

QUEENSLAND FOREST SERVICE.

Report of the Director of Forests for the Six Months ended
31st December, 1921.

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QUEENSLAND FOREST SERVICE.

Forests Office,
Brisbane, 7th September, 1922.

SIR,—I have the honour to present to you my Annual Report for the year 1921.

In accordance with your instructions the period of the Report has been reduced from the financial to the calendar term. As the first six months of the calendar year are dealt with in my previous report, the present one necessarily confines itself to the completion of the year's work to 31st December, 1921.

Yours faithfully,

E. H. F. SWAIN, Director of Forests.

The Hon. J. H. Coyne, M.L.A.,
Minister for Public Lands, Brisbane.

FOREST RESERVATIONS.

The total area under the control of the Forest Service increased during the period by 4.21 per cent. on the previous total, or 169,562 acres. The total area of the end of the period was 4,196,798 acres. This figure, while the highest ever attained in this State, still remains at less than 1 per cent. of the State area.

PERMANENT RESERVATIONS.

Three new reservations, aggregating 46,117 acres, were added to the list of State Forests during the period. The most important of these was a Cypress Pine and Redwood forest in the Inglewood district. State Forests at the end of the year totalled 1,320,647 acres.

The area dedicated to National Parks was increased by 79,000 acres by the dedication to this purpose of an area previously held as a Fauna and Flora Reserve in the Inglewood district. This area was dedicated as a National Park at the request of certain public land owners and is so held mainly for scenic purposes and for the preservation of native animals and plants rather than for commercial timbers, of which there are to be found very small quantities. The total area reserved in National Parks at 31st December, 1921, was 153,316 acres.

PROVISIONAL RESERVATIONS.

Thirteen areas, totalling 102,732 acres, were proclaimed as timber reserves during the period under review. This increase in area was offset by the loss from the area provisionally reserved of 58,988 acres, the net gain in area being 43,744 acres. The most important of the additions were a Hardwood forest in the Clermont district, 65,000 acres of jungle on the Paluma Ranges, Townsville, and 19,000 acres of rough mountain country north of Yeppoon. At the close of 1921, 2,722,835 acres were held as timber reserves.

THE FOREST AREA.

The figures with respect to the forest area at 31st December, 1921, summarised, viz.:

	Acres.
State Forests	1,320,647
National Parks	153,316
Timber Reserves	2,722,835
	<hr/>
	4,196,798

indicate an improvement on the figures at the close of my last report period, and the gain in area for the half-year—169,561 acres—is larger than the increase in the preceding two years.

The percentage of the State reserved for timber is still very small, the increase representing a step from ninety-four one hundredths of 1 per cent. to ninety-eight one hundredths of 1 per cent. only. This figure is far below the safety mark of forest conservation, and its value is further discounted by the inclusion therein of the National Park areas which are mainly of importance for scenic and protective reasons, and are not of note as timber areas.

The following schedule illustrates the changes in the forest area during the report period:—

FOREST RESERVATION—DECEMBER, 1921.

<i>State Forests.</i>	No.	Area in Acres.
30th June, 1921	100	1,273,830
Proclaimed 1st July, 1921, to 31st December, 1921	3	46,117
Increase by recomputation	—	700
	<hr/>	<hr/>
	103	1,320,647
<i>Timber Reserves.</i>	Acres.	
30th June, 1921	—	2,679,091
Made State Forests	45,000	
Cancelled	11,950	
Decrease by recomputation	2,038	
	<hr/>	<hr/>
Total decrease	58,988	2,620,103
Added since 30th June, 1921	—	102,732
	<hr/>	<hr/>
Total forest reservation at 31st December, 1921		2,722,835
National Parks at 30th June, 1921		74,316
Proclaimed 1st July, 1921, to 31st December, 1921		79,000
	<hr/>	<hr/>
		153,316
	<hr/>	<hr/>
Total		4,196,798

RESUMPTIONS OF TIMBER LANDS.

No resumptions of timbered areas were made.

ALLOCATION OF FOREST AREAS.

The distribution of the reserved forest area is shown on the following table:—

RETURN OF STATE FORESTS, TIMBER RESERVES, AND NATIONAL PARKS IN THE STATE ON THE 31ST DECEMBER, 1921.

District.	STATE FORESTS.		TIMBER RESERVES.		NATIONAL PARKS.	
	No.	Area in Acres.	No.	Area in Acres.	No.	Area in Acres.
Atherton	7	40,890	3	18,285	..	..
Bowen .. .. .	..	..	6	76,153	..	..
Brisbane	21	67,317	44	121,268	8	47,889
Bundaberg	5	64,770	20	76,142	..	..
Cairns	1	37,850	3	63,260	1	79,000
Charters Towers .. .. .	..	..	1	125,000	..	..
Clermont .. .. .	..	..	3	170,800	..	..
Cooktown .. .. .	..	..	4	411,080	..	..
Dalby	5	368,061	17	210,705	..	..
Dalby and Nanango .. .. .	..	..	..	..	1	22,500
Gayndah .. .. .	..	..	10	37,955	..	..
Gladstone	5	37,007	14	138,255	..	..
Gympie	12	60,279	38	248,559	1	106
Herberton	2	731	5	20,793	1	270
Ingham .. .. .	..	..	3	96,728	..	..
Inglewood	1	45,000	10	43,833	..	..
Innisfail .. .. .	..	..	2	23,810	..	..
Ipswich	8	81,430	29	72,928	..	..
Mackay .. .. .	..	..	14	249,884	..	..
Maryborough	6	257,775	25	100,926	1	100
Nanango	23	88,883	9	19,044	..	..
Port Douglas .. .. .	..	..	5	173,016	..	..
Rockhampton	2	48,320	7	53,357	1	216
Roma	1	8,695	5	18,401	..	..
Springsure	1	69,000	2	20,440	..	..
Taroom .. .. .	..	..	1	2,240	..	..
Toowoomba	2	17,239	4	35,450	..	..
Townsville .. .. .	..	..	1	65,000	..	..
Warwick	1	27,400	9	29,283	2	3,235
Windorah .. .. .	..	..	1	240	..	..
	103	1,320,647	295	2,722,835	16	153,316

THE FOREST AREA, 1900-1921.

