 men securing part-time employment.

The examination of forests not yet under management has continued. The results of these investigations indicate the need for protection and silvicultural treatment as early as possible to secure the maximum productivity possible of every acre of the forest estate, and to maintain timber supplies for an expanding and considerable industry.

#### Plantations—

Rainfalls well below average in all districts with record maximum temperatures, low humidities, high evaporation, and high winds in spring and summer, particularly following the severe 1935-36 conditions, combined to make 1936-37 the most difficult year from all climatic aspects ever experienced in the history of silviculture and forest management in Queensland.

For example, in the Yarraman District, the centre of greatest planting activity, rainfall was 2,045 points or 937 points below average. When it is further observed that the March fall includes 804 points registered in 4 days the severity of the remainder of the year is better appreciated.

Four days in succession in October had relative humidities of under 20 per cent. at 3 p.m.—10 per cent. on two of the days, and on those days the humidity had fallen below 20 per cent. as early as 9 a.m.

Beyond a slight delay in the start of some of the late spring-summer planting occasioned by the great caution that had to be exercised in burning off, the entire planting programme was carried out to schedule.

As was to be expected clean burns were secured on all plantation areas and had a decided effect in reducing first year tending costs. However, as was inevitable under the conditions, many patches of adjoining scrub fire-breaks were so badly scorched that they had to be felled and included in the plantation areas, but in no instance did the fire spread into uncontrollable proportions.

The efficiency of the developed technique was severely tested this year, as the bulk of the plantings were on sites which had not received soaking rains for two years.

Not one case of less than 85 per cent. establishment with tubed plantings is reported, while generally the figure is much higher.

At Kilkivan over 92 per cent. was secured on each of the new areas; one large area at Imbil showed 94 per cent. success. The entire Kalpowar plantings did not show 5 per cent. loss.

The results of the open root winter plantings of Slash and Loblolly pines at Glasshouse Mountains and of Slash and Mexican pines at Pechey were also gratifying.

At Passchendaele, however, the July open-root planting of Slash and Mexican pines though showing over 70 per cent. establishment at the end of September, gave ultimate results of 38 per cent. and 17 per cent. respectively. Here in the dry granite soils the trees received after planting a rainfall of only 694 points in eight months, and the losses beyond those normally experienced here with *Pinus patula* are thus explained.

The total area planted for the year was 2058.5 acres, details of which are shown in appendix M. Species distribution of these plantings was as follows:—

Working Plan Area.	AREA IN ACRES.						
	Hoop Pine.	Kauri Pine.	Silky Oak.	Ironbark, and other Eucalypt Species.	Pinus Species.	Other Species.	Total.
Brisbane Valley and Nanango ..	519.0	..	40.0	46.0	135.0	..	730.0
Kilkivan .. .. .	79.2	..	19.0	..	6.3	..	104.5
Kilcoy .. .. .	..	..	..	47.0	..	..	47.0
Many Peaks .. .. .	61.5	..	..	..	9.5	..	71.0
Mary Valley .. .. .	436.9	172.0	..	..	..	..	608.9
North Coast .. .. .	1.5	36.0	..	276.0	99.0	..	412.5
North Queensland .. .. .	12.8	7.2	3.2	..	..	1.4	24.6
Warwick .. .. .	..	..	..	..	60.0	..	60.0
Totals .. .. .	1,110.9	215.2	62.2	369.0	299.8	1.4	2,058.5

While the total area planted is less than that of last year, the area of Hoop and Kauri pine is very close to the 1935-36 figure, the percentage showing a considerable improvement.



[Photo. J. A. Lum.]

**QUEENSLAND. MAPLE SEEDLINGS IN FOREST NURSERY.**

1,300,000 trees were set out in Plantations and 4,600,000 trees remained in Nurseries at the end of June.



[Photo. Education Dept.]

**PRESIDENT OF FORESTRY CLUB ADDRESSING CHILDREN IN A SCHOOL FOREST PLOT.**

During the year trees were supplied for fifteen new school plots. Seventy-four plots have now been established.

Most prominent is the increased Kauri pine (*A. robusta*) planting.

Regular and extensive collections of fertile seed of Kauri are not possible, but every effort is being made to maintain a proportion of this species in the annual planting. Suitable planting sites are, however, relatively limited.

Two further forests—State Forest Reserve 298 Gallangowan (Kilkivan District), and State Forest Reserve 392, Como (North Coast District) entered into the planting programme for the first time during the year.

The planting of abandoned or worked-out banana or tobacco farms on State Forests in the North Coast District was continued.

Unfortunately, as referred to previously, the loss by fire reduced the nett addition to planted area to 1,596 acres.

The total area of satisfactorily established plantations at 30th June, 1937 is thus 17,012.7 acres.

The very dry conditions inimical to pronounced tree growth (and plots have revealed small increments in most stands for the year) have on the other hand been responsible for low tending costs. Neither germination nor development of weeds approached the normal crop, and though the usual two or three tendings on the first year areas were carried out in many instances, in others no first tending was made until some months after planting.

Thinning and pruning initiated last year have now become a routine operation in the older plantations. The areas covered in the year's operations being—

District.	Pruning.	Thinning.
	Acres.	Acres.
Brisbane Valley .. .. .	187	136
North Queensland .. .. .	96	87
Kilkivan .. .. .	20	..
Mary Valley .. .. .	208	34
North Coast .. .. .	53	5
Totals .. .. .	564	262

The experience gained, added to results from experimental work, has permitted the development of prescriptions covering the early thinning and pruning procedures with Hoop Pine, which represent a blending of the practical with the ideal.

#### Nurseries—

No new nurseries were constructed during the year, but the addition of the one on State Forest Reserve 137 Yabba to the production list brought the total number to 22 (19 permanent and 3 temporary).

The latter are those in use for the raising of hardwood stock for the planting of banana leases on hardwood forests,

Total output for the year was 1,300,000, and the number of plants in stock at 30th June, 4,600,000.

As forecast in last year's report, a particularly heavy crop of Hoop Pine seed occurred. Opportunity was taken to collect a sufficient quantity for four year's sowings.

The total collection amounted to 38,000 lb. or about 17 tons.

Germination tests have shown the seed to be of excellent quality. An interesting feature is the wide variation in number of seeds per lb. the limits of the collection being 1,600 and 3,800 per lb. of clean seed.

Collection was rendered difficult this year by the early ripening and sudden falling of the seed. Normally collection is not undertaken until mid-December, and several weeks are available before the seed has fallen. In this instance, ripening occurred about two weeks ahead, and in several districts the bulk of the seed had fallen within a week. In the circumstances the collection of 38,000 lb. of seed, which is much larger than any previous collection, called for special efforts, and the efficiency of the district organisations in achieving the objective set warrants special mention.

Arrangements for the cold storage of the seed, which is essential to retain its viability, have been successfully finalised, and the bulk of the seed not required for the 1937-38 sowings is now in storage.

Owing to the failure of seed crops over several years, seed was not available for the routine sowings of Hoop Pine in spring as usual, and in consequence sowings were delayed until the seed collections were made. Routine sowing was conducted in January and, in an endeavour to ensure that the resultant stock would be available for planting in 1938-39, moderate to heavy dressings of organic manure as considered necessary were applied. In addition drill sowing was adopted in the high shade nurseries in preference to the usual routine broadcast sowing, with the object of avoiding the check attendant on transplanting at the end of the first year. Present indications are that the procedures adopted will achieve their object, and the stock will be available when required. However, in the low shade nurseries these later sowings were associated with considerable mortality on the edges of the beds due to insolation.

In addition considerably more trouble was experienced with the damping off fungi than at previous sowings, but timely application of cheshunt mixture exercised reasonable, though not complete, control.

#### **School Forestry Plots—**

From 59 at the beginning of the year the number has risen to 74.

The oldest of the plots—that at the Marburg Rural School—was given a routine pruning during the year, and a few thinned trees were utilised in the manufacture of small articles.

At another school a corner of the school ground area carrying a mixed eucalypt stand was subjected to a normal hardwood treatment.

#### **Private Planting—**

A marked increase took place in the number of trees made available for such purposes, a demand for over 10,000 being met.

**Natural Forests—**

The area covered for the year—52,305 acres—represents by far the greatest annual acreage of such work to date and an increase of 12,000 acres on the best previous figure.

Many of the original areas of treatment are now reaching the stage of requiring further treatment, and of the year's work, while 41,684 acres were first treatment, the balance—10,621 acres—was largely thinning of the new stands resultant from the initial operation.

The area subjected to at least one treatment totals 225,113 acres.

Eleven new forests were brought under management:—

- S.F.R. 83 Cherwondah (Dalby district—Spotted Gum).
- S.F.R. 446 Stapylton (Brisbane district—Ironbark and Spotted Gum).
- S.F.R. 667 Gatton (Brisbane district—Ironbark and Spotted Gum).
- S.F.R. 434 Conondale (Kilcoy district — Ironbark, Tallowwood, Blackbutt).
- S.F.R. 444 Palgrave (Warwick district—Ironbark and Spotted Gum).
- S.F.R. 132 Texas (Inglewood district — Ironbark and Cypress Pine).
- S.F.R. 49 Littabella (Bundaberg district—Ironbark and Spotted Gum).
- S.F.R. 390 St. Mary (Maryborough district—Ironbark and Spotted Gum).
- S.F.R. 502 Gympie (Gympie district—Ironbark, Spotted Gum, and Messmate).
- S.F.R. 627 Goomboorian (Gympie district—Ironbark, Spotted Gum, and Messmate).
- S.F.R. 234 Tuchekoi (Gympie district—Ironbark).

In several of these, work was confined to firebreaks and road construction.

Details of the areas treated on each forest are set out in appendix N, which briefly summarised, shows the following:—

Working Plan Area.	AREA TREATED.	
	Acres.	Type of Forest.
Brisbane .. .. .	1,986	Spotted Gum, Ironbark, and/or Blackbutt
Brisbane Valley .. .. .	1,320	Ironbark, Blackbutt
Bundaberg .. .. .	2,270	Spotted Gum, Ironbark
	144	Hoop Pine
Clermont .. .. .	4,560	Narrow-leaf Ironbark
Dalby .. .. .	5,093	Spotted Gum
Dalby .. .. .	9,042	Cypress Pine (with or without Narrow-leaf Ironbark)
Fraser Island .. .. .	657	Blackbutt
Inglewood .. .. .	2,922	Narrow-leaf Ironbark
	9,783	Cypress Pine (with or without Narrow-leaf Ironbark)
Kilkivan .. .. .	1,650	Spotted Gum, Ironbark
Maryborough .. .. .	8,780	Spotted Gum, Ironbark
North Coast .. .. .	4,098	Blackbutt, Ironbark
Total .. .. .	52,305	



During the year some minor alterations, principally of local significance, were found necessary in the rules for treatment. Owing to evidence of a probable demand for small Cypress Pine the size at which no further treatment beyond the removal of worthless stems is carried out was decreased from 25 inches g.b.h. to 20 inches g.b.h.

#### Silvicultural Research—

Silvicultural investigations in the main forest types of Queensland, namely the Hoop Pine Forests, the Coastal Hardwoods, the Western Hardwoods, and Cypress Pine, and the Northern Rain Forests, as well as with the exotic species, have been extended during the year.

In the Hoop Pine centres of the Mary and Brisbane Valleys the policy of concentration on thinning and pruning research has been extended, and in other directions the work has been confined to the minimum demanded by the difficulties experienced in practice. Plots with the object of determining the free growing curve have been initiated, as distinct from plots in which varying degrees of thinning are being tested. On the older thinning plots the dry conditions of the year, by reducing growth very considerably, militated against clear-cut results. The information on pruning, however, is rapidly becoming complete, and provides a basis for more definite pruning prescriptions than have been possible previously. The thinning and pruning experiments so far clearly indicate one generalisation, viz., that early thinning is a corollary of pruning.

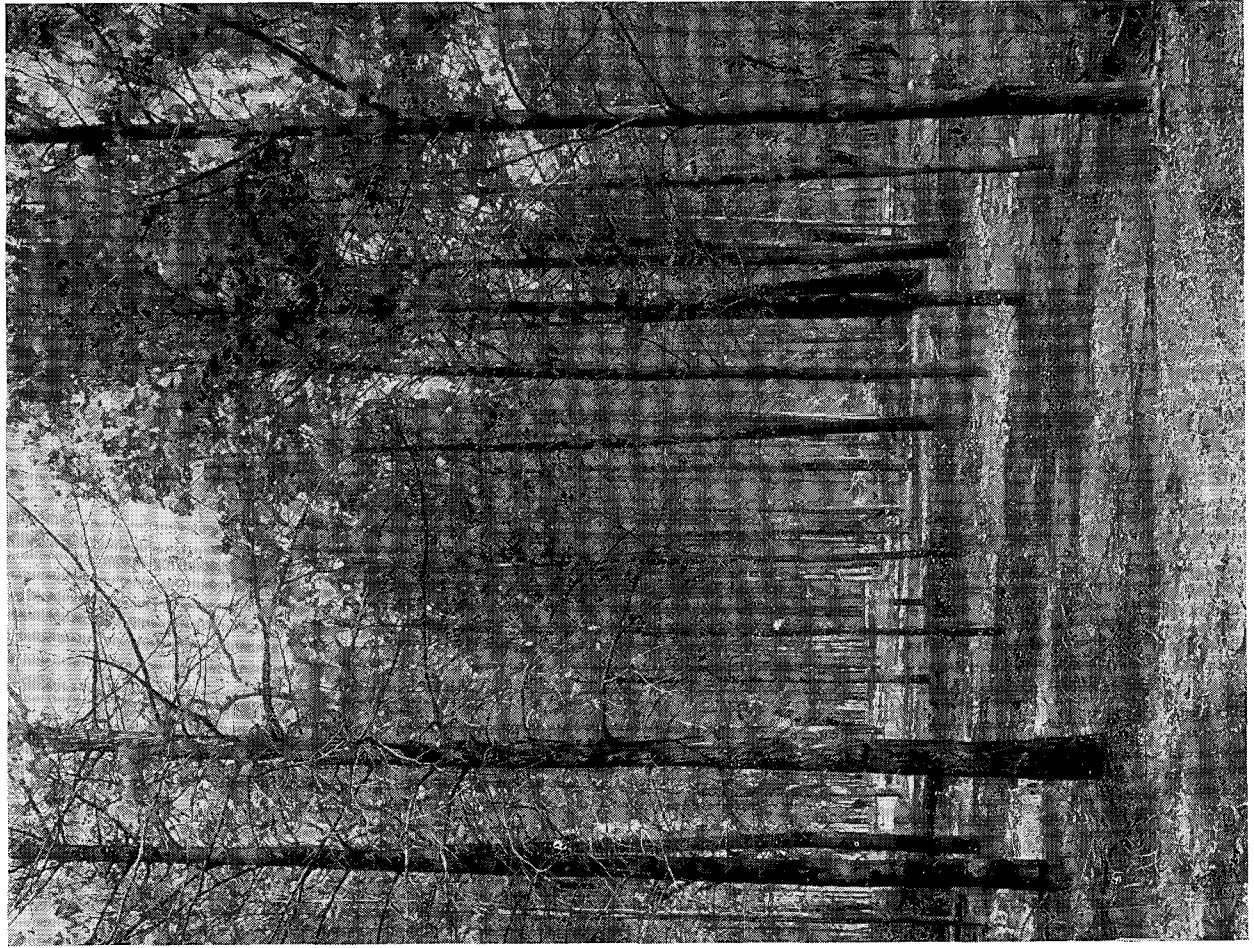
The same remarks apply with equal force to the exotic species with which Queensland is most concerned—*Pinus caribæa* and *P. taeda*.

