

ANNUAL REPORT

OF THE

DIRECTOR OF FORESTS.

Department of Public Lands,
Forests Office,

Brisbane, 16th July, 1913.

SIR,—I have the honour to submit the Annual Report for the twelve months ending 31st December, 1912.

TEMPORARY TIMBER RESERVES.

The area temporarily reserved at the end of the year was 3,211,855 acres, an increase of 343,518 acres over the figures for the previous year. New areas to the extent of 492,989 acres were proclaimed, while the total reservations cancelled amounted to 125,655 acres. The apparent discrepancy between the excess of new areas over cancelled areas and the total gain for the year is due to the recomputation of existing reserves and adjustments on account of the exact location of boundaries. About 470,000 acres were added to the reserves in the Cairns, Port Douglas, and Cooktown districts, but these areas are of far less importance than their size would indicate, large reservations being necessary under existing conditions in the less accessible localities of the North to secure a comparatively small quantity of timber.

STATE FORESTS AND NATIONAL PARKS.

No new national parks were proclaimed during the year, but the area of State forests was increased by the permanent reservation in the Bundaberg district of 36,500 acres of rough country, a fair proportion of which is well stocked with hoop pine and other scrub woods of minor importance.

The total area now permanently reserved is 881,682 acres, a feature survey of the Canal Creek State forest having disclosed the fact that the area is 1,400 acres less than was supposed.

FOREST INSPECTIONS.

The systematic examination of the timber reserves in the Southern districts has been proceeded with steadily, much useful and interesting information having been compiled. As the figures obtained shed considerable light on the nature and extent of our scattered timber resources, a summary of the results is given.

The total area examined is approximately 98,950 acres, of which 7,600 acres are classed as quite unsuited to the growth of indigenous timbers. About 30,600 acres in the Maryborough district consist of open hardwood country, from which almost all the milling timber has been removed and which offer very little inducement for the expenditure of money on improvement operations. Another area of 16,150 acres is estimated to carry 40,000,000 superficial ft. of hardwood, of which about 30 per cent. is fit for milling purposes. Of the remainder 30,200 acres contain pine and 14,400 acres are composed of grass lands, the retention of which is necessary in order that grass may be available for teams engaged in hauling. Of the area under pine 4,500 acres, chiefly in the Maryborough district, are almost devoid of overgirth timber and carry but a moderate stand of young trees. The remaining 25,700 acres, a proportion of which is now being worked, are estimated to contain approximately 170,000,000 superficial ft. of overgirth timber—probably an additional 50 per cent. of knotty timber might be classed as unsaleable—and a considerable stand of under-sized trees. This estimate is based on a valuation survey of approximately 5 per cent. of the area of each reserve, but in order that the figures may be more accurate such valuations now cover 10 per cent. of the area.

As indicative of the extent to which nature, when not hampered by timber-getting operations, maintains the proportion of pine in a scrub, it may be cited that the actual number of trees counted on the valuation strips was:— Class I., over 72 in. girth, 8,400; Class II., between 36 in. and 72 in. girth, 10,930; Class III., saplings and poles under 36 in. girth, 5,730; seedlings not counted. These figures, besides indicating the relative distribution of trees of various girth classes, show that the average

number of trees per acre over the 1,460 acres closely examined is 17, a satisfactory figure for one species in virgin subtropical scrubs, but less than one-third of what the area must be expected to carry if an adequate return on money expended on forestry operations is to be obtained. To determine the most economical method of greatly increasing the stand per acre of valuable species is the problem with which the forestry officers of the present generation are confronted.

Of the country examined the total area recommended as suitable for permanent reservation is 34,500 acres.

STATE FOREST SURVEYS.