The fluctuations in the total reserved forest area for the State during the past two decades is given in the Schedule following:—

Date.	No.	State Forests.	No.	National Parks.	Timber Reserves	Total.
		Acres.		Acres.	Acres.	Acres.
31st December, 1900 .. .. .	..	..	..	..	1,622,855	1,622,855
31st December, 1901 .. .. .	..	..	..	..	2,219,177	2,219,177
31st December, 1902 .. .. .	..	..	..	..	3,124,160	3,124,160
31st December, 1903 .. .. .	..	..	..	..	3,518,520	3,518,520
31st December, 1904 .. .. .	..	..	..	..	3,673,331	3,673,331
31st December, 1905 .. .. .	..	..	..	..	3,606,709	3,606,709
31st December, 1906 .. .. .	..	..	..	..	3,460,826	3,460,826
31st December, 1907 .. .. .	..	416,872	..	..	3,255,706	3,672,578
31st December, 1908	15	793,097	5	23,175	3,019,919	3,836,191
31st December, 1909	18	809,697	7	26,545	2,981,111	3,817,353
31st December, 1911	24	819,937	7	26,645	2,863,337	3,714,919
31st December, 1912	25	855,037	7	26,645	3,211,855	4,093,537
31st December, 1913	25	886,137	7	26,645	3,195,688	4,108,470
31st December, 1914	37	962,557	8	26,751	3,076,159	4,065,467
31st December, 1915	52	1,003,733	9	73,751	2,998,851	4,076,335
31st December, 1916	54	1,006,829	9	73,751	2,887,646	3,968,226
31st December, 1917	64	1,069,134	9	73,751	2,804,967	3,947,852
31st December, 1918	69	1,121,900	14	73,980	2,671,139	3,867,019
30th June, 1919	71	1,151,500	14	73,980	2,559,717	3,785,197
30th June, 1920	84	1,260,832	14	73,980	2,583,450	3,918,262
30th June, 1921	100	1,273,830	15	74,316	2,679,091	4,027,237
30th December, 1921	103	1,320,647	16	153,316	2,722,835	4,196,798

SILVICULTURE.

In general the rainfall for the period under review was above the average. In Southern Queensland a mild winter, with more rain than is usual in this State of dry winters, was experienced. Subsequently, however, hot and dry weather ensued and continued until the year culminated with very heavy rains.

In North Queensland, frosts were met with in the winter, subsequent conditions being similar to those of the Southern districts.

The half-year period does not embrace the *Araucaria* fall which occurs usually in January, but the indications at the end of the year were of a very light crop for both Hoop and Bunya Pine.

Flindersia Oxleyana (Yellowwood) seeded well in the Benarkin district, and in the Dalby district the crop of Cypress Pine (*Callitris glauca*) seed was heavy.

On Fraser Island 232 lb. of seeds were collected, the species represented being Kauri (*Agathis robusta*), 25 lb.; Tallowwood (*E. microcorys*), 52 lb.; *Evodia accedens*, 1 lb.; *Elaeocarpus grandis*, 153 lb.; and *Elaeocarpus Eumundi*, 1 lb.

NATURAL REGENERATION OPERATIONS.

The Forest Service continued its work of freeing and assisting promising young growths of the various commercial species which were met with on its State Forests.

On Brooloo State Forest 100 acres of Hoop Pine advance growth were liberated during the year. On Reserve 256 (Imbil) a small area of Silky Oak reproduction was dealt with for interplanting with White Beech. On Reserve 256 (Kandanga) liberation of Pine was effected on an area of 55 acres, and at Amamoor brushing and thinning was carried over 30 acres of the reserve.

At Benarkin 260 acres of hardwood forest underwent regenerative treatment, and 228 acres of Hoop Pine regrowth were freed from competing growths. Of these operations, the Deputy Forester comments:—

"The average cost per acre of the treatment of the Pine is 19s. 3d. Considering the value of the Pine stand here, which in one place is estimated at over 500 trees per acre over ten acres, under the small pole class, this is very cheap work, and it is a better stand on the average than would be got by planting. It is probably ten years old at least, and this is the first expenditure."

"The growth on the treated hardwood areas has been well maintained, and with the absence of fire presents a picture of vigorous healthy growth. While by no means sensational, the two following instances show how indigenous hardwood can grow:—On 4th June, 1919, an Ironbark sapling was measured and found to be 8 ft. 4 inches, probably 12 months old. Next month, July, the frost killed about 1 foot of the top leader and gave the sapling a severe setback. In December, 1921, the same tree was 28 feet 6 inches high and had grown 3 feet during the previous quarter. A Tallowwood sapling measured at the same time, and also set back by frost, is now 25 feet 9 inches high. It must be remembered also that the year following the first measurement was a drought year."

On the operations for the benefit of the natural young growth on Fraser Island, the Deputy Forester reports that at the end of the year a total area of nearly 2,000 acres had been treated, resulting in the establishment of a good stand of various species.

As regards the work undertaken on 300 acres on Reserve 310 (Gadgarra), North Queensland, for the regeneration of Maple, the Acting District Forester at Atherton reports:—

"This area shows a finer stand of Maple than I have seen anywhere in Queensland. Young plants, from a few inches to 30 feet in height, present a very pleasing prospect, and hold out hopes of success in future operations."

"During the half-year, 20 acres of new area were brushed, and about 25 acres brushed a second time."

NURSERY OPERATIONS.

In the Atherton district operations at the one nursery on State Forest Reserve 191 East Barron, were very limited during the half-year.

The nursery suffered severely from frosts during the half-year, much of the stock being badly damaged, and it has been decided as soon as present planting stocks are exhausted to remove to a new and more sheltered site, utilising the present nursery as a horse paddock.

At Benarkin sowings were made of seed of various species.

Nursery operations here were hampered by the hot and dry weather experienced towards the end of the year.

At Imbil nursery work was confined to the tending and distribution of existing planting stocks and to the pursuit of various experiments with native species.

Operations were commenced towards the establishment of small nurseries on Reserves 26, 220, 221, and 355 Kilkivan, 74 Nangur, 119 Glastonbury, and 287 Woowoonga. These nurseries are designed merely to supply the local planting requirements of the various reserves mentioned.

At Rockhampton a small nursery was established in the Botanic Gardens by courtesy of the trustees, and numerous natural plants of *Agathis Palmerstoni*, *Araucaria Cunninghamii*, and *Araucaria Cookii* were transferred thereto.

At Fraser Island 200 lb. of seed were sown, and 20,000 plants resulted. The species dealt with were:—Kauri, Tallowwood, Blackbutt, Tasmanian Blackwood (*Acacia melanoxylon*), *Pleiogynium Solandri*, *Eleocarpus grandis*, and *E. Eumundi*. The exotics—*Cryptomeria japonica*, *Cupressus sempervirens*, *Juniperus virginiana*, *Cedrus deodara*, and *Cedrus libanensis*—were also represented, a small quantity of seed of each being sown.

PLANTATIONS.

The half-year did not cover the planting period (late summer and autumn), and planting operations were confined to experiments with various species and to the preparation of areas for later treatment. In the Gympie district a total area of 15 acres of Reserve 135 (Brooloo), Reserves 26, 220, and 255 (Kilkivan), and Reserve 119 (Glastonbury) was felled and brushed.

The District Forester at Gympie states:—

“Further areas were proposed for plantation felling, but owing to the failure of the seed supply and shortage of nursery stock for distribution, this work was held over until next year.”

Of the experimental plantings made at Benarkin, Hoop Pine gave the best results, returning 75 per cent. success. Seed-spotting of Cypress Pine did not give encouraging results, and depredations of marsupials destroyed a planting of *Pinus insignis*.

Trial plantings of hardwood gave a fair percentage of success.

An area of 28 acres has been felled for later planting operations.

On Fraser Island during the half-year an area of 55 acres was prepared for planting.

INCREMENT PLOTS.