Research on the coastal hardwood forest areas has now reached the stage where the flowering and fruiting habits of the major species are reasonably well known, and this information provides a valuable basis for the design of sound experiments on the regeneration of the various species. During the year the desirable procedures for the regeneration of Grey Ironbark (*Euc. paniculata*), were much elucidated by the experimental work. An incidental point which arose from these investigations was the grazing damage which is likely to be sustained by this species.

The investigations aiming at testing the various points of the prescriptions for treatment are still proceeding, and although considerable progress was made during the year there are no definite results to report.

In the Cypress Pine-Western Hardwood areas a commencement has been made to secure information on the rate of growth of treated forests under a wide range of varying conditions, and in addition, further thinning plots have been established. The older plots in Eucalyptus crebra indicate that following the thinning of dense young stands some action may be necessary to control the coppice from the thinned stumps.

In North Queensland following on the collection during the year of Maple (*Flindersia brayleyana*) and Northern Kauri (*Agathis palmerstoni*) seed a number of nursery experiments were initiated.



[Photo. J. A. Imm.]

**TREATED POLE STAND OF WESTERN CYPRESS PINE (*Callitris glauca*).**

During 1936-37 an area of 52,305 acres of natural hardwood and cypress pine forest was subjected to an improvement thinning and regeneration treatment.



[Photo. S. G. Jennings.]

**NARROW LEAF IRONBARK (*Eucalyptus crebra*) AFTER THINNING.**

During 1936-37 an area of 52,305 acres of natural hardwood and cypress pine forest was subjected to an improvement thinning and regeneration treatment.

The pathological investigations concerned with Fused Needle in the exotic species have given a lead on the possibility of the use of fertilisers with these species. Experiments over a long period will be necessary before any finality can be reached in this direction.

Investigation of the Maple seedling gall was recommenced during the year, and at the present stage the indications are to the effect that the disease is caused by a bacterium. No control measures have yet been evolved. The fungus disease responsible for leaf cast in Northern Kauri has been now identified as *Hendersonula* (a new sp.).

The root rot disease experienced in plantations has been diagnosed as being caused by *Fomes pachyphloeus*. While the disease has been found on all species in all districts no serious attack has been evidenced.

The mycorrhiza problem has been the subject of further research throughout the year, and endeavours are being made to test the efficiency under Queensland conditions of a number of different mycorrhiza-forming fungi.

The work on the Hoop Pine Bark Weevil (*Aesiotes notabilis*) was considerably advanced. Despite proof that the adult beetle can live and actually lay eggs for more than twelve months there appears little likelihood of serious damage following pruning in Hoop Pine stands. As these results were secured in an abnormally dry year their confirmation in a year of normal or heavy rainfall is required before they can be considered as conclusive.

#### Forest Protection—

*Fires.*—The severe fire season experienced has already been referred to.

Several areas under treatment were burned over, but a marked feature was the comparative paucity of outbreaks on the western forests.

Over 250 separate outbreaks of fire were reported on State Forests or Timber Reserves.

Many of these were, however, on areas not under management. The area under intensive management burned over totalled:—

6,000 acres natural hardwood forest.

380 acres softwood plantations.

82 acres hardwood plantations.

The plantation losses are the first of any magnitude experienced since 1930.

Of the treated hardwood area burned, over one half of the area was burned in three fires, the balance being made up in over fifty outbreaks.

It is significant that many of these smaller fires were on areas under patrol from lookouts and rapid communication has been responsible for the limited losses in these instances.

The construction of four further lookouts and four fire towers was undertaken.

**Fireline Works—**

In addition to the increased hardwood treatments the marked feature of the year's work was the large expansion of firebreak construction.

During 1935-36 the work carried out totalled 650 miles, and 750 miles of construction and maintenance work respectively.

The works for the year under review were as follows:—

Working Plan Area.	AMOUNT AND TYPE OF WORK CARRIED OUT (MILES).	
	Fireline Construction	Fireline Maintenance.
	Miles.	Miles.
Brisbane .. ..	Fall, log, and burn .. .. 22.2	Chip and burn .. .. 21.1
Brisbane Valley ..	Clear and stump .. .. 10.4 Fall, stack, and burn .. .. 21.8	Brush and chip .. .. 13.1 Plough and/or grade .. .. 49.8
Bundaberg .. ..	Fall, log, and burn .. .. 62.6	Plough and/or burning .. .. 81.0
Clermont .. ..	Chip and burn .. .. 12.0	
Dalby .. ..	Fall and stack .. .. 467.7 Burning .. .. 422.6	Brush and/or sucker .. .. 72.2
Fraser Island ..	Clear, grub, and grade .. .. 22.4	Grade and delve .. .. 47.0
Inglewood .. ..	Fall and stack .. .. 29.1 Plough .. .. 40.5 Burn .. .. 93.0	Plough .. .. 405.3 Burn .. .. 365.4
Kilcoy .. ..	Fall .. .. 7.0	
Kilkivan .. ..	Chip .. .. 1.0 Fall and stack .. .. 20.0	Chip .. .. 2.2 Burn .. .. 7.5
Many Peaks ..	Chip and stump .. .. 1.2	Chip .. .. 4.5
Maryborough ..	Fall, log, and burn .. .. 101.1	Plough and/or burn .. .. 105.2
Mary Valley ..	Stump and plough .. .. 15.6 Chip .. .. 1.2	Chip .. .. 1.9 Plough .. .. 16.7
North Coast ..	Fall, log, and burn .. .. 89.8 Plough .. .. 24.3 Chip and/or burn .. .. 15.9	Grade .. .. 37.4 Chip and burn .. .. 57.9
Warwick .. ..	Fall and stack .. .. 30.8	Chip .. .. 9.0 Plough .. .. 19.0
Totals .. ..	*931.8	950.8

\* Total new breaks added only.

On several areas protected previously by only narrow cleared breaks, conversion to "green" breaks was undertaken while on all coastal hardwood operations this type of break has been adopted as standard.

Purchase was made of a road patrol grader to special specifications for firebreak-road construction and maintenance. This has been under trial with good results in the Brisbane Valley District. It is proposed to transfer it to the western forests with a view to securing the rapid maintenance of the hundreds of miles of break-roads there.

**Animals—**

No other satisfactory recourse to avoid wallaby damage than to erect netting fence around newly-established plantations in the Hoop pine areas has yet been found.

Essential fencing during 1936-37 comprised  $9\frac{1}{2}$  miles in the Brisbane Valley,  $1\frac{1}{4}$  miles at Kalpowar, and  $\frac{1}{2}$  mile at Kilkivan.

The one exception is the Mary Valley District, where it is necessary only to fence against stock. Two miles of such fence were erected.

Rabbits continue to cause damage at Passchendaele to *P. patula* immediately following planting, though the use of larger stock has improved the position.

Sporadic rat damage still occurs on Hoop Pine plantation areas, where the exotic species used as fillers in frost hollows are severely attacked, the attack on Hoop Pine being more scattered. Destruction of the shelter of these rodents by grazing plantation areas is being adopted as a partial measure of control.

**Insects—**

No serious damage was reported.

Thrip damage on both the northern and southern kauri pines is now being controlled by the use of nicotine sulphate or Katakilla.

The introduction of a small lady bird to Peehey is effecting considerable control of Chermes.

As a precaution against attack from the Aesiotes beetle, pruning operations are being confined to the winter months. No attack has been reported.

**Fungi—**

Heavy damping off losses were experienced after the late Hoop Pine sowings this year, but as referred to previously, the application of cheshunt was effective in large measure.

In an endeavour to control both thrip and leaf-cast (*Hendersonula*), both of which attack northern kauri pine Bordeaux together with nicotine sulphate in mixture is being tried.

**Constructional and Maintenance Works—**

The expenditure on construction of necessary administrative works fell from £13,474 last year to £6,726. It was found impossible to complete the full programme planned.

However, those other improvements necessary for fire protection were completed and comprise:—

- (1) The erection of 110.4 miles of telephone line and the installation of 11 telephones. Almost entirely these were for a linking up of headquarters with fire lookouts.

- (2) The erection of three lookout towers with cabins (2-40 feet high and 1-50 feet high), and two lookout cabins. In addition one tower and three lookout cabins were under construction at the close of the year.
- (3) The construction of thirty-seven fire tool huts chiefly in the Dalby and Maryborough Districts. These huts which accommodate a 600-gallon tank are located at spaced intervals along firebreaks, and house a supply of fire-fighting equipment while also catching badly-needed water supplies.

Other improvements with the exception of a seed drying shed on State Forest Reserve 298, Gallangowan, were of minor extent only.

Maintenance works were chiefly concentrated on the cleaning of forest paddocks in order to obtain maximum value from these highly reproductive improvements.

#### Expenditure and Labour—

Details of the expenditure on reforestation works are contained in appendices J, K and L.

The total expenditure of £123,983 was made up of—

	£
State Loan Funds .. .. .	81,463
Unemployment Relief Funds .. .. .	24,874
Commonwealth Aid to Forestry .. .. .	15,000
Trust Funds .. .. .	2,646
Total .. .. .	<u>£123,983</u>

In addition to representing an increase of £5,465 on last year's expenditure, this is the largest annual reforestation expenditure to date.

Whilst only a few years ago there was a definite peak of employment during the summer months occasioned by the seasonal planting operation, the graph of monthly employment now remains very steady at a fixed level.

During 1936-37 there were only minor departures from a constant employment of 550 on reforestation works.

The beneficial effect on class of work and cost of operation is most marked.

Very favourable comment is reported from all districts in which the juvenile employment scheme is in operation. The number of youths employed was maintained at approximately ninety.

### Summary of Fire Reports.

Detailed record was again kept of the origin, causes, and circumstances of outbreaks of fire on forest reservations throughout the State.

An analysis of those reported discloses that the forest reserves in the Maryborough and North Coast districts generally were the principal sufferers.

All districts report losses in varying degrees through fire, from the destruction of seedling growth to the matured forest giant.

The summary of fire outbreaks examined furnishes indisputable evidence that preventible fires are once more in the majority.

For instance, of the 241 outbreaks which came under notice, 43 cases of deliberate and wilful lighting of fires were reported; 13 instances where accidental burning occurred, and 58 cases where the fire spread from adjoining properties to the adjacent reserve. It can be argued that under the latter heading reasonable precautions would have been effective in preventing the subsequent damage.

Breaches of the Rural Fires Act were evident, and where the circumstances warranted, the offenders were prosecuted and fines inflicted in each case.

Other causes of fires noted were sparks from locomotives igniting the grass, spread of fire from campers' and picnickers' billy fires, and burnt off scrub rekindling.

The origin of many fires remained unknown.

Forestry has recently addressed to all landowners and settlers in the vicinity of its reservations a letter based on the principle of harmonious working in the matter of burning off, and has indicated that where Forestry staff is available it will be employed in a co-operative effort to control any firing undertaken.

By this means it is hoped to minimise the losses sustained by the selector and the State from this source.

### NATIONAL PARKS.

A branch of Departmental activity of increasing importance is the management and control of National Parks.

The year 1936-37 saw the first provision made on the Estimates for National Parks work. The sum of £2,000 was voted, and in all £2,226 14s. 2d. was spent. Of this, approximately half was absorbed in the salaries and travelling expenses of the National Parks Rangers. Of the balance, £681 was spent in repairing the jetty at the newly proclaimed Green Island National Park (which had previously been administered by the Cairns City Council as a Recreation Reserve); and £329 in construction of walking tracks at Lamington National Park. Of the latter amount, £85 was paid by way of 50 per cent. subsidy, and the remainder as wages for a Departmental gang employed in the work.



The track under construction is along the main Beechmont Range on the slopes of Mount Hobwee. It is the intention to continue this track so as to connect the two guest houses, viz., Binna Burra Lodge and O'Reilly's Guest House.

The tracks which are built to easy grades for walking, all roots, stones, and other obstructions to a level surface being removed, afford the opportunity for untroubled observation at close quarters of the scenic beauties of the Park, and at the same time fatigue is reduced to a minimum. The tracks will be confined to pedestrian use, as horses would quickly reduce them to a quagmire.

In furtherance of the policy of perpetuating natural fauna, a number of koalas were released on Lamington National Park.

During the year forty-eight new Parks, aggregating 75,539 acres in area, were proclaimed, and at the end of the year the total area reserved for National Parks was 416,911 acres. The most important new reservations were Hook Island of 12,800 acres, Shaw Island 4,100 acres, and 48,640 acres in the Conway Ranges, fronting the Whitsunday Passage.

### FOREST SURVEYS.

Five fully-equipped camps operated during the financial year, whilst temporary small camps were organised to carry out required miscellaneous surveys.

The total expenditure for survey work amounted to £4,996 19s.

As a result, 4,437 acres were closely inspected; 87,732 acres were assessed; 139,638 acres were subjected to intensive contour and assessment survey; and 37,350 acres were divided into compartments for management purposes.

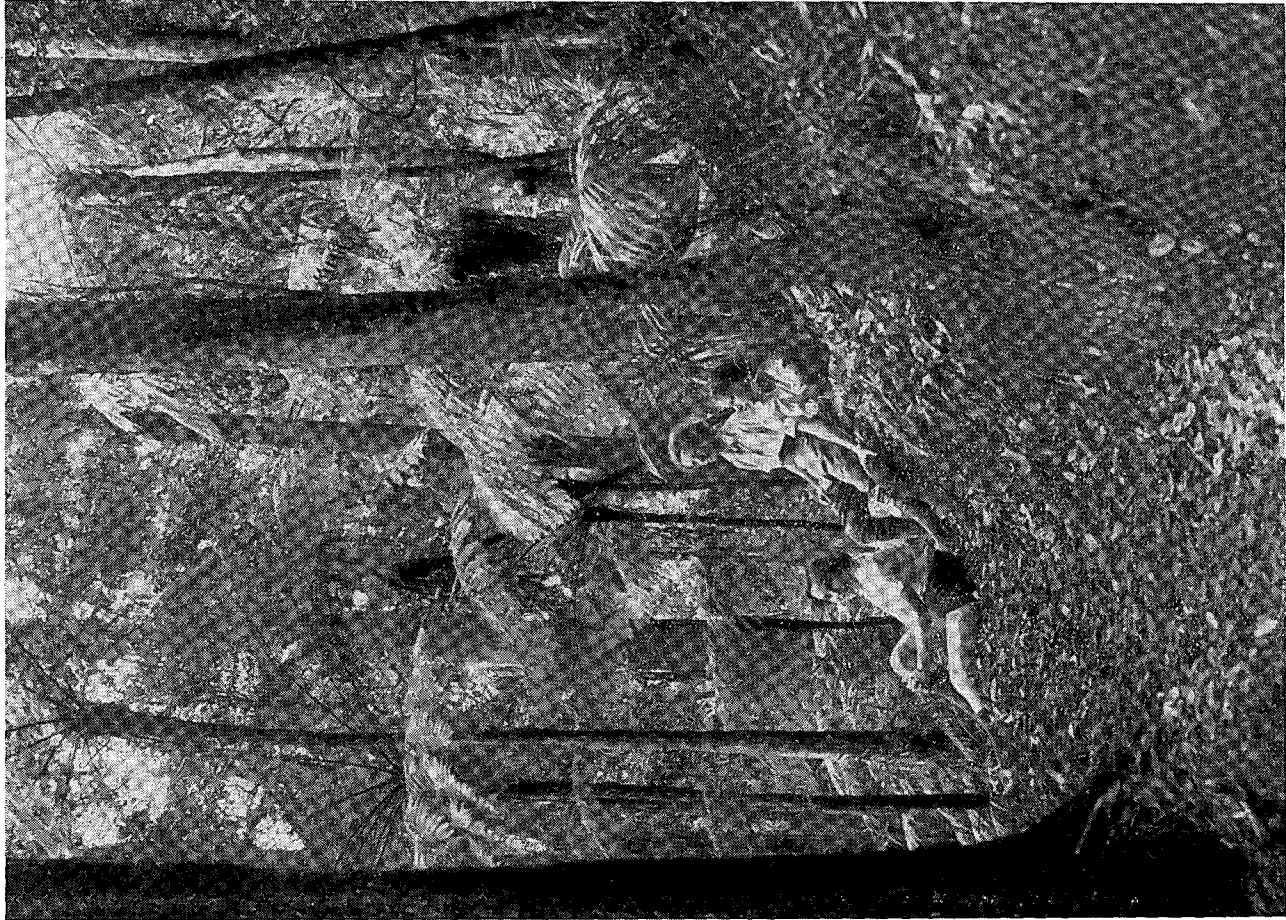
Summary of mileage completed by all camps is given hereunder:—

	Miles. Chains.	
Compass and chain .. .. .	499	53
Strip survey .. .. .	1,084	29
Topo. levels .. .. .	60	37
Trial traverse .. .. .	112	66
Track making .. .. .	3	20
Exploratory .. .. .	225	00
Road work .. .. .	19	56

#### Atherton Working Plan Area—

Only one camp operated in North Queensland, surveys being continued on Timber Reserve 30, Parishes of Garioch and Riflemead, in the vicinity of Mount Spurgeon, and field work was closed down on the 20th December. In all, approximately 15,000 acres were dealt with by Class 2 survey during the financial year.