Acting under the Surveyor-General, surveyors were engaged during the year making feature surveys of State forests. Plans of three reserves, embracing in all 285,400 acres, were received, but, owing to the pressure of other work, only a small proportion has since been examined critically by Forest officers. Sufficient information has been obtained, however, from the surveyors' reports to show that the area of productive land is but a small percentage of the area reserved. For instance, the State forest on Fraser Island, with an area of 240,000 acres, possesses a timbered belt of less than 50,000 acres; and in this belt the timber is extremely patchy, the most abundant species being turpentine and scrub box, which are at present unsaleable. In this connection, it may be noted that the actual area of State forests and timber reserves is no indication of the magnitude of the timber resources, for what applies to Fraser Island is applicable in a greater or less degree to a large number of our reserves.

CROWN TIMBER CUT AND REVENUE RECEIVED.

Despite the depression which was reported to exist in the sawmilling industry in the latter half of the year 1912, the figures for the year showed no decline on the previous year's figures, except in the cases of milling hardwood and cypress pine. According to the returns furnished by the Land Agents, the quantity of Crown timber on which royalty was paid was as follows:—Northern kauri pine, 3,260,000 superficial ft.; cypress pine, 4,440,000 superficial ft.; hoop and bunya pine, 42,140,000 superficial ft.; milling hardwood, 10,790,000 superficial ft.; red cedar, 591,000 superficial ft.; other milling timbers, 1,960,000 superficial ft.; sleepers and transoms, 978,600; piles and girders, 417,600 lineal ft.; telegraph poles and house blocks, 241,000 lineal ft.; mining timber, 743,000 lineal ft.; fuel, 52,200 cords; posts, rails, and palings, 91,600; miscellaneous, 221,000 lineal ft.

Of the hoop and bunya pine cut Nanango accounted for 11,600,000 superficial ft., Gympie for 11,500,000 superficial ft. (an increase of 2,250,000 ft. over the figures for 1911), and Ipswich for 9,900,000 superficial feet.

REVENUE AND EXPENDITURE.

The timber revenue for the year amounted to £63,446 16s. 8d., as compared with £53,840 8s. for 1911, the increase being due partly to increased activity in softwood operations and partly to the higher royalties received consequent on improved railway communication. The highest prices realised at auction were: Hoop pine, Nanango district, 4s. 6d.; red cedar, Atherton district, 26s.; and hardwood, Brisbane district, 2s. 9d. The most noteworthy increase in revenue was obtained in the Gympie district, where the receipts rose from £6,882 to £9,570. Generally speaking, a tendency for royalties to rise was noticeable throughout the State.

The expenditure for the year amounted to £5,396 13s., which was made up as follows:—Salaries, £2,222 16s. 10d.; forest surveys, £1,673 2s. 8d.; allowances and general expenses £1,500 13s. 6d.

FOREST OFFENCES.

Proceedings on account of breaches of those sections of the Land Act relating to the removal of timber and of the Timber and Quarry Regulations were instituted in 37 cases, one of which was dismissed on the grounds that the evidence was insufficient.

GENERAL.

During the course of the year I had occasion to visit two areas which, in view of the attention which they have attracted, are deserving of special reference.

The State forest on Fraser Island, containing about 240,000 acres, has long been regarded in certain quarters as an area which offers large inducements for the investment of capital for the purpose of exploiting the extensive virgin hardwood forests which it is supposed to contain. As pointed out earlier in this report, a compass traverse of the scrub belt brought to light the fact that less than 50,000 acres are contained therein, and a cursory inspection of the area was sufficient to show that a more detailed examination will disclose that the heavily timbered area must be placed at a still lower figure. In its virgin state the island is reported to have carried a considerable quantity of kauri pine, of which there is now very little trace except for isolated patches of seedling growth. Tallow-wood also has been operated upon for many years, with the result that, except for occasional heavily timbered

pockets, only scattered mature trees are now met with. At present operations are concentrated almost wholly on blackbutt, while the two species which comprise the bulk of the timber, viz., turpentine and scrub box, are rejected. Owing partly to the dense undergrowth, the luxuriant growth of which is a natural result of the favourable climatic conditions, the natural reproduction of all species but turpentine and box is unsatisfactory, and calls for the establishment of an experimental station, where methods of regeneration may be tried, and the adaptability of certain exotic conifers to the locality may be investigated. The acclimatisation of hardy exotic conifers which are capable of growing in dense forest on a soil composed of pure sand would result in Fraser Island becoming an important source of the future supply of soft woods both for Queensland and the rest of Australia.