Forest Service measurement records of the growth increment of the various species were maintained during the report period, and a complete system of recording and following up instituted at Head Office.

Ten new plots were established during the half-year.

FLOWERING AND FRUITING.

Observations of the flowering and fruiting of the native species were also continued.

FOREST PROTECTION.

FIRE.

The half-year did not see the forests sustain very great damage from fires. After the showers met with during the winter, however, the dry hot “spring” months brought about a distinct menace, which fortunately was removed by the heavy rains which fell at the end of the year.

Small fires were reported from State Forests Brooloo (R. 135), Kilkivan (R. 221), Injune (R. 10), Benarkin (R. 283), Blackbutt (R's. 257 and 258), Monsildale (R's. 343 and 207), Avoca (R. 229), and Fraser Island (R. 3), Bunya Mountains (R. 151), Tarong (R. 120), Cooyar (R. 316).

Patrol of those State Forests that were without resident staffs could only be hazardous. The State Forests under resident staffs, on the contrary, are efficiently protected, and there is little fear of serious fire damage.

On the Benarkin State Forest 248 chains of existing fire lines were cleaned up at a cost of about 1s. 3½d. a chain.

On the East Barron State Forest (R. 191), fire lines were established round the plantation area and 50 chains of fire lines were brushed and burnt, at a cost of £6 4s. 3d.

A look-out station was established on Observation Hill on the Goodnight Scrub State Forest (R. 169).

At the close of the year 2 miles of fire lines had been provided on Brooloo State Forest. Most of the plantations on this area are protected by natural features and conditions.

On R. 256 (Imbil) an area of 1,500 acres is under protection, the total length of fire lines being about 4 miles.

On R. 256 Kandanga, 800 acres are under protection by fire lines, half a mile of which is permanently constructed. On R. 235 Amamoor, about 2 miles of permanent lines have been constructed, whilst temporary lines are burnt as required. On Glastonbury R. 119 the half-year's fire protection work amounted only to patrol. On R. 502 Gympie, about 3 miles of fire lines, which are reinforced by burns when required, have been provided, whilst on R. 700 Gympie and Curra, 6 miles of temporary lines and considerable length of temporary burnt lines represent the protective measures. On R. 26 Kilkivan, 12 chains of permanent fire break have been established, while on this reserve 228 chains and on R. 355 Kilkivan 3 miles of temporary breaks were burnt. Patrol of Reserves 220, 221 (on which several fires were put out in initial stages), Kilkivan, and of R. 74 Nangur, was also carried out during the half-year.

As regards Fraser Island, the Deputy Forester reports:—

"Fire-fighting altogether cost £11 13s. 7d. for ten fires. There were seven small outbreaks due to the teamsters' attempts to improve pastures. The policy being adopted now should tend to reduce the number of these fires. Teamsters are being told that we realise the necessity for fires on grazing areas and if they will assist we will undertake to burn periodically. Controlled fire is a help—it is the uncontrolled fire we object to. Generally speaking, the number of fires recorded is very small and no damage was done. Nevertheless no slackening-off of precautionary measures will result, as I realise that a fire next year will be all the more serious on account of the extra leaf and bark litter on the ground."

On Fraser Island 38½ chains of new fire line were constructed, making a total of 1,214½ chains.

NOXIOUS WEEDS.

The Forest Service continued the work of eradication of noxious weeds-on-forest lands during the report period.

On Brooloo State Forest destruction of lantana and other weeds was proceeded with and previous operations followed up. The District Forester at Gympie says of these operations:—

"£10 10s. was spent in paddock No. 9 eradicating tobacco, and lantana eradication was proceeded with in various parts of the Reserve. In cases where grass planting followed, the effects will probably be more lasting than in cases where the land remains undisturbed. The whole question as applied to Brooloo State Forest in particular is receiving careful consideration, as unless eradication is followed up constantly the initial expenditure appears to be wasted. Other weeds and burns absorbed £3 4s. 9d."

On R. 256 (Imbil area) £8 was spent in lantana eradication, and on the Kandanga area of the same reserve similar work cost £34. The forest gangs on R. 287 Woowoonga, on the Kilkivan reservations, and on R. 700 (Gympie and Curra) also destroyed scattered stands of this pest.

On Goodnight Scrub State Forest the resident staff of two was largely occupied during the half-year in the work of eradicating prickly-pear and lantana and in freeing Pine stands from vines. This work was carried on in all parts of the Reserve.

In the Dalby district an area of 500 acres was cleared of prickly-pear during the report period. Of this area, 400 acres were on R. 4 (Braemar State Forest) and 100 acres on R. 337 (Yeulba State Forest). Scattered pear was also dealt with on Nudley State Forest (R. 92). The total cost of the year's operations was £295 18s. 4d. At the close of the year 1,150 acres of pear country had been treated in this district.

On the Bunya Mountains and Pidna State Forests (Benarkin district) patches of prickly-pear were destroyed, and on R. 283 (Benarkin) scattered lantana growths on the north end were dealt with.

BIRDS AND INSECTS.

Observations of birds and insects were maintained. A number of specimens of insects damaging timber were secured by forest officers and the Government Entomologist for identification.

Measures for repressing our most serious insect enemy—the Red Cedar Twig-Borer (*Hypsipyla robusta*)—were under consideration during the half-year, but it cannot be said that a solution of the problem has yet been reached. The investigation was in the direction of discovering insect and bird enemies of the borer, and, *inter alia*, it was found that the Rifle Bird and an insect of the *Halticella* species were useful in this direction. These studies are being pursued with a view to ascertaining if any further developments are possible.

FOREST SURVEY AND ENGINEERING.

At the end of the half-yearly period eight fully equipped forest survey camps were operating, mainly engaged on intensive feature and assessment surveys of State Forests and Timber Reserves.

In North Queensland, owing to the vast areas of unknown country to be dealt with, operations took the direction only of rapid feature and assessment surveys, the comprehensive valuation and engineering inspections being deferred until the present work in hand is more complete. Two camps were engaged in North Queensland during the period.

Approximately 408,000 acres of forest country were dealt with in the State.

FOREST SURVEYS FOR HALF-YEAR ENDING 31ST DECEMBER, 1921.

Class 1.—Exploratory or Investigation Surveys of Vacant Crown Lands.

		Acres.
20v, 29v, 30v, 31v, and 36v	Charlestown	9,073
46v and 47v	Taromeo	360
27	Degalgil	200
R. 10 and Crown Land	Forrest (Injune State Forest)	50,000
Crown Land	Dinden, Grafton, Cairns	38,450
Proposed National Park R. 167	Cairns	3,213
S.F. 99	San José	1,600
R. 71	Moultree and Manasseh	25,600
Crown Land	Moultree	10,000
102	Moorlands and Clyde	128,000
		272,496

Class 2.—Feature and Assessment Surveys of Timber Reserves and Vacant Crown Lands.