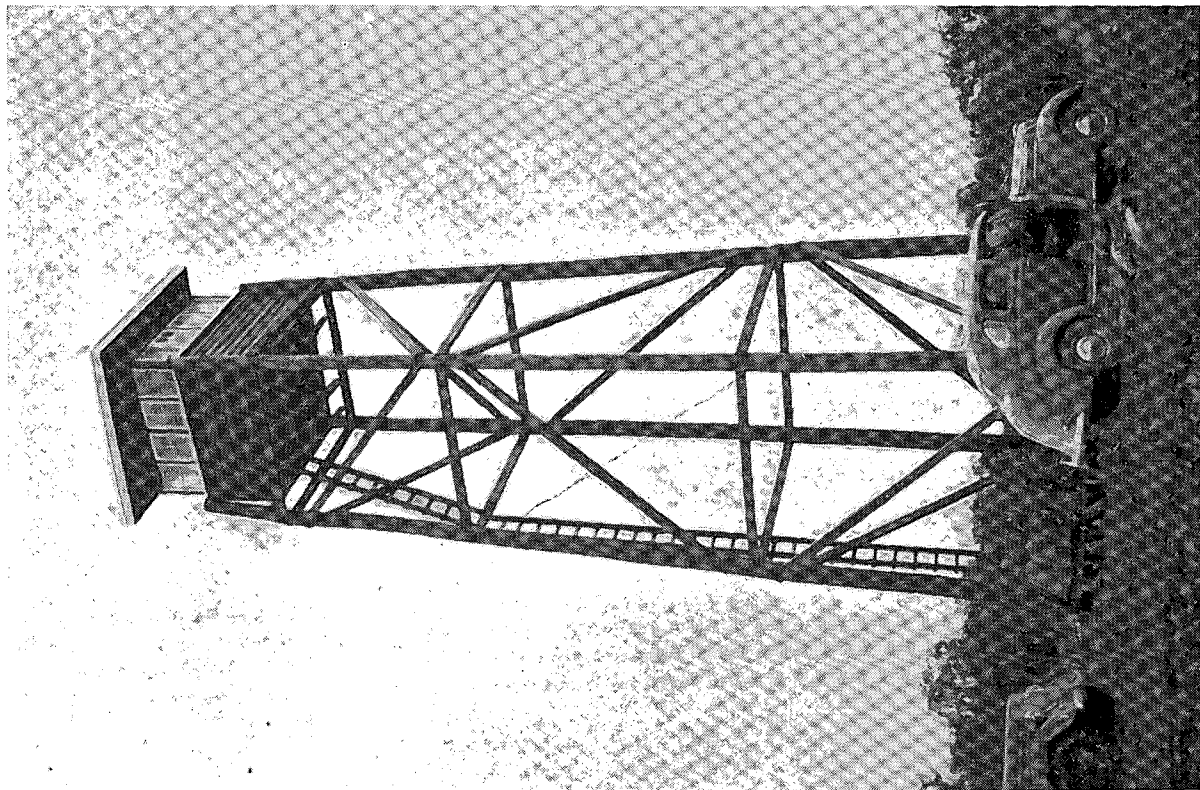
For various reasons this survey was not continued in the latter part of the financial year, but a new camp was organised and commenced a type and firebreak survey on the hardwood



[Photo. G. S. R. Genery.]

**GRADED WALKING TRACK, LAMINGTON NATIONAL PARK.**

The past year marked the initiation of developmental work in National Parks.



[Photo. S. G. Jennings.]

**FIRE LOOKOUT.**

Six Lookout Stations were established during the past year.

areas adjacent to and surrounding Cardwell (T.R. 343 Glenbora Creek). This camp commenced operations on the 8th June. Particulars of mileage are set out hereunder—

Reserve.		Miles.	Chains.
T.R. 30	Compass and chain .. .. .	6	35
	Strip survey .. .. .	74	16
	Pack tracks .. .. .	3	20
	Exploratory .. .. .	20	00
T.R. 343	Strip survey .. .. .	17	10

Small plantation surveys on S.F. 310, Gadgarra, and S.F. 191, Barron, were also effected by local staff—see Miscellaneous Surveys.

#### Bundaberg Working Plan Area—

Class 3 survey of the southern section of State Forest 169, St. Agnes, was continued and field operations were completed by the 8th March, an area of 6,552 acres having been dealt with during the report period. This camp was then shifted to State Forest 893, Byron, on the 9th March.

Mileage was as follows:—		Miles.	Chains.
Compass and chain	.. .. .	46	00
Strip survey	.. .. .	43	20
Boundary levels	.. .. .	13	16

#### Many Peaks Working Plan Area—

A camp shifted from the Brisbane District on the 10th February in order to carry out type and firebreak survey on a large hardwood forest near Monto. This State Forest has an area of approximately 80,000 acres, and includes S.F. 28 Coomnglah, Bailey, Selene, Timber Reserves 79, 84, and vacant Crown land.

Field work is still proceeding on the Three Moon area and should be completed shortly.

Mileage was as follows:—

Mileage was as follows:—		Miles.	Chains.
Trial traverse	.. .. .	95	49
Final traverse	.. .. .	72	62
Strip survey	.. .. .	271	24
Road work	.. .. .	18	40
Exploratory	.. .. .	163	00

#### Maryborough Working Plan Area—

Two forest survey camps operated almost continuously in this district, with the result that the more important reserves have now been dealt with.

One camp continued with the firebreak and type survey of State Forests 59 and 390, St. Mary, and field work was completed by the 15th July. State Forests 503, 8, and 303, Doongul, were then dealt with and completed by the 7th October. Timber Reserve 417 and State Forest 38, Woocoo, were then dealt with up to 27th November, when a transfer was made to State Forest 12, Gungahlin. Subsequently, the camp carried out urgent work on the Lamington National Park in the Brisbane District, and did not resume operations in the Maryborough Working Plan Area during the balance of the financial year, going direct to the Many Peaks District. Prior to the Brisbane transfer, Portions 87, 88, 102, 122v, and 123v, parish of St. Mary, were dealt with by Class 2 survey.

The second camp commenced operations on Timber Reserve 85, Dundar, moving from the Mary Valley on the 24th August. Owing to the resignation of the officer-in-charge in October, it became necessary to re-organise this camp, and survey work again commenced on this reserve on the 12th October.

From this date until 18th April, a number of reserves were dealt with, a summary of which is shown hereunder, together with those dealt with by the other camp.

Reserve and Parish.	Area.	Trial	Compass	Strip.	Miles. Chains.	Commenced.	Completed.
		Trav. Mls. Chs.	and Chain. Mls. Chs.	Mls. Chs.			
T.R. 85 Dundar .. .. .	4,900	..	10 53	1 66	..	24-8-36	12-10-36
T.R. 375, Boompa .. .. .	5,890	..	3 46	6 20	..	12-10-36	1-11-36
S.F. 25 Boompa .. .. .	2,000	..	..	7 31	Worked with	R. 375	..
T.R. 376 Teebar .. .. .	3,970	..	..	18 00	..	1-11-36	1-12-36
T.R. 465 Teebar .. .. .	2,891	..	..	2 51	} with	R. 376	..
Portion 138 Teebar .. .. .	3,775	..	1 50	12 34		..	..
S.F. 50 Glenbar .. .. .	7,300	..	8 42	45 20	..	1-12-36	15-2-37
S.F. 301 Miva .. .. .	2,275	..	..	15 63	} Worked with	R. 50	..
T.R. 470 Miva .. .. .	2,329	..	..	8 67		..	..
T.R. 420 Miva .. .. .	..	..	..	4 59	..	..	..
Portion 182 Glenbar .. .. .	618	..	..	3 74	} Worked with	..	..
Portion 183 Glenbar .. .. .	744	..	..	4 51		..	..
S.F. 287, 750, Woowoonga .. .. .	5,665	..	5 64	32 51	..	15-2-37	5-4-37
T.R. 580 Degilbo .. .. .	390	..	..	1 71	} Worked with	R. 287	..
T.R. 581 Degilbo .. .. .	880	..	..	5 45		..	..
S.F. 435 Gundiah (incomplete) .. .. .	3,000	..	..	40 54	..	6-4-37	18-4-37
T.R. 274 Conondale .. .. .	Transferred to	Mary	Valley	W.P.A.	..	..	..
S.F. 390 St. Mary .. .. .	..	..	5 77	..	..	..	15-7-36
S.F. 59 St. Mary .. .. .	1,403	..	..	7 53	..	..	15-7-36
S.F. 503 Doongul .. .. .	5,869	..	..	30 02	..	20-7-36	29-7-36
T.R. 8, 303, 7, 517, &c. Doongul .. .. .	22,258	..	58 70	142 72	..	30-7-36	7-10-36
T.R. 417 Woocoo .. .. .	7,150	12 77	13 34	48 02	..	9-10-36	25-11-36
S.F. 38 Woocoo .. .. .	600	..	..	4 21	..	26-11-36	27-11-36
S.F. 12 Gungaloon .. .. .	4,560	..	9 02	37 20	..	7-12-36	21-1-37
Totals .. .. .	88,467	12 77	117 38	482 47	..	..	..

#### Mary Valley Working Plan Area—

On 19th April a camp was transferred to Timber Reserve 274, Conondale, in order to carry out Class 2 survey of that section of the reserve at the headwaters of Booloomba, Bundaroo, and Peter Creeks.

An area of 10,328 acres was dealt with and field work was practically completed by the end of the report period. Local staff, in addition, effected numerous minor surveys, particulars of which are shown under Miscellaneous Surveys.

Details of mileage on R. 274, Conondale, are as follows:—

	Miles.	Chains.
Compass and chain .. .. .	24	14
Strip survey .. .. .	59	78

#### Kilkivan Working Plan Area—

Miscellaneous surveys were effected by resident staff on the following reserves:—S.F. 242, Widgee, S.F. 82, Brooyar, T.R. 220, Kilkivan, and S.F. 298, Gallangowan. For details, see Miscellaneous Surveys.

#### Brisbane Working Plan Area—

A type survey and estimate of State Forest 446, Stapylton, was effected during July, a total of 1,365 acres being typed necessitating 15 miles .07 chains of stripping.

Approximately 1,100 acres of National Park 496, Roberts, were stripped and estimated. Work commenced on the 22nd January and was completed by the 9th February. A trial traverse of 3 miles was run by compass and chain and 7 miles 60 chains of strip line run.

#### North Coast and Kilcoy Working Plan Areas—

Class 3 survey of State Forest 893, Byron, was commenced on the 15th March, and is still in progress, approximately 5,000 acres being dealt with up to the end of the report period.

The officer-in-charge of northern camp took over as from 5th April.

Mileage completed was as follows:—

	Miles.	Chains.
Compass and chain survey .. .. .	18	00
Strip survey .. .. .	26	43
Boundary levels .. .. .	13	00
Exploratory .. .. .	10	00

Miscellaneous surveys in these working plan areas included location of banana blocks on S.F. 393, Woondum, and S.F. 893, Byron, improvements on Mill Logging Area, State Forest 137, Yabba, soil and firebreak survey on State Forest 589, Beerwah, connection, S.F. 392, Como, and compartments on State Forest 173, Durundur, entailing 4 miles 50 chains of compass and chain compartment boundary.

#### Brisbane Valley Working Plan Area—

A small camp operated in the above district for the greater part of the financial year, transferring to the Warwick district in June of this year.

Firebreak surveys were continued intermittently on Wallaby Logging Area (S.F. 283, Colinton), an area of 3,407 acres being laid out with the following mileages:—

	Miles.	Chains.
Compass and chain .. .. .	11	78
Old boundaries .. .. .	3	64
Exploratory .. .. .	6	00

A Class 3 survey was effected on State Forests 527, 528, 529, Deongwar, commencing on 10th August and being finalised by the 12th February last.

Mileage was as follows:—

	Miles.	Chains.
Compass and chain .. .. .	10	13
Strip survey .. .. .	86	44
Old boundaries .. .. .	30	37
Road .. .. .	1	16
Exploratory .. .. .	16	00

Other miscellaneous surveys carried out are listed hereunder:—

Reserve.	Compt. No.	Log. Area.	Miles. Chains.	Remarks.
299 Avoca .. .. .	10	Nanango .. .. .	1 18	Subdivision and compartment boundary Scrub break, &c.
299 Avoca .. .. .	7, 8	Nanango .. .. .	2 20	
283 Colinton .. .. .	12	Rocky .. .. .	3 9	Subdivision, old boundaries
283 Colinton .. .. .	13	Benarkin .. .. .	0 66	Subdivision, scrub breaks
283 Colinton .. .. .	14	Benarkin .. .. .	0 14	Scrub breaks
289 Cooyar .. .. .	3, 11, 12, 13	Tarong Road .. .. .	5 35	Old boundaries
289 Cooyar .. .. .	8, 9, 10, 11	Rocky .. .. .		
289 Cooyar .. .. .	3, 13	Tarong Road .. .. .	0 37	Subdivision
289 Cooyar .. .. .	10	Rocky .. .. .	0 43	Subdivision
289 Cooyar .. .. .	5 to 8, 11	Cooyar .. .. .	2 37	Breaks
289 Cooyar .. .. .	8, 9	Tarong Road .. .. .	0 22	Park

#### Dalby Working Plan Area—

On 27th April, a small camp was organised in order to carry out compartment surveys on the eastern section of the Chinchilla State Forest (R. 16, Parish of Macdonald). Up to the end of the report period, sixteen compartments had been laid out, the total area enclosed being 16,450 acres.

Mileage was as follows:—

	Miles.	Chains.
Compass and chain .. .. .	63	36
Compass and chain creek traverse .. .. .	19	57

**Warwick Working Plan Area—**

On 1st June, firebreak survey of an area of 4,786 acres on State Forest 444, Palgrave, was commenced and was completed by the 26th of that month. Stands of spotted gum on Portions 57v, 58v, and 60v, Palgrave, were then investigated, and this work is still proceeding. Summary of mileage is as follows:—

	Miles.	Chains.
Compass and chain .. .. .	22	21
Compass and step .. .. .	1	20
Exploratory .. .. .	10	00

**Inglewood Working Plan Area—**

Compartment survey of State Forest 134, Parish of Bringalilly, was completed by resident staff, a total of 20,900 acres being subdivided into nineteen compartments with a total mileage (compass and chain) of 21½ miles.

**ACKNOWLEDGMENT.**

The Director of Forests desires to express his appreciation of the loyal and efficient service of members of the staff during what was a very arduous year for all sections.