The supplies of red cedar and other timbers in the scrubs of the Atherton Tableland have frequently been brought prominently under the notice of the public, and the Department has been subject to much adverse criticism from some quarters on account of the waste of good timber which has resulted from land settlement. The climate of the locality and the soil of a large part of the district are so favourable to intense culture that the retention of the greater portion of the old reserves could not be considered seriously, and the waste of such timbers as even now are not saleable at a distance of 4 miles from the railway line was inevitable. Moreover, judging by the stand on the few virgin areas which are still retained, the criticisms appear to have been based on grossly exaggerated reports, for, though the scrub growth is attractive and luxuriant to a degree, the average stand of marketable timbers per acre is much less than appears to the superficial observer. The future importance of the remaining reserves lies not in the value of the timber with which nature has endowed them but in the greatly increased value that they will acquire under forestry treatment, which aims at obtaining a maximum of useful and a minimum of useless species.

The necessity for increasing the productiveness of the timber reserves applies to the Southern parts of the State as well as to the North, but, as the silvicultural characteristics of our indigenous trees have yet to be studied, operations along these lines will be mainly experimental for several years to come. Arrangements were made at the end of the year for the establishment near Atherton of a small nursery, in which the behaviour of the most important indigenous species and any exotics which show promise will be investigated. The most valuable exotic species which could be tested in the moister localities of North Queensland is the teak of the East Indies, and a small supply of seed of this tree has been obtained from Burma for trial during the coming year.

Attempts made during the year to encourage the utilisation of pine tops met with very little success, but it is hoped that, in course of time, the Department's expectations that the numerous country mills which have been erected would be able to utilise a greater proportion of the trees, will be realised. The pulp mill which is being erected by the Queensland Pine Company at Yarraman will shortly test the possibilities of pine tops in this direction, but it must be remembered that a considerable proportion of the tops might with advantage be utilised in sawmills rather than in pulp mills.

The energies of the Forestry staff were devoted during the past year to the checking of revenue, the general inspection of reserves, and the collection of information, the contemplated change in regard to the control of the reserves in the Southern district not having been put into effect till the current year.

I have, &c.,

N. W. JOLLY,

Director of Forests.

The Under Secretary for Lands.

TABLE No. 1.

PROGRESS OF THE SAWMILLING INDUSTRY FROM 1907 TO 1912.*

	1907.	1908.	1909.	1910.	1911.	1912.
Number of sawmills in operation ...	155	175	186	181	218	258
Number of hands employed... ..	2,507	2,960	3,012	3,178	3,872	4,753
Value of machinery, plant, land, &c. £	327,897	360,181	381,080	412,347	482,723	551,811
Soft woods cut... ..	{ Super. feet 57,274,629	{ Super. feet 64,696,990	{ Super. feet 70,127,903	{ Super. feet 71,228,722	{ Super. feet 83,954,514	{ Super. feet 107,780,777
	{ Value, £ 349,339	{ Value, £ 404,976	{ Value, £ 449,142	{ Value, £ 493,805	{ Value, £ 645,822	{ Value, £ 829,617
Cedar cut	{ Super. feet 551,797	{ Super. feet 1,125,866	{ Super. feet 1,142,287	{ Super. feet 650,325	{ Super. feet 685,027	{ Super. feet 885,791
	{ Value, £ 8,414	{ Value, £ 18,752	{ Value, £ 19,009	{ Value, £ 10,407	{ Value, £ 14,154	{ Value, £ 19,850
Hardwood cut	{ Super. feet 33,925,650	{ Super. feet 34,936,160	{ Super. feet 37,111,069	{ Super. feet 44,558,510	{ Super. feet 54,255,941	{ Super. feet 55,160,910
	{ Value, £ 220,484	{ Value, £ 241,622	{ Value, £ 268,427	{ Value, £ 354,529	{ Value, £ 438,197	{ Value, £ 478,015
Planing, Moulding, &c.	{ Value, £ 53,760	{ Value, £ 45,711	{ Value, £ 52,257	{ Value, £ 56,412	{ Value, £ 68,425	{ Value, £ 148,506
Value per 100 sup. feet*—	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Soft woods	12 2	12 6	12 10	13 10	15 5	15 5
Cedar	30 6	33 4	33 3	32 0	41 4	44 10
Hardwood	13 0	13 10	14 6	15 11	16 2	17 4