		Acres.
R. 234	Tueheko	2,530
R. 30 (part)	Garioch	9,000
R. 32, R. 42	Garioch, Mowbray (proceeding)	15,800
R. 315, R. 31	Dulanban, Smithfield, Garioch	28,000
R. 274	Cambroon, Conondale	17,000
Portion 32v	Charlestown	2,560
Portion 7v	Cooyar	1,240
91 and 4v	Emu Creek	1,012
		77,142

Class 3.—Valuation and Organisation Surveys of State Forests.

		Acres.
R. 393	Woondum (proceeding)	6,200
R. 235	Amamoor (Compartment Bdys.)	..
R. 249	Maroochy	1,730
R. 368	Maroochy (proceeding)	1,040
R. 283	Colinton and Taromeo	5,600
R. 67 (part)	Bulburin and Thornhill (proceeding)	29,900
R. 399	Emu Vale (proceeding)	13,500
		57,970

BRISBANE DISTRICT.

A class 3 survey of R. 249 State Forest, parish of Maroochy (area 1,730 acres), was completed. This proved difficult survey country, boulders and moving shale combined with dense scrub and lantana, together with there being no grass for horses on this reserve, made expeditious survey work an impossibility. The camp was then shifted to R. 368 State Forest, same parish (area 1,040 acres), where it is at present engaged on a class 3 survey.

Total work done for half-year is as follows:—

	Miles.	Chains.
<i>R. 249, Parish of Maroochy—</i>		
Theodolite and chain	12	40
Compass and chain	4	8
Levelling	2	0
Compass and step	3	45
Strip survey	10	20
Exploratory investigation for tramline	6	0
<i>R. 368, Parish of Maroochy—</i>		
Theodolite and chain	1	54
Compass and chain	7	18
Exploratory investigation	6	20

The survey of this State Forest was commenced in the wet season, and the Forest Overseer in charge reports loss of time in field work on this account.

In the Ipswich District, the camp was still operating on State Forest R. 283, parishes of Colinton and Taromeo, at the end of the half-yearly report period. An intensive feature assessment and contour survey is being carried out on that part of the State Forest to the north of the Brisbane Valley branch railway.

Details of operations are as follows:—

	Miles.	Chains.
Theodolite and chain	13	40
Compass and chain	45	0
Strip survey	67	40
Levels	2	60

Fifty compartments of approximately 100 acres each were laid out on the ground, making a total of seventy-one on the area.

A class 2 survey (inspection and estimate) was also made of Portion 32v, Parish of Charlestown (area 2,560 acres), Portion 7v, Cooyar (area 1,240 acres), and Portions 91 and 4v, Parish of Emu Creek (area 1,012 acres). In addition, a cursory inspection and timber cruise (class 1) were also made of Portions 20v, 29v, 30v, 31v, and 36, Charlestown (area 9,073 acres) and Portions 46v and 47v, Taromeo (area 360 acres).

The Deputy Forester in charge reports that, despite the scarcity of rain during the earlier part of six months, survey work has progressed satisfactorily and that, now the rain has come during Christmas week, a plentiful supply of water is ensured for the coming half-year.

GYMPIE DISTRICT.

Survey operations on R. 393 Timber Reserve, Parish of Woondum, have been continued throughout the half-year, and a class 3 survey, including land, engineering, and timber assessment surveys, is well in hand. By the end of the year 20 miles of theodolite primary and secondary control traverses had been completed, which further divided the Reserve into five more logging areas, ranging from 600 to 1,100 acres. The area is now ready for the details of a contour and assessment survey.

R. 393 has proved a difficult reserve to work, due to the extreme roughness of the country traversed, the absence of vehicular roads and grazing area for horses. The first three months of the half-year were exceptionally wet, and outdoor work was hampered considerably. On the 1st August, control of survey camp was transferred to Foreman Cole who has subsequently carried out the field work, with accuracy and despatch.

A class 2 survey was made of State Forest R. 234, Parish of Tuchekoi, compass and chain only being used on this survey. An area of 2,530 acres was dealt with, which was subdivided into six compartments involving 20 miles of compass traverse. This reserve was easily dealt with, being of an undulating nature and easy of access.

On R. 235, Parish of Amamoor, there was carried out a compartment survey, these boundaries being only designed by the previous class 3 survey of this reserve.

Whilst operating on R. 235, the camp completed a road survey and estimate to Tristania Logging Area (R. 124 Glastonbury), which will also tap R. 256 Kandanga; a small resumption on Portion 1319 Kandanga only being necessary, the estimated cost of the new route being £48.

Details of the work on R. 235 and road survey are as follows:—

	Miles.	Chains.
Theodolite and chain	7	43
Compass and chain	18	12
Old survey lines re-run	4	30
Compass and step	4	16
Exploratory investigation	28	0

In August, there was completed a rough feature and timber estimate of that part of Reserve 274, Parish of Conondale, drained by the Yabba Creek and its tributaries, including the Yabba Goldfield, embracing an area of approximately 17,000 acres. Estimates of hardwoods on the land dealt with show approximately 42,000,000 superficial feet of millable timber, in addition to other species.

BUNDABERG DISTRICT.

The Forest Survey Camp at Many Peaks is still operating on the northern half of R. 67 State Forest, Parishes of Bulburin and Thornhill. Cabbage Tree Creek Logging Area (1,030 acres) was the only logging area completed on this State Forest during the half year. Surround surveys were made of the following logging areas:—

- Lefroy's logging area,
- Booroon logging area,
- Four-Mile Creek logging area.

Part of the strip assessment surveys of the last-mentioned areas have been made. Surround survey has been completed of one large area, which will be subsequently divided into four separate logging areas.

Details of work performed :—

	Miles.	Chains
Theodolite and chain	20	51
Strip survey	15	66
Exploratory investigation	12	0

Wet weather was responsible for the loss of eighteen working days. The presence of a dense impenetrable growth of lantana in the south-eastern corner of the State Forest considerably hampered survey operations of this camp.

An inspection of about 200 acres of jungle north-west of Portion 27 Degalgil was also made, and was found to contain roughly 2,000,000 superficial feet of Hoop Pine.

WARWICK DISTRICT.

A total area of 3,788 acres was completed on R. 399 Timber Reserve, Parish of Emu Vale, for report period being the northern section of the Reserve. This Reserve has proved very difficult to operate in, the use of ropes having to be resorted to in the vicinity of Mount Huntley and Panorama Point.

During the half year considerable time was lost through excessive rainfall, the total number of points for the half year being 4,130.

Details of chainage on this Reserve are :—

	Miles.	Chains.
Theodolite and chain	22	28
Compass and chain	0	45
Levelling	5	58

Towards the end of December, an estimate of War Service Homes properties in the Killarney district was commenced, and at the end of the half-year 1 mile 69 chains of strip survey was completed.

ROMA DISTRICT.

An exploratory survey of State Forest R. 10, parish of Forrest (Injune), and a large area to the north held as Westgrove Holding was intermittently engaged in during the period. A logging area consists of seven blocks of 139 acres and forty-six of 102 acres.

Compass and chain traverse, 53 miles, which includes survey of forest paddock 122 chains, survey of mill site 25 chains, and fence traverse 421 chains. In addition to the above, a compass and chain traverse was made of the Injune-Baffle Creek road, a distance of 24½ miles.