V. GRENNING,  
Director of Forests.

20th September, 1937.

## Appendices.

### APPENDIX A.

#### Return of Timber, &c., Removed from Crown Lands for the Year ended 30th June, 1937.

Species.	Quantity.
<b>MILLING TIMBERS—</b>	
Hoop and Bunya Pine Ply .. .. .	6,581,878 superficial feet
Hoop and Bunya Pine Logs .. .. .	68,104,655 superficial feet
Hoop and Bunya Pine Tops .. .. .	30,439,599 superficial feet
Kauri Pine .. .. .	9,290,786 superficial feet
Cabinet Woods .. .. .	14,328,338 superficial feet
Scrubwoods .. .. .	2,247,749 superficial feet
Hardwoods .. .. .	25,943,284 superficial feet
Cypress Pine .. .. .	4,929,649 superficial feet
	161,865,938 superficial feet
<b>OTHER CLASSES—</b>	
Sleepers .. .. .	162,549 pieces
Sleeper Blocks .. .. .	35,360 pieces
Headstocks, Transoms, and Crossings .. .. .	197,089 superficial feet
Girders, Corbels, Piles, and Sills .. .. .	164,958 lineal feet
Poles .. .. .	172,866 lineal feet
House Blocks .. .. .	171,481 lineal feet
Fencing Material .. .. .	143,708 pieces
	65,236 lineal feet
Hewn and Bridge Timbers .. .. .	96,017 superficial feet
	2,034 lineal feet
Mining Timbers .. .. .	228,373 pieces
	124,389 lineal feet
Fuel .. .. .	83,431 tons
Sandalwood .. .. .	33½ tons
Rosewood .. .. .	230 tons
Lawyer Cane .. .. .	24 tons 16 cwt.
Mangrove Bark .. .. .	10 tons
Sand .. .. .	566 tons
Gravel .. .. .	12,005 cubic yards
Stone .. .. .	5,624 cubic yards
Charcoal .. .. .	6,909 bags
Plants .. .. .	270 pieces
	1,078 superficial feet
Miscellaneous .. .. .	1,212 lineal feet
	621 pieces

### APPENDIX B.

#### Annual Cut—Pine—Year ended 30th June, 1937.

Working Plan Area.	Ply.	Logs.	Tops.	Total Cut.
	Super. Ft.	Super. Ft.	Super. Ft.	Super Ft.
Brisbane .. .. .	296,456	7,684,027	3,508,349	11,488,832
Brisbane Valley .. .. .	2,107,722	22,632,499	14,032,470	38,772,691
Bundaberg .. .. .	33,653	881,374	343,407	1,258,434
Gympie .. .. .	245,114	3,486,923	818,573	4,550,610
Kilkivan .. .. .	1,701,149	15,696,564	5,185,697	22,583,410
Many Peaks .. .. .	694,440	2,946,331	1,769,142	5,409,913
Maryborough .. .. .	316,544	3,082,980	1,034,469	4,433,993
Mary Valley .. .. .	1,083,084	7,788,751	2,472,463	11,344,298
Warwick .. .. .	103,716	3,456,708	1,121,377	4,681,801
Bowen .. .. .	Nil	32,582	14,300	46,882
Mackay .. .. .	Nil	9,931	6,156	16,087
Townsville .. .. .	Nil	405,985	133,196	539,181
<b>Totals .. .. .</b>	<b>6,581,878</b>	<b>68,104,655</b>	<b>30,439,599</b>	<b>105,126,132</b>



## APPENDIX C,

## Revenue Collected under the State Forests and Timber and Quarry Regulations for the Year ended 30th June, 1937.

Districts.	Licenses.			Sales.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.
Southern Queensland*	784	12	3	466,232	14	10	467,017	7	1
Atherton	182	2	6	135,367	12	7	135,549	15	1
Bowen	18	17	0	662	15	0	681	12	0
Charters Towers	17	6	0	828	13	5	845	19	5
Clermont	6	7	6	696	19	9	703	7	3
Dalby	38	5	0	3,362	11	5	3,400	16	5
Goondiwindi	8	0	0	628	14	10	636	14	10
Hughenden	7	11	6	187	7	6	194	19	0
Ingham	10	15	0	521	12	6	532	7	6
Inglewood	6	0	0	291	13	10	297	13	10
Mackay	28	2	6	857	10	8	885	13	2
Rockhampton	50	19	6	1,148	7	11	1,199	7	5
Roma	10	18	0	486	5	5	497	3	5
Townsville	43	17	6	1,939	9	2	1,983	6	8
Other Districts†	135	15	6	5,186	8	5	5,322	3	11
Totals	£1,349	9	9	£618,398	17	3	£619,748	7	0

\*Southern Queensland includes Brisbane, Bundaberg, Gladstone, Gympie, Ipswich, Maryborough, Toowoomba, and Warwick Districts.

†Other districts include Aramac, Barcaldine, Blackall, Boulia, Burketown, Charleville, Cloncurry, Coen, Cunnamulla, Emerald, Gaydah, Georgetown, Jundah, Kynuna, Longreach, Mackinlay, Mitchell, Monto, Springsure, St. George, Taroom, Thursday Island, and Winton Districts.

## APPENDIX D.

## Proceeds of Sales of Timber, &amp;c., for the period from 1st July, 1929, to 30th June, 1937.

Districts.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Southern Queensland *	225,836 17 3	115,936 2 6	103,488 2 7	181,466 10 5	223,698 8 3	439,550 19 3	458,475 6 9	467,017 7 1
Atherton	75,007 6 1	35,644 1 8	29,851 11 1	36,083 11 0	49,928 14 1	117,113 17 7	145,152 8 0	135,549 15 1
Bowen	500 13 3	367 8 5	431 8 9	577 2 6	505 14 5	739 7 6	738 5 11	681 12 0
Charters Towers	1,482 5 4	892 5 10	784 7 6	975 16 0	192 8 9	510 15 6	493 4 6	845 19 5
Clermont	342 12 10	176 7 10	20 19 9	597 5 5	647 10 2	459 0 5	176 3 3	703 7 3
Dalby	1,830 6 1	1,503 6 8	1,408 3 6	786 16 9	1,093 17 7	2,410 11 2	3,441 11 0	3,400 16 5
Goondiwindi	479 13 2	168 7 9	145 15 8	96 15 11	510 6 10	502 12 9	767 3 10	636 14 10
Hughenden	362 15 3	184 4 7	128 2 11	97 6 8	101 14 8	244 9 7	129 0 5	194 19 0
Ingham	381 6 8	287 4 6	182 7 11	357 4 3	217 5 3	308 7 0	485 16 2	532 7 6
Inglewood	826 3 4	319 19 5	79 11 4	45 2 0	174 15 10	138 0 3	274 6 5	297 13 10
Mackay	827 18 2	1,458 19 2	814 15 4	841 0 1	704 11 11	1,044 2 11	1,045 2 5	885 13 2
Rockhampton	4,528 1 10	167 12 9	216 17 7	164 0 9	109 0 5	315 15 4	696 2 6	1,199 7 5
Roma	519 3 4	188 14 6	295 2 9	96 0 1	90 18 8	438 5 8	282 19 0	497 3 5
Townsville	537 18 6	598 14 5	875 11 9	2,774 15 1	2,884 15 1	3,395 11 3	2,282 2 6	1,983 6 8
Other Districts*	1,811 6 5	1,882 4 10	906 4 7	1,447 11 11	1,170 14 2	2,060 9 6	2,045 6 9	5,322 3 11
Totals	315,274 7 6	159,775 15 10	139,629 3 0	226,406 18 10	282,030 16 1	569,277 5 8	616,477 0 2	619,748 7 0
			Less Loan Fund Receipts		2,976 12 8			
					£279,054 3 5			

\*See appendix for districts included in Southern Queensland and other districts.

## APPENDIX E.

## Prices of Log Timber.

The following Schedule illustrates the fluctuations in the Forest Service Key market prices of logs during the year 1st July, 1936, to 30th June, 1937 :—

Species.	Girth Class.	Delivery.	Price.
Hoop Pine Ply .. ..	7 ft. and over ..	F.o.r. Brisbane .. ..	July 28s. 6d.
Hoop Pine .. ..	7 ft. and over ..	F.o.r. Brisbane .. ..	July 21s. 6d.
Hoop Pine Tops .. ..	7 ft. and over ..	F.o.r. Brisbane .. ..	July 11s.
Maple Silkwood .. ..	8 ft. to 8 ft. 11 in.	F.o.b. Cairns .. ..	July 30s.
Rose Silkwood .. ..	8 ft. to 8 ft. 11 in.	F.o.r. Townsville .. ..	July 28s. 6d.
Kauri Pine .. ..	8 ft. and over ..	F.o.b. Cairns .. ..	July 19s. 6d.
Grey Teak (White Beech) ..	8 ft. and over ..	F.o.b. Cairns .. ..	July 23s.
Grey Teak (White Beech) ..	8 ft. and over ..	F.o.r. Brisbane .. ..	July 27s. 6d.
Red Cedar .. ..	8 ft. and over ..	F.o.r. Brisbane .. ..	July 40s.
Red Cedar .. ..	8 ft. and over ..	F.o.r. Mackay .. ..	July 34s. 3d.
Red Cedar .. ..	8 ft. and over ..	F.o.b. Cairns .. ..	July 42s. 6d.
Queensland Satinay .. ..	6 ft. and over ..	F.o.b. Brisbane .. ..	July 23s.
Brown Bollywood (Bolly Gum) .. ..	6 ft. and over ..	F.o.r. Brisbane .. ..	July 15s. 6d.
Rose Butternut (Bolly Gum, N.Q.) .. ..	7 ft. and over ..	F.o.b. Cairns .. ..	July 14s. 6d.
Rose Mahogany .. ..	6 ft. and over ..	F.o.r. Brisbane .. ..	July 16s. 6d.
Yellow Ash .. ..	6 ft. and over ..	F.o.r. Brisbane .. ..	July 18s.
Crow's Ash .. ..	6 ft. and over ..	F.o.r. Brisbane .. ..	July 18s.
Silver Ash .. ..	6 ft. and over ..	F.o.r. Brisbane .. ..	July 18s.
Blush Cudgerie (Pink Poplar) ..	5 ft. and over ..	F.o.r. Brisbane .. ..	July 10s. 6d.
Red Tulip Oak, N.Q. ..	7 ft. and over ..	F.o.b. Cairns .. ..	July 16s. 6d.
Brown Tulip Oak, S.Q. ..	6 ft. and over ..	F.o.r. Brisbane .. ..	July 12s. 6d.
Yellow Satinash (Water Gum) ..	7 ft. and over ..	F.o.b. Cairns .. ..	July 17s. 6d.
Silky Oak .. ..	8 ft. and over ..	F.o.b. Cairns .. ..	July 21s.
Putt's Pine .. ..	8 ft. and over ..	F.o.b. Cairns .. ..	July 21s.
Walnut Bean .. ..	8 ft. to 8 ft. 11 in.	F.o.b. Cairns .. ..	July 24s. 6d.
Hardwood .. ..	6 ft. and over ..	F.o.r.—Brisbane Warwick .. Gladstone F.o.r.—Maryborough Bundaberg Toowoomba F.o.r.—Rockhampton  F.o.r.—Mackay ..	First class July 11s. 6d. Second class, July 10s. 6d. Third class July 8s. 6d. First class, July 11s. Second class, July 9s. 6d. Third class, July 8s. First class, July 12s. Second class July 11s. Third class July 9s. First class, July 15s., October 13s. 6d. Second class, July, 13s. 6d., October 12s.
Cypress Pine .. ..	All sizes .. ..	F.o.r. Dalby .. .. F.o.r. Roma .. .. F.o.r. Mitchell .. .. F.o.r. Miles .. .. F.o.r. Chinchilla .. .. F.o.r. Inglewood .. .. F.o.r. Goondiwindi .. .. F.o.r. Dirranbandi .. .. F.o.r. Cecil Plains .. .. F.o.r. Millmerran .. .. Delivered St. George and other towns not on the railway line	July 10s., October 10s. 6d. July 10s. 6d. July 10s. 6d. July 10s. July 10s. July 10s. July 10s. July 10s. July 10s., October 9s. 6d. July 10s., October 9s. 6d. July 8s. 6d.

## APPENDIX F.

## Expenditure, Year ended 30th June, 1937.

Item.	FROM 1ST JULY 1936, TO 30TH JUNE, 1937.			Total.	Per Cent.
	Revenue.	Loan.	Trust.		
	£	£	£	£	
Overhead Expenses—					
Salaries .. ..	30,084	6,293	..	36,377	..
Extra Living Allowances .. ..	609	..	..	609	..
Travelling and Incidentals .. ..	4,284	..	..	4,284	..
National Parks .. ..	2,226	..	..	2,226	..
	37,203	6,293	..	43,496	8.8
Reforestation .. ..	..	81,463	..	81,463	..
Reforestation, Relief Funds .. ..	..	..	24,874	24,874	..
	..	81,463	24,874	106,337	21.4
Timber Trading Operations—					
Harvesting and Marketing (Log Timber) .. ..	..	..	299,927	299,927	..
Lumbering (Hewn, Split, and Pole Timber) .. ..	..	..	45,980	45,980	..
	..	..	345,907	345,907	69.8
Totals .. ..	37,203	87,756	370,781	495,740	100.0

## APPENDIX G.

## Financial Statement, 1st January, 1904, to 30th June, 1937.

Year.	Gross Revenue (less amounts refunded from Revenue.)	Payments in connection with Market- ing of Forest Service Timber (including Roads).	Net Revenue.	OTHER EXPENDITURE FROM REVENUE VOTES.			Surplus Paid to Revenue.
				Overhead.	Capital Improve- ments, &c.	Total.	
	£	£	£	£	£	£	£
1904-11 .. .. .	216,478	..	216,478	14,487	..	14,487	201,991
1912-18 .. .. .	469,024	..	469,024	42,298	30,834	73,132	395,892
1919 (to 30th June) .. .. .	38,574	..	38,574	5,619	6,947	12,566	26,008
1919-20 .. .. .	121,152	13,876	107,276	14,483	13,209	27,692	79,584
1920-21 .. .. .	163,461	23,578	139,883	21,434	11,821	33,255	106,628
1921 (1st July to 31st December) .. .. .	61,517	11,825	49,692	11,783	5,278	17,061	32,631
1922 .. .. .	267,816	91,945	175,871	25,911	7,518	33,429	142,442
1923 .. .. .	367,686	185,253	182,433	28,755	5,630	34,385	148,048
1924 .. .. .	492,586	224,555	268,031	28,823	846	29,669	238,362
1925 (to 30th June) .. .. .	234,051	102,853	131,198	14,075	..	14,075	117,123
1925-26 (1st July, 1925, to 30th June, 1926) .. .. .	453,037	227,667	225,370	30,230	..	30,230	195,140
1926-27 .. .. .	543,825	292,944	250,881	31,884	..	31,884	218,997
1927-28 .. .. .	455,015	213,451	241,564	33,087	..	33,087	208,477
1928-29 .. .. .	414,516	174,407	240,109	38,720	..	38,720	201,389
1929-30 .. .. .	336,762	141,288	195,474	38,049	..	38,049	157,425
1930-31 .. .. .	174,106	80,323	93,783	36,080	..	36,080	57,703
1931-32 .. .. .	162,246	84,934	77,312	32,727	..	32,727	44,585
1932-33 .. .. .	235,440	89,345	146,095	33,112	..	33,112	112,983
1933-34 .. .. .	293,991	130,775	163,216	32,155	..	32,155	131,061
1934-35 .. .. .	608,935	301,159	307,776	35,823	29	35,852	271,924
1935-36 .. .. .	660,455	357,678	302,777	32,210	40	32,250	270,527
1936-37 .. .. .	669,457	345,907	323,550	36,184	1,019	37,203	286,347
Totals .. .. .	£ 7,440,130	3,093,763	4,346,367	617,929	83,171	701,100	3,645,267

## APPENDIX H.

## Loan Expenditure—1st July, 1919, to 30th June, 1937.

Year.	Amount Expended.	Revenue Surplus.	Per Cent. of Surplus reinvested.
1919-20 .. .. .	17,197	79,584	22
1920-21 .. .. .	46,949	106,628	44
July-December, 1921 .. .. .	18,794	32,631	57
1922 .. .. .	33,246	142,442	23
1923 .. .. .	44,134	148,048	30
1924 .. .. .	32,178	238,362	13
January-June, 1925 .. .. .	16,795	117,123	14
1925-26 .. .. .	42,006	195,140	21
1926-27 .. .. .	37,378	218,997	17
1927-28 .. .. .	30,995	208,477	15
1928-29 .. .. .	32,175	201,389	16
1929-30 .. .. .	29,833	157,425	19
1930-31 .. .. .	34,397	57,703	42
1931-32 .. .. .	20,000	44,585	44
Buildings transferred from Public Works by Treasury Department .. .. .	2,629	..	..
1932-33 .. .. .	44,101	112,983	39
1933-34 .. .. .	70,000	138,596	50.5
1934-35 .. .. .	88,562	271,924	33
1935-36 .. .. .	107,000	270,527	39.6
1936-37 .. .. .	87,756	286,347	30.6
Total .. .. .	£826,125	£3,028,911	27.3

NOTE.—The sum of £28,761 has been paid to the Treasury during the years 1927-37 in reduction of loan indebtedness, making the debit balance of Forestry Loan Vote at the Treasury on 30-6-37 to be £797,364.