ATHERTON DISTRICT.

Two survey camps are still operating in Northern Queensland.

Camp No. 1 completed a class 2 survey of part of R. 30 Timber Reserve, Parish of Garioch, comprising an area of approximately 9,000 acres. This area is situated about 10 miles north of Mount Molloy and 12 miles south-west from Port Douglas.

A rough inspection of the western portion of the reserve was carried out to ascertain if the country warranted being held for Forestry purposes.

Details of operations—

	Miles.	Chains.
Compass and chain	20	56
Roadmaking	2	0

Camp No. 2, has been engaged on the class 2 survey of proposed State Forest in the parishes of Dulanban (Timber Reserve R. 315) and Garioch (Timber Reserve R. 31), area about 28,000 acres. Timber Reserves R. 42 Mowbray and 32 Garioch (area about 15,800 acres) have also been dealt with. Main work consisted of running coastal scrub edge and traversing creeks. This work was carried out in rough and rugged cycloned country heavily grown over with brush and stinging tree, necessitating the use of flying camps for all work.

Work run by this camp includes—

	Miles.	Chains.
Compass and chain	32	46
Compass and step	3	58
Exploratory investigation	20	0

Towards the end of the half-year period there was completed a topographical survey of an area of approximately 41,500 acres in the Parishes of Dinden, Cairns, and Grafton. A route has also been located for the proposed main road between Cairns and Mareeba, and the question of general access to this stretch of timber country was given close consideration, with the result that certain recommendations have been made.

ROCKHAMPTON, EMERALD, CLERMONT, AND ST. LAWRENCE DISTRICTS.

The surveys undertaken in these districts have been entirely exploratory—firstly, with a view to the location and usefulness of inspected lands; secondly, as a general inspection of Timber Reserves and State Forests not previously dealt with; and thirdly, to ascertain the possibilities as Timber Reserves of other Crown Lands. Now that the North Coast Railway has become a *fait accompli* to Mackay, the St. Lawrence district has become an integral addition and has received attention.

ROCKHAMPTON DISTRICT.

An inspection of S.F. 99, Parish of San José (area 1,600 acres) shows a good stand of *Eucalyptus citriodora* in pole growth. Although the reserve is rough, steep, broken, and stony, and has no permanent water, its proximity to the railway and value of pole growth warrants its retention as a State Forest.

Timber Reserve R. 71 Moultrie and Manasseh, and adjoining Crown lands, were inspected. The area is situated about 36 miles from Goowarra (Central Railway), and is a low-level tableland, irregular and broken on its eastern face. It carries a stunted growth of Ironbark, Stringybark, &c., and *Eucalyptus citriodora*. The whole is valuable for mill timber. Pole growth is satisfactory on the lower reaches (Areas R. 71, 25,600 acres; other lands, about 10,000 acres).

EMERALD DISTRICT.

Extensive areas in this district were inspected with a view to the dedication of two portions as Timber Reserves.

Other Crown lands were inspected to ascertain the value of reported timber stands of *Eucalyptus citriodora*.

CLERMONT DISTRICT.

Three inspections were made of Timber Reserve R. 102, parishes of Moorlands and Clyde (area 128,000 acres).

ST. LAWRENCE DISTRICT.

A general inspection of the whole of this district was made. No timber wealth was discovered, the general stand being of a very stunted nature. Apart from the inferior growth of the various stands, want of road access to the existing railway system totally debars their economic use.

FOREST ORGANISATION.

The business of timber-farming cannot be properly nor profitably carried on until effective means are to hand both for the harvesting of the standing crop and the establishment of the new crop. Roads, water, and grass must be provided, and employees on the timber farm must be furnished with accommodation. These necessities come under the heading of forest organisation, which is the forester's first task in the forests and is preliminary to all other operations.

During the year the work of organisation was pushed on with on the various areas.

ROADS.

On Brooloo State Forest about 5 miles of new roads were constructed at a cost of £291 4s. 4s., whilst 7 acres of scrub along the site of a new road were felled at a cost of £10 8s. 4d. £310 12s. 9d. was spent in maintenance and improvement of roads on the State Forest.

Maintenance of roads on the Timber Reserve R. 256 Imbil cost £2 4s. 11d.¹

On Timber Reserve R. 256 Kandanga 32 chains of road were formed and made trafficable, at a cost of £89 13s. 8d. Maintenance and improvement of existing roads on the reserve cost £67 13s.

One hundred and seventy-two chains of road were constructed on Reserve 119 Glastonbury, at a cost of £233 11s. 3d.

Existing roads on Reserve 235 Amamoor were improved and maintained, expenditure amounting to £244 3s. 5d.

On State Forest 502 Gympie £43 3s. 10d. was expended on the improvement and maintenance of existing roads.

On Sinai State Forest (R. 220 Kilkivan) 6 chains of road were constructed at a cost of £11 17s. 6d.

Repairs to a road on R. 221 Kilkivan cost £8 7s. 9d.

On Fraser Island 43 chains of road were completed, and 2 miles 26 chains cleared and grubbed, the expenditure being £434 13s. 6d. £6 12s. 9d. was spent on maintaining the existing roads on the Island.

In the Dalby district about 25 chains of road were cleared on State Forest 337 Yeulba, at a cost of £7 8s. 6d.

Road-construction work in the Benarkin district resulted in the completion of 118 chains of road on S.F. 283 Colinton, at a cost of £73 18s. 10d., and the part construction of a wagon road on State Forest 379 Cooyar. Repairs to roads in the Parish of Taromeo were also effected.

FOREST PADDOCKS.

In the Gympie district, forest paddocks covering an area of 625 acres were established at a cost of £537 7s. 7d. Of these, the principal are at R. 256 Kandanga (192 acres), R. 119 Glastonbury (280 acres), R. 220 Kilkivan (42 acres), R. 502 Gympie (40 acres), R. 355 Kilkivan (3 acres), and R. 135 (two paddocks totalling 68 acres).

There are in prospect about five further paddocks on R. 135 Brooloo, and others in various parts of the Gympie district. The provision of secure grass paddocks has been fully justified, not as a convenience but as an absolute necessity. From a financial standpoint they are, in addition, a first-class investment, returning an ample rate of interest.

A small amount, viz., £25 10s. 10d., was spent in maintenance of paddocks, this being mostly for fence repairs, burning off, and, to a lesser extent, rebrushing.

Agistment collected during the half year in this district amounted to £328 2s. 9d.

On Fraser Island improvement operations were carried out on existing forest paddocks at a cost of £18 18s. 3d. On these paddocks sowings of several grasses are being made on experimental lines. It is proposed that any found suitable will be used to stock prospective paddocks as the natural grasses are found insufficient.

Five forest paddocks in the Benarkin district were incomplete at the close of the year. Agistment of those previously existing yielded £105 5s. 4d. for the half year.

Agistment of forest paddocks in the Dalby district for the half year produced £25 13s.

HOUSING.

In the Gympie district the expenditure on construction of residences and bunk-houses amounted to £663 10s. 6d. Two residences and four bunk-houses (also a tool-shed and a blacksmith's shop) were completed during the half year. Maintenance and improvement costs amounted to £77 13s. 3d.

During the report period four residences reached completion on Fraser Island, the cost being £320 19s. 7d. Maintenance of the Fraser Island buildings cost £27 6s. 7d. during the half year.

Two overseers' dwellings were in course of construction on the Nudley and Injune State Forests, in the Dalby district, at the end of the year.

FOREST PRODUCTS BUREAU.

One of the most interesting tasks the forester is called upon to undertake, and withal a very important one, is the survey of the at-present-unused forest species and minor products with the object of ascertaining what commercial possibilities they may possess. The work is interesting, since in Queensland the field is more or less unexplored, and important because upon the close utilisation of the forest products depends in a large measure the success of the practice of forestry.

The Forest Products Bureau of the Forest Service, which comprises the showrooms or Advertising Section, and the Investigation or Technical Section, was busily engaged during the half year in placing new woods before the public in guises illustrating their usefulness, and in examining, testing, and classifying timbers and minor products.

In the absence of a properly equipped Forest Products Laboratory the material for the tests of timbers and for the chemical examination of the minor products was supplied to the University and the Chemist of the Department of Agriculture. A great deal of classifying and indexing was, however, done in the Forest Service's own workroom.

The work of the Forest Products Showrooms during the half year embraced, *inter alia*, displays of manufactured articles, timbers, and minor forest products at the Melbourne Royal Show and Brisbane Exhibition. These displays had an educative value, and keen interest was evinced by the large numbers of people who viewed them. The Brisbane display was visited by Their Excellencies the Governor-General (Lord Forster), and the Governor of Queensland (Sir Matthew Nathan).

The permanent Showrooms were transferred from Adelaide Street to a site in the Executive Buildings. These attracted many visitors from all States of the Commonwealth and from England, Canada, United States of America, Mexico, Philippine Islands, Papua, and Fiji.

A large number of samples of Queensland timbers were distributed and sold during the half year.

As a result of the operations of the Showrooms the demand for some of the previously-unused scrubwoods, notably Rose Mahogany, was much more marked at the close of the year.

The Investigative Section of the Forests Products Bureau was occupied chiefly during the semi-annual period in studies of wood structure, and over one thousand specimens were indexed and classified. A large number of specimens were held for examination also at the end of the year.

The Forest Service Herbarium was catalogued, extended, and rearranged. Over three hundred identifications were made by the Government Botanist for the Forest Service during the half year. The Assistant Government Botanist (Mr. Francis) also visited the Brooloo State Forest and the Traveston Forest Survey Camp and obtained a quantity of botanical material.

The Forest Service made approximately two hundred identifications of timber from samples supplied by the general public and by the Showrooms.

Tests of various barks were made during the half year. That of Brigalow (*Acacia harpophylla*) was tested for tannin, but was disappointing, the best sample received giving a percentage of 16.14 per cent. of tannins and 14.1 per cent. of non-tannins. A sample of this bark was sent south at the request of a Melbourne firm, but did not prove suitable for their requirements.

Bark of *Acacia decurrens* var. *pauciglandulosa* was also tested for tanning purposes. This returned a percentage of 24.53 per cent. of tannins and 7.95 per cent. of non-tannins.

Toward the close of the year local tanners were circularised regarding their supplies of tanning material, with the object of obtaining a census of local barks used and placing further supplies. Several replies which indicated a limited use of local barks, were to hand by the end of the year.

A sample of bark of *Sterculia diversifolia* was sent to Japan for trial for fibres, but results were not received at the close of the year. *Cupania anacardioides* bark was tested for saponin content, but proved inferior to its congeners *Cupania pseudorhus* and *Cupania xylocarpa*. It is anticipated that fruit of *Cupania pseudorhus* will yield a greater quantity of saponin than the bark, and further tests are in view.

Extract of *Hemodorum tenuifolium* was tried for dyeing purposes, but the results were not satisfactory, the costs being high and the colours obtained not clear.

Samples of *Schizomeria ovata*, *Casuarina suberosa*, *Callitris glauca*, *Cinnamomum camphora*, *Tarrietia argyrodendron*, *Sterculia discolor*, *Tristania conferta*, *Casuarina torulosa*, and *Angophora subvelutina* were under trial for paper-pulping at the close of the report period.

A quantity of gum from *Evodia accedens* was sent to the University for testing; results were not to hand at the end of the year.

The question of utilization of Grass tree (*Xanthorrhæa*) gum was gone into, and it is hoped at a later date to place a quantity of the better grades on the market.

THE FOREST AND TIMBER INDUSTRIES.

The timber trade recovered to some extent from the decided depression of the first half of the calendar year. In the aggregate the State's timber cut for the half year was nearly 3,000,000 super. feet behind the average for the prior three years. The discrepancy was in Hoop and Bunya Pine, only 13,567,263 super. feet being cut in the six months, against 33,887,627 super. feet for the twelve months of 1920-21 and 43,113,383 super. feet for 1919-20. The reasons were the continued dullness in the building trade, both local and in the Southern States, and the substitution of cheap imported softwoods in the place of Queensland Pine for boxes, crates, and cheap building.

More Kauri Pine was sold by the Forest Service during the period than for the previous year, and five times more than was sold during 1919-20. Sales of Cypress Pine logs also increased during the half year. Sales of other softwoods and of hardwoods were about on a par with business for previous half year. Railway timber operations were very slack during the period.

The following statements give details of Forest Service log cut from 1919 to 1921 :—

FOREST SERVICE TIMBER CUT—MILL LOGS.

	1919.	1919-20.	1920-21.	June to December, 1921.
	Superficial feet.	Superficial feet.	Superficial feet.	Superficial feet.
Hoop and Bunya logs and tops ..	40,567,959	43,113,383	33,887,627	13,567,263
Kauri	663,308	339,111	1,333,175	1,553,530
Cypress Pine	741,336	846,229	1,578,396	1,117,841
Other softwoods	962,111	931,164	1,501,576	710,088
Hardwoods	4,998,033	4,939,610	7,600,189	3,245,462
Grand Total	47,932,747	50,169,497	45,900,963	20,194,184

RAILWAY, MINING, AND MISCELLANEOUS.

	1919.	1919-20.	1920-21.	June to December, 1921.
Sleepers	253,720 pieces	181,316 pieces	469,379 pieces	35,000 pieces
Posts, rails, and palings	85,398 pieces	97,285 pieces	90,615 pieces	33,562 pieces
Piles, girders, corbels, and sills	228,509 l. ft.	434,559 l. ft.	95,982 l. ft.	10,868½ l. ft.
Headstocks, transoms, and crossings			944,814 s. ft.	78,022 s. ft.
Telegraph poles and house blocks	112,151 l. ft.	126,116 l. ft.	215,864 l. ft.	55,209 l. ft.
Mining and miscellaneous	702,797 l. ft.	692,727 l. ft.	484,242 l. ft.	18,478 l. ft.
Miscellaneous			102,119 s. ft.	2,434 s. ft.
Fuel	44,059 tons	49,333 tons	64,532 tons	33,790½ tons
Sandalwood	498 tons	546 tons	388 tons	247 tons
Mangrove	18 tons	18 tons	54 tons	..
Guano	139 tons	139 tons	..	..
Foam bark	4 tons	..	13 cwt.	..
Ebonywood .. .. .	..	..	3 tons 15 cwt.	20 lb. 4
Sand and gravel	13 loads	..	37 loads	..
Hoop Pine gum	90 lb.	..	..	..
Charcoal .. .. .	..	..	1,222 bags	6,845 bags

SALES FOR RESPECTIVE DISTRICTS.