## APPENDIX I.

Analysis of Expenditure from Loan Vote from 1st July, 1919, to 30th June, 1937.

	£	£
<b>REFORESTATION AND INCIDENTAL WORKS—</b>		
Plantations .. .. .	171,338	
Regeneration areas .. .. .	62,913	
Nursery working and maintenance .. .. .	69,167	
Forest experiment .. .. .	19,769	
Construction of nurseries, buildings, &c. .. .	86,033	
Maintenance of capital improvements .. .. .	18,204	
Forest protection .. .. .	104,247	
Supervision, miscellaneous stores, fodder, &c. .. .	85,733	
Wet time, holidays, recreation leave, sick leave .. .	54,383	
Workers' compensation and unemployment insurance .. .	15,716	
Surveys .. .. .	40,372	
Purchases of land and improvements .. .. .	12,378	
Salaries .. .. .	18,452	
Miscellaneous .. .. .	1,077	
	<hr/>	759,782
<b>OTHER WORKS—</b>		
Roads, construction .. .. .	13,319	
Roads, maintenance .. .. .	2,715	
Logging .. .. .	6,094	
Fire protection (established stands) .. .. .	3,431	
Purchase of timber lands .. .. .	917	
Supervision of timber sales .. .. .	32,960	
Surveys (estimates and reconnaissances) .. .. .	29,508	
Miscellaneous .. .. .	2,991	
Buildings taken over from Public Works .. .. .	2,629	
Relief labour on banana blocks .. .. .	203	
	<hr/>	94,767
		<hr/>
		854,549
Less—Amount recouped from Commonwealth Aid Funds .. .		28,424
		<hr/>
Total .. .. .		826,125
<b>Less REPAYMENTS—</b>		
<b>Reforestation and incidental works—</b>		
Sale of buildings .. .. .	75	
Sale of land and improvements .. .. .	472	
Sale of material .. .. .	1,111	
Refund of survey fees .. .. .	870	
Rent .. .. .	7,847	
Grazing dues .. .. .	15,860	
Sale of plants .. .. .	253	
Sale of maize .. .. .	38	
Sale of timber .. .. .	273	
Subsidy from Commonwealth account 1934-35 works .. .	1,514	
<b>Other Works—</b>		
Disposal of road material .. .. .	85	
Sale of fuel .. .. .	160	
Banana blocks .. .. .	203	
	<hr/>	28,761
		<hr/>
Net Total .. .. .		<u>£797,364</u>

APPENDIX J.

Summary of Loan Reforestation Expenditure, Year ended 30th June, 1937.

Reserve.	REFORESTATION.						Total of Columns 2-9.	OVERHEAD EXPENSES.				Total Overhead.	Reserve Total.		
	Plantations.		Nursery Working and Experiment.		Surveys.			Protection, Fire Fighting, Pear Clearing, &c.		Maintenance of Capital Improvements.				New Construction of Buildings, &c.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.			£ s. d.	£ s. d.
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
R. 69 and 1376	..	21 18 0	..	..	..	337 7 8	66 14 4	..	426 0 0	104 1 10	57 7 7	3 14 9	165 4 2	591 4 2	
R. 131	..	62 17 10	..	..	..	116 6 7	..	..	179 4 5	35 15 10	19 2 11	1 15 4	56 14 1	235 18 6	
R. 359	..	..	..	..	..	..	..	99 14 7	99 14 7	2 0 0	..	..	2 0 0	101 14 7	
R. 446	..	32 17 11	..	..	4 15 10	80 13 8	3 4 9	..	130 12 2	72 15 5	25 19 6	1 7 0	100 1 11	230 14 1	
R. 494	..	40 8 7	..	..	..	16 14 9	0 5 3	..	57 8 7	24 4 4	7 12 2	0 11 6	32 8 0	89 16 7	
R. 536	..	..	..	..	..	..	..	4 1 10	4 1 10	..	..	..	..	4 1 10	
R. 667	..	..	..	..	..	308 1 4	..	9 4 9	312 6 1	73 4 5	58 2 10	2 11 0	133 18 3	446 4 4	
Experiments	..	..	..	33 2 1	..	..	..	..	33 2 1	..	..	..	..	33 2 1	
	..	158 2 4	..	38 2 1	4 15 10	868 4 0	70 4 4	113 1 2	1,242 9 9	312 1 10	168 5 0	9 19 7	490 6 5	1,732 16 2	
						BRISBANE WORKING PLAN AREA.									
R. 120	..	807 3 4	..	..	..	136 0 0	9 12 7	16 2 11	968 18 10	39 13 4	61 16 11	5 0 6	106 10 9	1,075 9 7	
R. 131	..	30 19 6	..	..	..	93 2 6	62 5 0	..	196 7 0	2 10 2	11 13 0	1 6 8	15 9 10	276 4 6	
R. 257	..	1,030 19 1	..	..	..	204 11 7	63 4 3	7 6 0	1,745 4 2	146 7 2	213 12 2	11 1 0	371 9 13	2,316 4 6	
R. 283	..	2,439 5 10	..	..	..	563 12 4	246 9 1	149 15 3	4,351 10 10	1,290 5 2	604 17 8	31 6 1	1,896 8 13	6,347 10 9	
R. 289	..	..	..	..	110 7 8	421 2 0	87 9 5	59 10 8	3,528 8 3	417 6 4	423 6 5	22 9 11	863 7 8	4,391 11 4	
R. 299	..	..	..	..	25 15 11	294 10 1	57 0 1	343 14 10	2,674 3 8	333 15 5	267 1 7	16 10 8	617 1 4	3,291 11 4	
R. 379	..	1,472 18 5	..	..	17 0 5	..	..	..	2,674 3 8	1 8 0	..	..	1 8 0	3,291 11 4	
R. 395	..	..	..	..	..	0 5 0	..	..	..	..	..	..	..	..	
R. 509	..	..	..	..	..	198 19 3	6 5 7	..	683 19 4	192 2 4	69 17 11	5 4 9	267 5 0	951 4 4	
R. 527-529	..	..	..	..	289 16 8	260 15 6	4 0 0	299 2 10	1,001 3 2	138 2 7	103 16 3	7 1 6	249 0 4	1,250 3 6	
Fire fighting and Patrol Experiments	..	147 8 2	..	..	..	1,313 16 1	..	..	1,313 16 1	..	..	..	..	1,313 16 1	
Purchase Grader	..	..	..	429 19 3	..	..	..	..	429 19 3	567 6 6	..	..	567 6 6	429 19 3	
	..	8,192 4 10	..	2,772 0 2	443 0 8	3,486 14 4	536 6 0	875 12 8	16,892 15 7	3,098 17 0	1,756 1 11	100 1 1	4,955 0 0	21,847 15 7	
						BUNDABERG WORKING PLAN AREA.									
R. 80	..	..	..	..	..	..	..	17 10 5	17 10 5	..	..	..	..	17 10 5	
R. 169	..	..	..	..	190 15 10	..	..	..	190 15 10	..	..	..	..	190 15 10	
	..	..	..	..	190 15 10	..	..	..	208 6 3	..	..	..	..	208 6 3	
						CLEMONT WORKING PLAN AREA.									
R. 117	..	..	..	..	..	..	..	..	..	1 12 8	..	2 17 10	4 10 6	4 10 6	



APPENDIX J—continued.

Reserve.	REFORESTATION.					Surveys.	Protection, Fire Fighting, Clearing, &c.	Maintenance of Capital Improve-ments.	New Con-struction of Nurseries, Buildings, &c.	Total of Columns 2-9.	OVERHEAD EXPENSES.				Total Overhead.	Reserve Total.
	Plantations. Regeneration.	Nursery Working and Maintenance.	Forest Experiment.	OVERHEAD EXPENSES.												
				£ s. d.	£ s. d.						£ s. d.	£ s. d.	Stores, Forster, Supervision, &c.	Holidays, Wet Time, &c.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
..	£ 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.		
R. 24	214 1 11	..	..	..	..	422 0 4	3 18 4	104 3 6	834 4 1	297 13 6	108 12 9	7 1 7	413 7 10	1,247 11 11		
R. 82	..	371 5 1	..	..	13 9 3	10 13 7	..	88 14 4	503 2 3	19 17 11	25 14 0	1 14 11	46 16 10	1,549 19 1		
R. 249	559 11 7	200 16 4	..	..	2 4 6	111 13 0	3 6 9	..	877 12 2	82 12 10	88 1 0	6 7 11	177 1 9	1,064 13 11		
R. 248	..	..	..	..	Cr. 4 15 9	..	..	..	Cr. 4 15 9	..	..	..	..	Cr. 4 15 9		
R. 248	422 13 5	493 19 1	..	..	1 12 10	69 18 0	8 10 2	131 6 9	1,128 0 3	118 19 0	87 12 2	5 14 7	212 5 9	1,340 6 0		
R. 325	181 14 8	26 17 7	..	..	10 16 4	10 16 4	10 8 11	..	226 17 6	15 11 3	21 4 11	1 12 0	38 8 2	268 5 8		
Fire fighting and Patrol Experiments	..	..	..	3 18 8	..	62 0 3	..	..	62 0 3	..	..	..	..	62 0 3		
Construction of Office	1,163 19 8	1,092 18 1	3 18 8	12 10 10	696 1 6	26 4 2	431 18 4	3,641 13 2	534 4 6	331 4 10	22 11 0	888 0 4	4,529 13 6			
R. 12	9 14 0	..	..	..	..	1 10 8	..	..	11 4 8	..	3 4 8	0 2 0	3 6 8	14 11 4		
R. 28	1,021 10 0	351 13 4	..	..	260 15 3	5 16 3	181 2 9	266 11 6	266 11 6	132 7 11	2 10 6	2 1 11	137 0 4	403 11 10		
R. 95, &c.	..	..	..	..	..	186 15 5	..	1,974 11 3	20 2 3	402 7 8	276 0 0	13 6 7	691 14 3	2,606 5 8		
Fire fighting and Patrol	1,021 10 0	351 13 4	..	..	260 15 3	212 13 11	181 2 9	263 9 9	2,261 5 0	534 15 7	278 10 6	15 8 6	828 14 7	3,089 19 7		
R. 8	..	..	..	..	264 8 1	..	..	4 6 0	268 14 1	..	..	..	..	268 14 1		
R. 12	..	..	..	..	55 12 0	..	..	..	55 12 0	..	..	..	..	55 12 0		
R. 62	..	..	..	..	4 8 9	..	..	..	4 8 9	..	..	..	..	4 8 9		
R. 287	..	..	..	..	35 11 3	..	..	..	35 11 3	..	..	..	..	35 11 3		
R. 390	..	..	..	..	68 2 0	..	..	..	68 2 0	..	..	..	..	68 2 0		
R. 417	..	..	..	..	105 12 0	..	..	..	105 12 0	..	..	..	..	105 12 0		
R. 435	..	..	..	..	20 15 11	..	..	4 6 0	25 1 11	28 1 8	..	0 1 6	28 3 2	53 9 1		
..	..	..	..	..	554 10 0	..	..	8 12 0	563 2 0	28 1 8	..	0 1 6	28 3 2	591 5 2		
R. 195	5,114 19 8	730 14 6	..	..	66 5 3	642 1 5	183 16 4	468 9 4	7,306 6 6	1,302 4 10	815 19 9	46 3 7	2,164 8 2	9,370 14 8		
R. 256	1,175 14 10	499 1 7	..	..	26 2 10	357 13 0	202 9 4	139 8 11	4,652 3 1	31 3 1	24 1 1	1 13 1	1,577 7 9	2,883 12 2		
R. 435	3,727 7 5	..	..	..	..	471 5 1	..	..	5,71 5 1	870 18 9	689 18 11	84 0 0	1,594 17 8	6,547 0 9		
Fire fighting and Patrol Experiments	..	..	..	354 6 2	..	..	..	..	354 6 2	..	..	..	..	471 5 1		
..	9,018 1 11	1,229 10 1	354 6 2	92 8 1	1,501 0 11	398 10 5	616 1 8	13,210 5 3	2,204 6 8	1,530 10 3	81 16 8	3,816 13 7	17,026 18 10			

KILKIVAN WORKING PLAN AREA.

MACKAY WORKING PLAN AREA.

MANY PEAKS WORKING PLAN AREA.

MARYBOROUGH WORKING PLAN AREA.

MARY VALLEY WORKING PLAN AREA.



APPENDIX J.—continued.