	Hoop and Bunya Pine.	Kauri Pine.	Cypress Pine.	Cabinet Woods.	Hardwoods.	Scrubwoods.
Atherton .. .. .	..	555,463	..	592,185	64,487	..
Bowen	19,232	..	..	..	5,501	..
Brisbane	69,585	..	..	..	56,766	..
Bundaberg	714,853	..	..	2,009	98,930	..
Cairns .. .. .	..	998,067	..	37,852	166,359	2,889
Charters Towers .. .. .	..	..	..	..	1,676	..
Clermont .. .. .	..	..	..	..	101,083	..
Charleville .. .. .	..	..	5,781	..	..	..
Cooktown .. .. .	..	..	..	1,900	4,793	..
Dalby	70,126	..	203,018	..	72,010	..
Gayndah .. .. .	..	..	..	..	23,144	..
Gladstone	166,902	..	..	..	180,548	..
Goondiwindi .. .. .	..	..	51,801	..	13,715	..
Gympie	3,406,677	..	..	8,278	160,453	49,135
Inglewood .. .. .	..	..	315,085	..	26,243	..
Ingham .. .. .	..	..	..	4,645	..	..
Ipswich	2,499,851	..	..	..	346,046	10,089
Mackay .. .. .	..	..	..	..	12,093	..
Maryborough	239,732	..	..	..	1,395,781	..
Nanango	6,297,907	..	..	2,006	5,237	..
Rockhampton	29,723	..	..	..	51,123	..
Roma .. .. .	..	..	397,282	..	420,705	..
Springsure .. .. .	..	..	29,484	..	..	..
St. George .. .. .	..	..	26,813	..	..	..
Stanthorpe .. .. .	..	..	23,859	..	..	..
Taroom .. .. .	..	..	27,045	..	..	..
Tambo .. .. .	..	..	18,000	..	4,672	..
Toowoomba	25,811	..	19,673	..	34,097	..
Townsville	26,864	..	..	..	..	..
Totals	13,567,263	1,553,530	1,117,841	647,975	3,245,462	62,113

The Acting District Forester at Atherton writes :—

“From June until December the weather has been abnormally wet. Atherton had only one month during which rain did not fall, and Ravenshoe, where most of our timber was being hauled, experienced an average of one wet day in three throughout the six months. This made operations throughout the district somewhat patchy during the half year, and is a warning that, when we are handling our own resources on our Timber Reserves and State Forests, to keep a continuous supply to rail will require mechanical means of transport, independent of the workable roads.

"Though the total revenue for the half year looks small on paper, it is more than for any previous year in the history of the district, and none but those who helped to get the timber to market will ever realise the effort that that amount of revenue has cost.

"Theoretically, it should be an easy matter to supply a Southern order for log timber at short notice. In actual practice the contract requires constant watchfulness until the purchasing firm has met the bank draft."

Following is an extract from the report of the Deputy Forester at Benarkin :—

"The slump which set in at the end of last year continued, so far as Benarkin and Blackbutt are concerned, until 31st December, 1921. On the south side of Reserve 283 only two sales of damaged pine were made, and one small sale of hardwood. On the north side 965,909 superficial feet of Pine and 219,096 superficial feet of hardwood were supplied to the Forest Service Mill at Taromeo by the Forest Service teams.

"On Reserve 257 it was not until 17th November, 1921, that the first sale took place, and by 31st December, 1921, 97,262 superficial feet of pine had been measured.

"Timber operations on Reserve 289 resulted in removal of 4,004,670 superficial feet of Pine for the half year. No other sales took place at Yarraman. One direct haulage contract is in operation at Yarraman. No work was done under direct haulage from the Bunya Mountains until October, and only about 50,000 superficial feet were sold by the end of the year. At Nanango operations did not start until August."

The District Forester at Gympie, reports :—

"The market brightened considerably towards the close of the year, and inquiries were plentiful. Many applicants were willing to contract for purchase of up to a million superficial feet of Pine, thus indicating that in their opinion, at least, the rot of last year has been definitely stopped.

"For the quarter ending 30th September, practically no inquiries were received, and our sales consisted of odd trucks to Brisbane firms. The prospects for 1922 are decidedly bright."

The timber market in Rockhampton remained dull during the period under review, as the following noting by the Deputy Forester shows :—

"The closure of the Mount Morgan mines and sawmill throughout 1921 and the general depression throughout the districts consequent upon the fall in stock values affected very seriously the general timber trade.

"The Rockhampton District recorded two small sales of Hoop Pine at stump, situated in isolated and difficult positions. The main source of timber revenue has been sales at stump of telegraph poles to the Postmaster-General's Department—that department availed itself of the enforced idleness of the teamsters usually employed in delivery of mining props to Mount Morgan, and was enabled to obtain lower quotes for delivery than at any previous date.

"The scantling and sleeper mill at Birimban previously in the hands of the Railway Department has been reorganised under the Forest Service Sawmills policy, but owing to the general depression in the timber trade of the West it was not considered advisable to commence milling operations. The local market for sawn lumber at Blair Athol, Clermont, Emerald, and surrounding districts died completely, chiefly on account of the almost-total closure of coal mines at Blair Athol and the depression in pastoral pursuits consequent on the great fall in stock values. At Birimban thirteen men who has been awaiting the opening of Forest Service Sawmill received employment in respect to squared railway material. The small sawmills operating in the Clermont and Emerald districts maintained the supply of local and Western needs at greatly reduced prices, hardwood in the rough being delivered at nearest railway vantage, or at sites within 10 to 15 miles' haulage, at 36s. per hundred superficial feet."

FOREST SERVICE SAWMILLS.

The sawn timber trade remained in a very depressed condition during the half year. Despite this fact the energies of the Manager of the Brisbane Timber Yard and his staff were responsible for an increase of £6,000 on the sales of the corresponding period for the previous year. Timber was disposed of to the value of £50,185. The selling price of sawn timber was 15 per cent. lower than for the half year ended December, 1920. Sales of B and C classes were very restricted, even at the heavily cut rates. The Forest Service Sawmills, however, were kept fully employed, although many private sawmills had to close for long periods.

The closure of the Brisbane hardwood mill has been justified by later experience. Supplies of sawn hardwood *ex Taromeo* are now augmented by purchase from country mills.

The position with respect to the Taromeo mill has improved. In spite of the fact that sawn hardwood could be purchased by the Forest Service Timber-yards from country mills at reduced prices compared with the previous year, Taromeo mill was able to justify its existence in the open field.

Owing to bad location of the Silkwood mill, which renders it necessary to ship from a port which can only accommodate vessels of small tonnage, Brisbane market cannot be satisfactorily supplied. Attention is confined almost wholly to local business. The question of removal of mill to a more suitable site is being seriously considered.

Owing to the unexpected slump of the timber business in the West, the Injune mill has not yet redeemed its promise. The usual difficulties in commencing a new mill have been experienced. While holding its own, the mill has been the means of supplying cheap timber to Mount Hutton Soldiers' Settlement and to western towns. With the anticipated revival of trade the mill should be in a good position.

Reconstruction of the Birimgan sleeper mill was complete at the end of the half year, but operations had not commenced.

The net profits of the mills and timber-yards at the end of the half year gave promise of buoyancy.

FINANCIAL.

EXPENDITURE.

For the six months under review the gross expenditure of the Forest Service, excluding sawmills, was £49,890. Of this amount the Timber Contracts Office absorbed £10,052, whilst Departmental expenditure amounted to £39,838.

Reimbursement was made to the extent of £1,990 by Departmental refunds, and £2,852 on account of the Timber Contracts Office, leaving a net expenditure of £37,848.

Queensland Forest Service-Sawmills spent some £50,316, making a grand total of £100,206 absorbed by Forest Service activities.

The various houses and bunk-huts were well let during the year, averaging a fair return.

Paddocks have been largely availed of by teamsters logging Forest Service timber, and have proved an unqualified success, large percentages being obtained in the majority of cases.

The various roads by way of reduced haulage rates are steadily paying for themselves.

A strict stocktaking, under date 31st December, 1921, revealed assets in the shape of buildings, tools, stock teams, machinery, &c. (but excluding paddocks, wells, &c.), to the extent of £30,000.

The following statement shows the allocation of expenditure from January to June, and July to December, 1921:—

The increase in the proportion of overhead costs is mainly accounted for by the retrenchment which took place amongst the workmen consequent on the failure of the Commonwealth Government to provide loan money for Forestry.

EXPENDITURE FOR THE PERIOD JANUARY-JUNE, 1921, COMPARED WITH PERIOD JULY-DECEMBER, 1921.

	JANUARY-JUNE, 1921.			TOTAL.	Per-centage.	JULY-DECEMBER, 1921.			TOTAL.	Per-centage.
	Revenue.	Loan.	Trust.			Revenue.	Loan.	Trust.		
OVERHEAD EXPENSES—	£	£	£	£		£	£	£	£	
Salaries	7,075	..	..	7,075	..	7,426	..	..	7,426	..
Administration ..	..	6,440	..	6,440	..	..	3,222	..	3,222	..
Travelling and Inci- dentals	4,319	..	..	4,319	..	3,823	..	..	3,823	..
Extra living to Officers	..	..	..	..	..	188	..	..	188	..
Postage and Telegrams	..	..	..	..	..	346	..	..	346	..
Allowances	668	..	..	668	..	..	..	..	..	..
	12,062	6,440	..	18,502	24.7	11,783	3,222	..	15,005	30.1
CAPITAL IMPROVEMENT—										
Forest Organisation ..	4,279	30,071	..	34,350	..	4,775	16,492	..	21,267	..
Roads to Crown Tim- ber Areas	1,739	..	..	1,739	..	503	..	..	503	..
Repurchase of Timber Lands	2,223	..	..	2,223	..	..	..	..	..	..
	8,241	30,071	..	38,312	50.8	5,278	16,492	..	21,770	43.6
TRADING—										
Harvesting and Mar- keting	8,616	..	..	8,616	..	3,063	..	..	3,063	..
Lumbering (Hewn, Split, Pole Timber)	..	..	9,869	9,869	..	..	..	10,052	10,052	..
	8,616	..	9,869	18,485	24.5	3,063	..	10,052	13,115	26.3
				75,299	100				49,890	100

REVENUE.

In my last Annual Report the forecasted revenue attendant upon Forest Service operations for the ensuing annual period—viz., for the financial year 1921-2—was shown at £205,000, equivalent to £102,500 for the semi-annual period now under review.

This anticipation has been more than realised, the sum of £110,117 having been gained as Forest Service revenue during the six months.

The forecast (proportionate figures given) and the actual results are contrasted as follows:—

Head of Receipt.	Forecasted.	Realised.
	£	£
Sales of logs and raw material	50,000	56,675
Timber contracts—Office recoupments	7,500	2,852
Sawn timber sales, &c.	45,000	50,590
Total	£102,500	£110,117

The log sales revenue of £56,675 did not average up to the previous year's figures—viz., £157,065—these latter figures constituting a record. The drop in the figures is, of course, due to the depression which existed in the timber market during the whole of the report period; under the circumstances to have more than realised anticipations is satisfactory, particularly as during this six months the slump in the timber market was at its worst. The first half-year having exceeded its quota of the estimate by £6,700, the full financial year should return a good advance on the figures anticipated. The failure of Timber Contracts Office recoupments to reach the expected mark was due to the quietness in railway construction operations. The balance of the amount is held as stocks.

Of the revenue obtained from sales of log timber the pine forests of the Southern Division were responsible for 80 per cent., the Northern Division 15 per cent., while the Central Division, where the scanty hardwood forests which originally existed have been ruthlessly treated in the past, supplied only 5 per cent. of the State total.

Atherton and Cairns both showed increases in revenue, the former 150 per cent., and the latter 97 per cent.

Decreases were recorded in practically all other centres, such as Brisbane 50 per cent. Nanango 24 per cent., Gympie 37 per cent., Ipswich 34 per cent., Gladstone 45 per cent. Maryborough 25 per cent., and Toowoomba 91 per cent.

The surplus of Forest Service revenue over expenditure (exclusive of sawmills and Timber Contracts Office figures) was £18,827 for the half year. The total surplus on forestry operations since 1904 is £750,205.

ADMINISTRATIVE MATTERS.

ACCOMMODATION.

During the report period new accommodation was found the Forest Service in the Executive Buildings, and the staff, part of which had previously been stationed in Adelaide street, was brought under one roof. The new accommodation, on the whole, has been satisfactory, and its provision has removed many of the irritating delays and difficulties previously existing. The William street room was converted from a lumber room into a workroom and wood laboratory.

At Gympie, new offices in the main street were taken over by the Forest Service staff; and at Bundaberg and Atherton office accommodation was also improved considerably.

An office in the Court House at Inglewood was also provided for the use of the Forest Overseer.

ORGANISATION OF STAFF.

Towards the end of the year the organisation of Forestry work in the Central District of Queensland came up for consideration, and as a result the new Forestry District of Gladstone was formed. From this centre will be maintained the timber sales management of the Central District, including the Land Agents' Districts of Gladstone, Rockhampton, Clermont, Emerald, and Springsure, and also the important Hoop Pine reserves of the Boyne Valley, which are the most northerly areas of any note carrying this valuable species.

Several smaller district adjustments were made, including the placing of the Gallangowan and Manumbar reservations within the Gympie District, into which under present circumstances the timber obtained from these areas will gravitate.