Reserve.	REFORESTATION.				Surveys.	Protection, Fire Fighting, Fear Cleaning, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Total of Columns 2-9.	OVERHEAD EXPENSES.			Total Overhead.	Reserve Total.			
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.						Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Unemp. Insurance.			£	s.	d.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.			
	NORTH COAST WORKING PLAN AREA.																
R. 60	..	..	..	..	..	..	14 12 3	..	14 12 3	3 3 0	..	..	3 3 0	3 3 0			
R. 318	..	..	..	..	..	..	..	..	..	..	..	..	..	14 12 3			
R. 561	..	..	2 10 0	..	..	..	..	..	..	23 18 0	..	..	23 18 0	14 12 3			
R. 893	..	..	..	..	150 4 0	..	..	..	150 4 0	3 0 0	..	..	3 0 0	26 8 0			
Portion 68v, Parish of Keilworth	..	..	..	..	..	..	275 0 0	..	275 0 0	..	..	0 6 2	..	153 10 2			
	..	..	2 10 0	..	150 4 0	..	14 12 3	275 0 0	442 6 3	30 1 0	..	0 6 2	..	275 0 0			
	..	..	..	..	..	..	..	..	..	..	..	..	..	472 13 5			
	NORTH QUEENSLAND WORKING PLAN AREA.																
R. 185	..	..	111 3 9	..	1 1 1	171 2 5	14 8 4	..	789 0 0	4 1 2	80 7 5	4 16 2	4 1 2	4 1 2			
R. 191	..	..	..	..	..	7 11 6	..	..	86 16 3	197 15 8	14 11 0	0 19 7	282 10 3	1,071 19 3			
R. 194	..	..	113 10 5	..	4 16 9	22 7 11	9 2 3	2 7 11	1,089 1 10	27 3 2	95 11 5	7 2 0	42 7 3	829 3 6			
R. 310	..	..	..	..	73 7 10	..	..	..	200 1 7	..	..	..	302 15 0	1,391 16 10			
R. 343	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Portions 218 and 219, Parish of Herberton	..	..	..	..	..	..	..	21 15 0	21 15 0	..	..	..	..	..			
Experiments	..	..	..	55 5 11	..	..	..	..	55 5 11	..	..	..	..	51 15 0			
	1,507 5 9	..	224 14 2	55 5 11	79 5 8	201 1 10	23 10 7	24 2 11	2,115 6 10	429 1 7	190 9 10	12 11 3	632 2 8	2,747 9 6			
Experiments	..	..	..	19 16 0	..	..	..	..	19 16 0	..	..	..	..	19 16 0			
	ROCKHAMPTON WORKING PLAN AREA.																
R. 263	..	..	128 4 0	..	1 18 8	187 1 8	..	1 17 11	708 11 6	64 8 10	85 12 2	5 13 10	155 14 10	859 6 4			
R. 444	..	..	..	..	35 7 7	483 0 3	..	..	518 7 10	133 10 10	62 8 11	3 15 0	199 14 9	718 2 7			
Fire fighting and Patrol	..	..	..	6 4 10	..	19 0 0	..	..	19 0 0	..	..	..	..	19 0 0			
Experiments	..	..	..	..	..	..	..	..	6 4 10	..	..	..	..	6 4 10			
	384 9 3	..	128 4 0	6 4 10	37 6 3	689 1 11	..	1 17 11	1,247 4 2	197 19 8	148 1 1	9 8 10	355 9 7	1,602 13 9			
Experiments—General	..	..	..	462 14 3	..	..	..	..	462 14 3	..	..	..	..	462 14 3			
GRAND TOTALS	22,875 16 10	721 3 9	6,663 16 0	1,540 3 7	1,855 11 10	8,259 1 5	1,695 5 5	5,945 13 5	48,956 12 3	9,366 4 9	4,943 7 6	370 10 7	14,680 2 10	63,636 15 1			
	Administration, Head Office																
	Salaries																
	Stores Suspense																
	Forestry Booklet, 1937 (Part)																
	Workers' Compensation																
	State's share of Expenditure under Commonwealth Aid to Forestry Scheme (See Appendix K)																
	£81,463 4 7																

Note.—Further amounts of £1,688 1s. on fireline maintenance and £2,518 14s. 6d. on fire fighting and patrol in natural forests were expended from Harvesting and Marketing Funds, of which £1,560 10s. 1d. was recouped by the Commonwealth.





APPENDIX L.  
Summary of Unemployment Relief Expenditure, Year ended 30th June, 1937.

Reserve.	REFORESTATION.						Surveys.	Protection, Fire Fighting, Pear Clearing, &c.	Maintenance of Capital Improvements.	New Con- struction of Nurseries Buildings, &c.	Total of Columns 2-9	OVERHEAD EXPENSES.				Total Overhead.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.	Stores, Fodder, Supervision, &c.							Holidays, Wet Time, &c.	Unemp. Insurance.				
					£ s. d.	£ s. d.								£ s. d.	£ s. d.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
R. 120	20 12 11	£ 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.			
R. 257	56 6 0	..	7 8 5	..	..	..	..	..	20 42 11	..	1 10 3	0 3 0	0 3 0	20 15 11			
R. 258	170 11 1	..	13 6 2	..	..	..	..	..	63 14 5	..	12 7 0	0 8 5	4 9 5	68 3 10			
R. 259	83 19 11	..	26 19 11	..	..	..	..	..	203 15 0	..	6 13 2	1 10 0	34 6 5	238 1 5			
R. 269	36 5 2	..	7 14 4	..	..	..	..	..	118 4 9	..	1 7 8	0 16 2	8 17 0	127 1 9			
R. 509	13 13 4	..	6 12 10	..	..	..	..	..	67 13 10	..	5 12 9	0 12 0	12 16 10	80 10 8			
R. 327-529	..	..	..	..	..	..	..	..	20 6 2	..	1 8 10	0 3 0	6 10 6	26 16 8			
Experiments	..	..	..	8 8 6	..	..	..	..	4 10 3	..	..	0 0 8	0 0 8	4 10 11			
..	381 8 5	..	62 1 8	..	..	..	..	..	8 8 6	..	..	..	67 3 10	574 9 8			
BRISBANE VALLEY WORKING PLAN AREA.																	
R. 80	..	24 13 5	..	..	..	..	..	..	0 16 2	..	..	..	..	37 18 0			
R. 109	..	16 4 0	..	..	..	..	..	..	63 14 2	..	..	..	..	68 7 3			
..	..	40 17 5	..	..	..	..	..	..	90 13 8	..	..	..	..	106 3 3			
BUNDABERG WORKING PLAN AREA.																	
R. 117	..	573 16 2	..	5 18 11	1 9 4	92 9 4	..	..	667 14 10	..	63 14 4	2 0 0	1 58 9 6	828 4 4			
Experiments	..	..	..	..	..	..	..	..	5 18 11	..	..	..	..	5 18 11			
..	..	573 16 2	..	..	1 9 4	92 9 4	..	..	673 13 9	..	63 14 4	2 0 0	1 58 9 6	832 3 3			
CLERMONT WORKING PLAN AREA.																	
R. 4	..	337 3 3	..	..	..	..	..	..	465 3 3	..	..	..	..	669 8 3			
R. 16	..	56 16 9	..	..	..	..	..	..	2,853 7 3	..	..	..	..	3,862 17 5			
R. 60	..	10 3 5	..	..	..	..	..	..	11 16 3	..	..	..	..	24 4 10			
R. 78	..	104 16 0	..	..	..	..	..	..	1,617 7 3	..	..	..	..	2,133 6 3			
R. 83	..	..	..	..	..	..	..	..	292 17 3	..	..	..	..	379 13 7			
R. 93	..	297 8 3	..	..	..	..	..	..	1,221 6 2	..	..	..	..	1,555 12 3			
R. 126	..	279 0 4	..	..	..	..	..	..	439 5 0	..	..	..	..	568 14 2			
R. 150	..	54 16 8	..	..	..	..	..	..	533 17 10	..	..	..	..	788 6 9			
R. 154	..	97 11 2	..	..	..	..	..	..	2,758 3 3	..	..	..	..	3,885 11 3			
Experiments	..	..	..	55 10 0	..	..	..	..	55 10 0	..	..	..	..	55 10 0			
Fire fighting and Patrol	..	..	..	..	..	..	..	..	238 10 2	..	..	..	..	238 10 2			
..	..	1,237 15 10	..	..	1 19 6	9,211 12 11	..	..	10,587 3 11	..	1,396 3 3	30 18 1	3,544 11 0	14,131 14 11			

DALBY WORKING PLAN AREA.

APPENDIX L—continued.  
SUMMARY OF UNEMPLOYMENT RELIEF, YEAR ENDED 30TH JUNE, 1937—continued.

Reserve.	REFORESTATION.				Surveys.	Protection. Fire Fighting, Pear Clearing, &c.	Maintenance of Capital Improvements.	New Con- struction of Nurseries, Buildings, &c.	Total of Columns 2-9	OVERHEAD EXPENSES.				Total Overhead.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.						Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Unemp. Insurance.	Total Overhead.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
R. 124	45 6 8	152 15 8	1 16 4	..	..	151 8 4	93 5 1	3 12 4	50 15 4	0 11 5	1 0 0	0 7 0	1 18 5 4	52 13 9	
R. 234	7 3 8	133 13 2	0 5 10	..	..	188 18 9	4 11 6	4 17 9	397 9 1	3 6 2	54 11 0	1 15 11	114 18 4	612 7 5	
R. 392	114 5 2	..	71 10 6	..	..	580 10 5	82 6 11	..	533 13 2	83 19 0	80 13 3	0 3 0	4 5 8	21 4 5	
R. 393	..	..	..	..	..	305 10 1	6 17 10	101 15 7	662 17 4	84 19 0	79 17 4	2 19 4	167 15 8	700 3 5	
R. 502	..	..	..	..	..	317 17 3	..	..	414 3 6	81 9 5	54 6 10	1 15 9	137 12 0	830 13 0	
R. 627	..	..	..	..	..	..	..	..	2 19 11	..	..	..	..	551 15 6	
Experiments	..	..	..	..	..	..	..	..	317 17 3	..	..	..	..	2 19 11	
Fire fighting and Patrol	166 15 6	286 8 10	73 12 8	2 19 11	..	1,544 4 10	212 6 11	110 5 8	2,396 14 4	312 16 5	271 4 11	8 19 0	593 0 4	2,989 14 8	
GYMPIE WORKING PLAN AREA.															
R. 48	..	203 3 8	..	..	1 18 3	257 19 3	..	..	463 1 2	32 19 11	46 8 2	1 6 6	80 14 7	543 15 9	
R. 76	..	152 5 7	..	..	..	104 16 3	..	..	237 1 10	16 14 3	31 8 10	1 8 4	49 11 5	306 13 3	
R. 79	..	801 6 4	..	..	..	394 13 8	..	33 18 6	1,229 18 6	89 10 4	155 12 9	3 16 0	248 19 1	1,478 17 7	
R. 81	..	16 1 0	..	..	..	150 0 3	..	..	166 1 3	23 12 3	7 14 9	..	31 7 2	197 8 5	
R. 101	..	238 13 10	..	..	..	73 1 3	..	17 10 6	329 5 7	33 1 10	38 5 4	0 17 3	72 4 5	401 10 0	
R. 117	..	158 1 10	..	..	..	52 4 3	..	45 0 7	255 6 8	24 15 1	30 12 4	0 16 2	56 3 7	311 10 3	
R. 122	..	317 16 6	..	..	..	194 19 9	0 7 5	..	513 3 1	38 1 6	60 2 3	0 18 6	99 2 3	612 5 11	
R. 132	..	..	..	..	2 4 5	189 4 8	..	..	191 9 1	12 11 8	14 8 9	..	27 0 5	218 9 6	
R. 134	..	360 1 10	..	..	3 16 10	156 0 10	28 17 0	16 0 5	564 16 11	66 0 5	71 11 9	1 8 10	139 1 0	703 17 11	
Fire fighting and patrol	..	..	..	..	..	70 13 9	..	..	70 13 9	..	..	..	..	70 13 9	
..	..	2,247 10 7	..	..	7 19 6	1,043 13 11	29 4 5	112 10 0	4,040 18 5	337 7 5	456 4 11	10 11 7	804 3 11	4,845 2 4	
FRASER ISLAND WORKING PLAN AREA.															
R. 3	..	..	..	..	..	51 4 7	8 19 5	..	60 4 0	36 2 3	2 10 5	0 12 8	39 5 4	99 9 4	
Experiments	..	..	..	..	..	..	..	..	3 2 0	..	..	..	..	3 2 0	
..	..	..	..	..	..	..	..	..	63 6 0	36 2 3	2 10 5	0 12 8	39 5 4	102 11 4	
KILKIVAN WORKING PLAN AREA.															
R. 24	..	8 12 1	..	..	..	2 11 0	..	4 9 11	15 13 0	6 17 0	1 13 4	0 3 0	7 0 0	22 13 0	
R. 82	..	..	..	..	..	..	..	4 16 3	14 12 6	0 8 9	1 3 9	0 2 0	1 15 4	16 7 10	
R. 230	..	26 16 6	..	..	..	5 15 2	..	..	27 10 10	0 16 9	0 4 7	0 3 0	1 17 1	28 17 11	
R. 298	..	10 18 0	..	..	..	0 15 0	..	..	20 19 1	..	..	0 3 0	0 19 9	21 18 10	
R. 355	..	7 10 8	..	..	..	0 19 7	..	..	8 5 8	..	..	0 1 0	0 1 0	8 6 8	
Fire fighting and Patrol	..	..	..	..	..	..	..	..	0 19 7	..	..	..	..	0 19 7	
..	..	45 5 2	..	..	..	10 0 9	..	9 6 2	87 10 8	8 2 6	2 17 1	0 13 7	11 13 2	99 3 10	

APPENDIX L—continued.  
SUMMARY OF UNEMPLOYMENT RELIEF, YEAR ENDED 30TH JUNE, 1937—continued.

Reserve.	REFORESTATION.				Surveys.	Protection, Fire Fighting, Clearing, &c.	Maintenance of Capital Improvements.	New Construction of Nurseries, Buildings, &c.	Total of Columns 2-9	OVERHEAD EXPENSES.				Total Overhead.	Reserve Total.
	Plantations.	Natural Regeneration.	Nursery Working and Maintenance.	Forest Experiment.						Stores, Fodder, Supervision, &c.	Holidays, Wet Time, &c.	Unemp. Insurance.			
													£ s. d.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	MANY PEAKS WORKING PLAN AREA.														
R. 25	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
R. 95, &c.	33 14 10	..	14 12 9	..	1 13 1	13 8 5	4 10 8	3 8 5	13 8 5	8 10 9	12 12 2	0 13 0	21 15 11	13 8 5	
Fire fighting and Patrol	..	..	..	..	..	1 10 1	..	..	77 12 4	..	..	..	..	99 8 3	
	33 14 10	..	14 12 9	..	1 13 1	34 11 1	4 10 8	3 8 5	92 10 10	8 10 9	12 12 2	0 13 0	21 15 11	114 6 9	
	MARYBOROUGH WORKING PLAN AREA.														
Rs. 8 and 303	40 15 3	..	..	..	..	..	..	2 10 11	40 15 3	3 13 6	4 7 4	0 5 8	8 6 6	49 1 9	
R. 12	..	..	..	..	..	1 1 7	..	..	2 10 11	0 3 2	..	0 0 1	0 3 3	2 14 2	
R. 59	..	..	..	..	..	15 15 7	..	..	..	1 8 3	..	0 0 1	0 0 1	1 1 8	
R. 62	46 9 4	..	..	..	..	59 10 4	..	..	15 15 7	9 9 5	10 17 7	0 9 7	20 16 7	17 5 1	
R. 390	12 2 8	..	..	..	..	25 4 4	..	..	37 7 0	5 1 5	2 11 6	0 5 6	7 18 5	73 6 11	
R. 435	99 7 3	..	..	..	..	48 2 6	..	2 10 11	150 0 8	19 15 9	17 16 5	1 2 2	38 14 4	45 5 5	
	196 15 0	..	10 4 5	..	..	3 8 6	3 0 4	7 7 7	217 7 4	20 5 2	29 13 10	1 12 4	51 11 4	268 18 8	
R. 135	10 5 2	..	7 15 11	3 17 0	..	..	..	19 4 4	13 13 8	17 7 8	0 10 9	0 2 6	0 13 3	14 6 11	
R. 256	165 17 8	..	..	..	..	..	..	..	192 17 11	..	6 4 4	1 7 0	24 19 0	217 16 11	
R. 435	372 17 10	..	18 0 4	3 17 0	..	3 8 6	3 0 4	26 11 11	3 17 0	37 12 10	36 8 11	3 1 10	77 3 7	3 17 0	
Experiments	..	..	..	..	..	..	..	..	427 15 11	..	..	..	..	504 19 6	
	NORTH COAST WORKING PLAN AREA.														
R. 108	41 5 3	..	4 11 3	..	..	28 1 10	3 7 2	..	28 1 10	0 3 10	3 13 11	0 3 0	4 0 9	32 2 7	
R. 561	81 18 1	..	..	..	..	4 3 2	2 5 0	..	53 6 10	7 6 5	3 13 9	0 9 0	17 9 2	70 16 0	
R. 589	..	..	..	..	..	21 16 5	..	..	105 19 0	..	3 0 0	0 13 6	8 15 6	114 15 0	
R. 611	..	..	..	..	..	23 8 6	..	..	23 8 6	..	1 7 8	0 3 0	1 10 8	24 19 2	
Experiments	123 3 4	..	4 11 3	9 5 4	..	77 9 11	5 12 2	..	9 5 4	..	..	..	..	9 5 4	
	15 10 8	..	0 18 1	..	0 6 8	6 5 9	1 4 1	..	220 2 0	7 10 3	22 15 4	1 10 6	31 16 1	251 18 1	
R. 191	36 13 11	..	7 9 11	..	..	26 5 1	..	..	24 5 3	0 2 2	..	0 2 9	0 4 11	24 10 2	
R. 310	..	..	..	2 1 3	..	..	..	..	70 5 13	1 9 0	..	0 8 6	1 17 6	72 6 5	
Experiments	52 4 7	..	8 8 0	2 1 3	0 6 8	32 10 10	1 4 1	..	2 1 3	..	..	..	..	2 1 3	
	..	..	..	..	..	..	..	..	96 15 5	1 11 2	..	0 11 3	2 2 5	98 17 10	
	WARWICK WORKING PLAN AREA.														
R. 444	..	..	..	..	..	24 10 10	..	..	24 10 10	0 10 9	7 13 5	0 5 0	8 9 2	33 0 0	
GRAND TOTALS	1,175 9 8	4,494 8 2	195 13 2	91 2 11	13 8 1	12,844 19 10	301 10 7	342 9 10	19,459 2 3	3,024 1 4	2,324 12 11	65 5 11	5,414 0 2	24,873 2 5	
	Workers' Compensation														
	..	..	..	..	..	..	..	..	..	..	..	..	..	1 1 0	
															£24,874 3 5

**APPENDIX M.**  
**Areas of Plantations Established.**

Working Plan Area.	Res. No.	AREAS PLANTED (ACRES).						ALL SPECIES.		
		Eucalypts.		Softwoods.		Other Species.		1936-37.	To 30th June, 1937.	
		1936-37.	To 30th June, 1937.	1936-37.	To 30th June, 1937.	1936-37.	To 30th June, 1937.			
Brisbane Valley and Nanango	283	..	136.0	173.0	1,448.3	..	..	173.0	1,584.3	
	289	46.0	200.5	143.0	1,436.7	..	6.0	189.0	1,643.2	
	120	..	..	85.0	297.7	..	..	85.0	297.7	
	379	..	..	..	40.0	..	..	..	40.0	
	257	..	72.0	115.0	728.5	..	..	115.0	800.5	
	299	..	..	98.0	779.9	..	..	98.0	779.9	
	151	..	..	..	148.0	..	..	..	148.0	
	509	..	..	70.0	311.4 <sup>1</sup>	..	..	70.0	311.4 <sup>1</sup>	
Total	..	46.0	408.5	684.0	5,190.5	..	6.0	730.0	5,605.0	
Fraser Island	3	..	161.0	..	749.5	..	..	..	910.5	
Kilcoy	893	47.0	104.0	..	..	..	..	47.0	104.0	
Kilkivan	355	..	8.0	6.0	127.5	..	..	6.0	135.5	
	220	..	..	40.0	310.4	..	..	40.0	310.4	
	298	..	..	58.5	58.5	..	..	58.5	58.5	
Total	..	..	8.0	104.5	496.4	..	..	104.5	504.4	
Mackay	12	..	..	..	30.5	..	..	..	30.5	
Many Peaks	95	..	..	71.0	215.0	..	..	71.0	215.0	
Maryborough	287	..	..	..	35.0	..	..	..	35.0	
Mary Valley	135	..	3.0	330.0	2,700.7	..	1.0	330.0	2,704.7	
	435	..	2.0	164.9	1,619.2	..	..	164.9	1,621.2	
	256	..	..	..	134.2	..	..	..	134.2	
	124	..	..	114.0	301.7	..	..	114.0	301.7	
Total	..	..	5.0	608.9	4,755.8	..	1.0	608.9	4,761.8	
North Coast	561	..	5.0	..	1,323.0	..	6.7	..	1,334.7	
	589	..	..	99.0	905.5	..	..	99.0	905.5	
	318	37.0	156.0	..	..	..	..	37.0	156.0	
	392	..	..	37.5	37.5	..	..	37.5	37.5	
	393	57.0	156.0 <sup>2</sup>	..	..	..	..	57.0	156.0 <sup>2</sup>	
	611	182.0	352.8	..	..	..	..	182.0	352.8	
Total	..	276.0	669.8	136.5	2,266.0	..	6.7	412.5	2,942.5	
North Queensland	191	..	51.8	..	406.7	..	18.9	..	477.4	
	194	..	109.5	..	22.0	..	12.5	..	144.0	
	310	..	13.8	23.2	214.2	1.4	280.8	24.6	508.8	
	418	..	..	..	..	..	4.0	..	4.0	
Total	..	..	175.1	23.2	642.9	1.4	316.2	24.6	1,134.2	
Warwick	263	..	0.3	60.0	650.0	..	18.5	60.0	668.8	
Experimental Areas	Imbil	135	..	4.0	..	47.5	..	9.7	..	61.2
	Maryborough	..	..	..	..	5.0	..	..	..	5.0
	Fraser Island	3	..	..	..	8.0	..	..	..	8.0
	Dalby	4	..	..	..	..	0.2	..	..	0.2
		93	..	..	..	..	1.0	..	..	1.0
	Rockhampton	20	..	..	..	7.0	..	..	..	7.0
	Gympie	451	..	..	..	17.9	..	..	..	17.9
Bribie Island	603	..	..	..	0.7	..	..	..	0.7	
Total	..	..	4.0	..	87.3	..	9.7	..	101.0	
Grand Totals	..	360.0	1,535.7	1,688.1	15,118.9	1.4	358.1	2,058.5	17,012.7	

(<sup>1</sup>) Total amended to allow for loss by fire, 1936-37, of 380 acres.

(<sup>2</sup>) Total amended to allow for loss by fire, 1936-37, of 82 acres.



## APPENDIX N.

## Areas of Natural Forests Treated and Improved.

Working Plan Area.	Res. No.	AREA TREATED (ACRES).									Total Area Treated to 30th June, 1937.	
		Eucalypts. (1)			Softwoods. (2)			Other Species.				
		Treated 1936-37.	First Treatment 1936-37.	Total at 30th June, 1937.	Treated 1936-37.	First Treatment 1936-37.	Total at 30th June, 1937.	Treated 1936-37.	First Treatment 1936-37.	Total at 30th June, 1937.		
Brisbane	69	200	..	1,548	..	..	..	..	..	..	1,548	
	1,376	..	..	1,379	..	..	..	..	..	..	1,379	
	215	177	..	925	..	..	..	..	..	..	925	
	893	260	140	1,330	..	..	..	..	..	..	1,330	
	494	703	..	1,040	..	..	..	..	..	..	1,040	
	446	646	646	646	..	..	..	..	..	..	646	
Total	..	1,986	786	6,868	..	..	..	..	..	..	6,868	
Brisbane Valley and Nanango	283	560	560	2,149	..	..	747	..	..	40	2,936	
	289	..	..	32	..	..	25	..	..	..	57	
	257	..	..	125	..	..	..	..	..	66	191	
	151	..	..	..	..	..	337	..	..	..	337	
	299	..	..	50	..	..	332	..	..	..	382	
	509	..	..	1,616	..	..	..	..	..	..	1,616	
	527	760	760	2,430	..	..	..	..	..	..	2,430	
Total	..	1,320	1,320	6,402	..	..	1,441	..	..	106	7,949	
Clermont	117	4,560	4,560	7,385	..	..	..	..	..	..	7,385	
Bundaberg	169	..	..	..	144	144	5,402	..	..	..	5,402	
	80	2,270	2,270	7,278	..	..	..	..	..	..	7,278	
Total	..	2,270	2,270	7,278	144	144	5,402	..	..	..	12,680	
Dalby	93	1,358	1,248	13,694	..	..	1,124	..	..	..	14,818	
	141	..	..	802	..	..	..	..	..	..	802	
	4	1,955	448	5,501	..	..	..	..	..	..	5,501	
	78	..	..	..	2,598	931	13,156	..	..	..	13,156	
	34	..	..	1,270	..	..	2,496	..	..	..	3,766	
	150	..	..	..	215	215	4,067	..	..	..	4,067	
	139	800	..	900	274	274	274	..	..	..	1,174	
	16	980	980	980	2,357	2,357	6,500	..	..	..	7,480	
	127	..	..	..	..	..	765	..	..	..	765	
	126	..	..	..	1,121	1,121	2,791	..	..	..	2,791	
	154	..	..	..	2,477	2,477	5,594	..	..	..	5,594	
	Total	..	5,093	2,676	23,147	9,042	7,375	36,767	..	..	..	59,914
	Fraser Island	3	657	..	9,476	..	..	2,310	..	..	..	11,786
Inglewood	79	..	..	..	3,982	2,785	25,272	..	..	..	25,272	
	122	..	..	..	2,481	894	18,196	..	..	..	18,196	
	117	769	769	9,227	..	..	..	..	..	..	9,227	
	101	1,453	1,453	8,551	..	..	..	..	..	..	8,551	
	134	..	..	..	2,315	2,315	8,846	..	..	..	8,846	
	81	98	98	2,470	..	..	..	..	..	..	2,470	
	76	602	602	602	..	..	..	..	..	..	602	
	48	..	..	..	1,005	1,005	1,005	..	..	..	1,005	
	Total	..	2,922	2,922	20,850	9,783	6,999	53,319	..	..	..	74,169
Silkivan	221	..	..	..	..	..	560	..	..	..	560	
	220	..	..	..	..	..	155	..	..	..	155	
	355	..	..	..	..	..	40	..	..	..	40	
	26	..	..	..	..	..	150	..	..	..	150	
	700	..	..	3,672	..	..	..	..	..	..	3,672	
	494	..	..	1,350	..	..	..	..	..	..	1,350	
	24	1,350	1,200	2,737	..	..	..	..	..	..	2,737	
12	300	300	5,200	..	..	..	..	..	..	5,200 <sup>a</sup>		
Total	..	1,650	1,500	12,959	..	..	905	..	..	..	13,864	
Mackay	12	..	..	82	..	..	24	..	..	..	106	
Maryborough	287	..	..	..	..	..	240	..	..	..	240	
	435	1,508	1,508	5,194	..	..	..	..	..	..	5,194	
	59	..	..	941	..	..	..	..	..	..	941	
	62	1,809	1,809	2,370	..	..	..	..	..	..	2,370	
	12	1,285	1,285	3,493	..	..	..	..	..	..	3,493	
	390	2,702	2,702	2,702	..	..	..	..	..	..	2,702	
	8	1,476	1,476	1,476	..	..	..	..	..	..	1,476	
Total	..	8,780	8,780	16,176	..	..	240	..	..	..	16,416	

## APPENDIX N.—continued.

## Areas of Natural Forests Treated and Improved.

Working Plan Area.	Res. No.	AREA TREATED (ACRES)									Total Area Treated to 30th June, 1937.
		Eucalypts. (1)			Softwoods. (2)			Other Species.			
		Treated 1936-37.	First Treatment 1936-37.	Total at 30th June, 1937.	Treated 1936-37.	First Treatment 1936-37.	Total at 30th June, 1937.	Treated 1936-37.	First Treatment 1936-37.	Total at 30th June, 1937.	
Mary Valley .. ..	135	..	..	159	..	..	277	..	..	..	436
	435	..	..	..	..	..	70	..	..	55	125
Total .. ..	..	..	..	159	..	..	347	..	..	55	561
North Coast .. ..	318	716	312	3,630	..	..	..	..	..	..	3,630
	313	650	650	1,824	..	..	..	..	..	..	1,824
	583	..	..	1,455	..	..	..	..	..	..	1,455
	445	640	200	1,408	..	..	..	..	..	..	1,408
	249	570	..	1,238	..	..	..	..	..	..	1,238
	60	332	..	1,410	..	..	..	..	..	..	1,410
	393	538	538	628	..	..	..	..	..	..	628
	611	652	652	964	..	..	..	..	..	..	964
Total .. ..	..	4,098	2,352	12,557	..	..	..	..	..	..	12,557
North Queensland ..	191	..	..	..	..	..	..	..	..	53	53
	194	..	..	175	..	..	..	..	..	..	175
	310	..	..	..	..	..	..	..	..	128	128
	418	..	..	..	..	..	..	..	..	43	43
	452	..	..	..	..	..	..	..	..	20	20
	245	..	..	339	..	..	..	..	..	..	339
Total .. ..	..	..	..	514	..	..	..	..	..	244	758
Grand Totals .. ..	..	33,336	27,166	123,853	18,969	14,518	100,755	..	..	405	225,013

NOTE.—(1) Includes some cypress pine associated with narrow leaf ironbark.

(2) Includes some narrow leaf ironbark associated with cypress pine.

Areas have been listed according to preponderance of either species in the stand.

Some Dalby and Inglewood areas are so concerned.

(3) This work carried out by Aboriginal Department employees under Forestry supervision.

## APPENDIX O.

## Assistance to Local Authorities for the Construction of and Repairs to Roads and Bridges.

Shire Council.	SUBSIDIES APPROVED—1936-37.		Amount. £
	Road.		
Atherton .. ..	160/4 Road from Kairi to S.F.R. 185	.. .. .	3,270
	Repairs to Juara Creek Bridge	.. .. .	5
Atherton .. ..	Main Roads Commission—160/75 Top Gate Road	.. .. .	1,500
Calliope .. ..	160/71 Road from Wietalaba to R. 122	.. .. .	550
Calliope .. ..	160/72 Road from Golembil to R. 123	.. .. .	400
Caboolture .. ..	160/73 Banana Settlement Road—Mount Mee	.. .. .	62
Caboolture .. ..	160/74 Carmichael's Road	.. .. .	36
Eacham .. ..	160/9 Road from Pearamon to S.F.R. 310, Gadgarra	.. .. .	113
Esk .. ..	160/37 Linville—Mount Stanley Road, North Section	.. .. .	500
Esk .. ..	160/70 Road from Portion 179 to T.R. 209, Neara	.. .. .	100
Kilkivan .. ..	160/31 Planted Creek Road	.. .. .	300
Kilkivan .. ..	160/38 Manumbar—Kinbombi Road	.. .. .	60
Kilkivan .. ..	160/39 Road along Portion 10v, Boonara	.. .. .	10
Kilkivan .. ..	160/40 Kilkivan—Blacksmoke Road	.. .. .	50
Kilkivan .. ..	160/41 Oakview—Sinai Road	.. .. .	15
Kilkivan .. ..	160/42 Road from Cinnabar to T.R. 355	.. .. .	5
Kilkivan .. ..	160/43 Road through Portions 117 and 118, Parish Widgee and Extension	.. .. .	*10
Landsborough ..	160/15 Curramore Road	.. .. .	12
Maroochy .. ..	160/50 Cooloolabin Private Road	.. .. .	50
Noosa .. ..	160/16 Cooran Tableland Road	.. .. .	20
Noosa .. ..	160/27 Road through Portions 1,071 and 1,087, Como	.. .. .	75
Nanango .. ..	160/34 Road from R. 151, Tureen towards Brooklands	.. .. .	60
Nanango .. ..	160/67 Road from S.F.R. 151 to Portion 79, Parish of Neumgna	.. .. .	100
Rosalie .. ..	160/26 Road from Res. 257, Cooyar to Gilla	.. .. .	160
Tingalpa .. ..	160/65 Road to S.F.R. 215, Redland	.. .. .	8
Woothakata .. ..	160/57 Bridge over Rifle Creek (increase of Subsidy previously approved)	.. .. .	3
Woocoo .. ..	160/60 Teebar—Brooweena Road	.. .. .	34
Woocoo .. ..	160/69 Melville Creek Bridge	.. .. .	20
Woocoo .. ..	160/77 Calgoa—Boowoogum Road	.. .. .	30
Woocoo .. ..	160/78 Old Gayndah Road	.. .. .	75
Widgee .. ..	160/62 Gympie—Glastonbury Main Road	.. .. .	50
Widgee .. ..	160/63 New Veteran—Sandy Creek Road	.. .. .	50
Widgee .. ..	160/36 Glastonbury Creek Road	.. .. .	25
Widgee .. ..	160/17 Amamoor Creek Road	.. .. .	50
Widgee .. ..	160/66 Road through Portion 438, Parish Imbil	.. .. .	30
			50
			£7,888

\* H. and M. Loan,

## APPENDIX P.

## Particulars of Forest Survey Work, year ended 30th June, 1937.

## CLASS 1.—INSPECTIONS OF VACANT CROWN LANDS AND TIMBER RESERVES.

Reserve.	Parish.	Area in Acres.
Portions 10, 39, 41, 86v, 98, 104v, 122 .. .. .	Glenbar .. .. .	4,437

## CLASS 2.—ASSESSMENT SURVEYS.

Reserve.	Parish.	Area in Acres.
State Forest 446 .. .. .	Stapylton .. .. .	1,365
State Forest 25 .. .. .	Boompa .. .. .	2,000
State Forest 38 .. .. .	Woocoo .. .. .	600
State Forest 50 .. .. .	Glenbar .. .. .	7,300
State Forest 301 .. .. .	Miva .. .. .	2,275
State Forests 420, 470 .. .. .	Miva .. .. .	2,329
State Forest 435 .. .. .	Gundiah (incomplete) .. .. .	3,000
Timber Reserve 85 .. .. .	Dundar .. .. .	4,900
Timber Reserve 375 .. .. .	Boompa .. .. .	5,890
Timber Reserve 533 .. .. .	Mungore .. .. .	2,336
Timber Reserve 376 .. .. .	Boompa and Teebar .. .. .	3,970
Timber Reserve 465 .. .. .	Teebar .. .. .	2,891
Timber Reserve 580 .. .. .	Degilbo .. .. .	390
Timber Reserve 581 .. .. .	Degilbo .. .. .	880
Timber Reserves 6, 30 .. .. .	Garioch (incomplete) .. .. .	15,000
National Park 496 .. .. .	Roberts (part) .. .. .	1,102
Portions 27, 139 .. .. .	Woocoo .. .. .	1,170
Portions 41, 42 .. .. .	Doongul .. .. .	1,004
Portions 9v, 20 .. .. .	Gungaloon .. .. .	886
Portions 138, 139 .. .. .	Teebar .. .. .	5,195
Portions 182, 183 .. .. .	Glenbar .. .. .	1,362
Portions 87, 88, 102, 122v, 123v .. .. .	St. Mary .. .. .	4,287
S.F. 59 .. .. .	St. Mary .. .. .	1,403
S.F. 503 .. .. .	Doongul .. .. .	5,869
T.R. 274 (part) .. .. .	Conondale .. .. .	10,328
	Total .. .. .	87,732

## CLASS 3.—INTENSIVE CONTOUR AND ASSESSMENT SURVEY.

Reserve.	Parish.	Area in Acres.
State Forest 390 (part) .. .. .	St. Mary .. .. .	..
State Forests 8, 303 .. .. .	Doongul .. .. .	18,670
State Forest 12 .. .. .	Gungaloon .. .. .	4,560
State Forest 169 .. .. .	St. Agnes (balance) .. .. .	6,552
State Forests 287, 750 .. .. .	Woowoonga .. .. .	5,665
State Forest 893 .. .. .	Byron (proceeding) .. .. .	5,000
State Forests 527, 528, 529 .. .. .	Deongwar .. .. .	10,279
State Forest 444 .. .. .	Palgrave (proceeding) .. .. .	..
State Forest 28 .. .. .	Coominglah, Bailey .. .. .	74,750
Timber Reserve 79 .. .. .	Bailey .. .. .	866
Timber Reserve 84 .. .. .	Bailey .. .. .	2,568
Timber Reserve 417 .. .. .	Doongul, Woocoo .. .. .	7,150
Timber Reserve 343 .. .. .	Glenbora (proceeding) .. .. .	..
State Forest 7 .. .. .	Doongul .. .. .	1,934
State Forest 517 .. .. .	Doongul .. .. .	976
Vacant Crown Land .. .. .	Doongul .. .. .	668
	Total .. .. .	139,638

## COMPARTMENT SURVEYS.

Reserve.	Parish.	Area in Acres.
State Forest 134 .. .. .	Bringalilly .. .. .	20,900
State Forest 16 .. .. .	Macdonald (part) .. .. .	16,450
State Forest 173 .. .. .	Durundur .. .. .	..
	Total .. .. .	37,350

## APPENDIX P—continued.

## MISCELLANEOUS SURVEYS.

Reserve and Parish.	Compartment No.	Logging Area.	Miles, Chains.	Remarks.
	..	East Coonoongibber	1 67	Scrub break
	..	West Coonoongibber	0 28	Scrub break
	4A, 8A .. ..	Western Creek ..	0 49	Species
	4A, 5A, 8, 9, 10A, 12, 13A	Casey Gully ..	8 59	Species
	14, 17B, 20 ..			
135 Brooloo .. ..	1, 5B, 6, 13 ..	Derrier .. ..	1 03	Species
	14, 15, 24 ..	Derrier .. ..	0 17	Scrub break
	14 .. ..	Derrier .. ..	..	Additional planting
	21 .. ..	Derrier .. ..	0 12	Overburn
	16, 24 .. ..	.. ..	1 29	Scrub break
	24 .. ..	.. ..	0 30	Overburn
	1, 2, 3 .. ..	West Derrier ..	0 48	Check traverse
	3 .. ..	West Derrier ..	0 62	Overburn
	2, 3 .. ..	Skyring .. ..	0 35	Scrub break
	7 .. ..	Zachariah .. ..	0 53	Fence, subdivision
435 Amamoor .. ..	1D .. ..	Stoney Gully ..	0 69	Planting
435 Amamoor .. ..	5 .. ..	Mary Creek ..	0 57	Break, road
124 Glastonbury ..	6 .. ..	Mary Creek ..	1 10	Planting
	2 .. ..	Tristania .. ..	0 34	Road
589 Beerwah .. ..	12 .. ..	.. ..	6 08	Soil survey
589 Beerwah .. ..	13, 16 .. ..	.. ..	0 34	Break
298 Gallangowan ..	1B, &c. .. ..	Leahy .. ..	1 57	Planting
82 Brooyar .. ..	1 .. ..	Creek .. ..	1 13	Paddock
242 Widgee .. ..	2, 3, 4, 11A ..	North .. ..	1 40	Planting
220 Kilkivan .. ..	5, 7, 9 .. ..	Gap .. ..	2 47	Planting
95 New Cannindah ..	4A, 6A .. ..	Hunting .. ..	0 65	Planting
191 Barron .. ..	9A .. ..	.. ..	1 34	Fence
191 Barron .. ..	10 .. ..	.. ..	0 26	Lease
191 Barron .. ..	12A .. ..	.. ..	1 75	Sub-compartment
310 Gadgarra .. ..	3A .. ..	Dreghorn .. ..	0 67	Experiments
310 Gadgarra .. ..	2, 3 .. ..	Dreghorn .. ..	0 47	Planting
310 Gadgarra .. ..	4B .. ..	Tardent .. ..	0 33	Sub-compartment
393 Woondum .. ..	8 .. ..	Dingo South ..	0 49	Banana block
893 Byron .. ..	6 .. ..	North Pine ..	0 78	Banana block
137 Yabba .. ..	.. ..	Mill .. ..	1 66	Improvements
435 Gundiah .. ..	14 .. ..	.. ..	0 42	Paddock
392 Como .. ..	.. ..	.. ..	0 15	Connection

## APPENDIX Q.

## Forest Reservations for the Year ended 30th June, 1937.

*State Forests.*—Eighteen (18) new State Forests, with a total area of 149,819 acres, were proclaimed during the year, the largest of these being as follows:—

Acres.		Land Agent's District.
33,260	{ R. 81 Weir Weir .. ..	Nanango, Dalby, and Gayndah
	{ R. 46 Cadarga and Monogorilly .. ..	
26,700	R. 58 Gideon and Tehanning .. ..	Dalby
24,800	R. 155 Marmadua and Durabilla .. ..	Dalby
17,700	{ R. 197 Diamondy and Jingi Jingi .. ..	Dalby and Nanango
	{ R. 35 Manerem, &c. .. ..	
16,700	R. 8 Doongul .. ..	Maryborough
9,670	{ R. 676 Broomfield .. ..	Maryborough
	{ R. 27, Woocoo .. ..	
7,000	R. 83 Conloi and Cherwondah .. ..	Taroom
6,880	R. 54 Bembil .. ..	Dalby
2,500	R. 95 Malmaison .. ..	Gayndah
1,365	R. 446 Stapylton .. ..	Brisbane

## APPENDIX Q—continued.

*Provisional Reserves.*—At 30th June, 1937, the number of Timber Reserves was 309, as against 318 at 30th June, 1936. Five (5) new areas, with a total of 13,528 acres were reserved, the largest of these being

Acres.		Land Agent's District.
11,670	R. 34 Clemant .. .. .	Townsville
1,435	R. 823 Walsh .. .. .	Maryborough

Five thousand four hundred and eighty (5,480) acres of Crown Land were added to existing reserves, one hundred and thirty-eight thousand and sixteen (138,016) acres were converted into State Forests and twenty-six thousand nine hundred and thirty-four (26,934) acres were converted into National Parks.

Twelve thousand three hundred and twenty-seven (12,327) acres were released for selection or other purposes.

*National Parks.*—Forty-eight (48) new National Parks with a total area of 75,539 acres were proclaimed during the year. Of this number, forty-six (46) are islands of the Great Barrier Reef, lying between Fraser Island and Cairns.

The largest National Parks proclaimed are as follows:—

Acres.		Land Agent's District.
48,640	R. 227 Conway and Molle (Conway Range) .. .. .	Bowen
12,800	R. 228 Hook (Hook Island) .. .. .	Bowen
4,100	R. 226 Shaw (Shaw Island) .. .. .	Bowen
2,050	R. 389 Hecate (Goold Island) .. .. .	Innisfail
1,600	R. 502 Ingot (Goldsmith Island) .. .. .	Bowen
1,200	R. 496 Ingot (Blacksmith Island) .. .. .	Bowen
1,060	R. 465 Numinbah (Warrie) .. .. .	Brisbane
1,000	R. 503 Ingot (Linne Island) .. .. .	Bowen

1ST JULY, 1936, TO 30TH JUNE, 1937.  
STATE FORESTS.

	No.	A.	R.	P.
At 1st July, 1936 .. .. .	246	2,640,376	2	17
Proclaimed 1st July, 1936, to 30th June, 1937 .. .. .	18	149,819	0	34
Total Reservations at 30th June, 1937 .. .. .	264	2,790,195	3	11

## TIMBER RESERVES.

	A.	R.	P.
At 1st July, 1936 .. .. .	3,542,466	0	15
Cancelled and Revoked .. .. .	12,327	1	4
Converted into State Forests .. .. .	138,016	0	0
Converted into National Parks .. .. .	26,934	0	0
Balance .. .. .	177,277	1	4
Additions to Reserves .. .. .	3,365,188	3	11
New Reserves (5) .. .. .	5,480	0	0
	13,527	2	28
Total Reservations at 30th June, 1937 .. .. .	19,007	2	28
	3,384,196	1	39

## NATIONAL PARKS.

	No.	A.	R.	P.
At 1st July, 1936 .. .. .	46	341,372	0	20
Proclaimed 1st July, 1936, to 30th June, 1937 .. .. .	48	75,539	0	0
	94	416,911	0	20
Grand Total Reservations at 30th June, 1937 .. .. .		6,591,303	1	30

## APPENDIX R.

## State Forests, Timber Reserves, and National Parks at 30th June, 1937.

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 .. .. .	11	46,919	1 30	5	62,746	2 19	2	2,382	0 0
Bowen .. .. .	..	..	..	9	127,800	0 0	17	70,147	0 0
Brisbane .. .. .	44	124,265	3 39	34	126,551	3 32	16	51,930	2 22
Bundaberg .. .. .	13	76,246	1 9	28	134,401	2 37	..	..	..
Cairns .. .. .	4	87,979	0 0	12	466,324	1 20	7	79,290	0 0
Charleville .. .. .	..	..	..	2	20,037	0 0	..	..	..
Charters Towers .. .. .	..	..	..	2	125,550	0 0	..	..	..
Clermont .. .. .	1	14,500	0 0	4	127,756	0 0	..	..	..
Cloncurry .. .. .	..	..	..	1	4,290	0 0	..	..	..
Cooktown .. .. .	..	..	..	8	623,510	0 0	..	..	..
Dalby .. .. .	23	627,693	0 38	9	108,725	2 0	1	22,500	0 0
Gayndah .. .. .	1	4,790	0 0	11	35,918	1 3	..	..	..
Gladstone .. .. .	4	35,000	0 0	19	77,822	1 7	2	60	0 0
Goondiwindi .. .. .	1	8,623	0 0	1	2,410	0 0	..	..	..
Gympie .. .. .	25	238,556	3 17	16	81,552	1 34	4	262	2 7
Herberton .. .. .	6	73,016	2 8	5	60,226	0 6	3	1,040	0 0
Ingham .. .. .	..	..	..	2	61,550	0 0	1	1,700	0 0
Inglewood .. .. .	12	151,051	2 35	11	34,020	2 15	..	..	..
Innisfail .. .. .	..	..	..	9	389,211	0 38	17	99,892	1 31
Ipswich .. .. .	19	122,732	2 2	23	89,763	1 0	2	4,344	0 0
Jundah .. .. .	..	..	..	1	25,600	0 0	..	..	..
Mackay .. .. .	2	11,500	0 0	17	248,535	0 0	12	3,636	0 0
Maryborough .. .. .	25	483,896	2 12	22	40,970	2 4	3	805	0 0
Monto .. .. .	6	88,112	3 20	12	90,803	0 0	..	..	..
Nanango .. .. .	40	194,732	2 4	11	7,753	0 25	..	..	..
Rockhampton .. .. .	3	117,640	0 0	13	112,168	1 20	1	216	2 0
Roma .. .. .	7	82,474	1 24	1	8,600	0 0	1	65,000	0 0
Springsure .. .. .	..	..	..	1	20,500	0 0	..	..	..
Stanthorpe .. .. .	2	4,630	1 10	..	..	..	2	10,460	0 0
St. George .. .. .	..	..	..	1	3,072	0 0	..	..	..
Taroom .. .. .	1	7,000	0 0	2	6,061	0 0	..	..	..
Toowoomba .. .. .	14	188,834	2 3	14	31,096	2 28	3	3,245	0 0
Townsville .. .. .	..	..	..	3	28,869	1 31	..	..	..
Totals .. .. .	264	2,790,195	3 11	309	3,384,196	1 39	94	416,911	0 20

AT 30TH JUNE, 1937.

	A.	R.	P.
Total Area reserved for—			
State Forests .. .. .	2,790,195	3 11	
Timber Reserves .. .. .	3,384,196	1 39	
National Parks .. .. .	416,911	0 20	
Total Reservations .. .. .	6,591,303	1 30	

## APPENDIX S.

## Distribution of Staff—Sub-Department of Forestry.

	30th June, 1936.	30th June, 1937.
Salaried Staff .. .. .	146	161
General Staff .. .. .	613	621
Totals .. .. .	759	782

Price: 10s. 6d.]

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