* The prices are the average local prices for all classes of the timber referred to.

These figures, supplied by the State Statistician, refer to timbers cut in the State, both on Crown and private lands.

TABLE No. 2.

FORESTRY.

RETURN OF TIMBER RESERVES ON 31ST DECEMBER, 1912.

Land Agent's District.	No. of Reserves.	Area.	
		Acres.	New Area Gazetted, 1912 (Included in previous column).
Atherton	8	27,678	...
Bowen	7	168,638	...
Brisbane	58	235,243	5,700
Bundaberg	20	117,330	5,500
Cairns	3	76,950	7,950
Charters Towers	1	125,000	...
Clermont	2	174,400	...
Cocktown	4	411,080	391,600
Dalby	18	405,769	206
Gayndah	2	1,610	...
Gladstone	14	163,783	...
Gympie	44	276,852	7,960
Herberton	1	9,600	...
Ingham	4	101,578	...
Inglewood	11	141,505	...
Innisfail	1	18,000	...
Ipswich	24	105,708	...
Mackay	10	85,923	...
Maryborough	25	134,599	...
Nanango	26	114,316	1,603
Port Douglas	5	211,036	71,400
Rockhampton	4	31,657	...
Roma	1	4,165	...
Springsure	1	3,240	...
Toowoomba	9	28,113	950
Warwick	12	37,842	120
Windorah	1	240	...
Totals	316	3,211,855	492,989

TABLE No. 3.

FORESTRY.

RETURN OF STATE FORESTS AND NATIONAL PARKS IN THE STATE ON 31ST DECEMBER, 1912.

Land Agent's District.	State Forests.			National Parks.	
	No. of Reserves.	Area.	Area Proclaimed, 1912 (Included in previous column).	No. of Reserves.	Area.
Atherton	1	1,280	...	...	...
Brisbane	4	17,240	...	1	324
Bundaberg	1	36,500	36,500	...	...
Dalby	3	308,900	...	...	...
Dalby and Nanango	...	...	...	1	22,500
Gladstone	3	30,900	...	...	...
Gympie	6	54,830	...	...	...
Herberton	...	...	...	1	270
Ipswich	2	20,267	...	...	...
Maryborough	2	242,000	...	1	100
Rockhampton	1	46,720	...	1	216
Springsure	1	69,000	...	...	...
Warwick	1	27,400*	...	2	3,235
Totals	25	855,037	36,500	7	26,645

* Recomputation.

No National Parks were proclaimed during 1912.

TABLE No. 4.
REVENUE UNDER THE TIMBER AND QUARRY REGULATIONS FROM 1905 TO 1912.

LAND AGENTS' DISTRICTS.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Aramac ...	16 10 0							
Atherton ...		20 10 0						
Banana ...	0 15 0	0 17 6	1,696 16 9	3,218 12 10	1,660 0 1	2,297 16 5	3,105 6 11	2,444 15 3
Barcaldine ...					36 2 0	0 5 0	2 0 0	1 15 0
Blackall ...	56 6 3	35 18 1	69 8 1	27 5 5	34 16 5	22 1 3	33 19 6	76 2 8
Boulia ...	2 2 6	18 0 0	8 9 7	6 3 0	3 17 6	7 3 4	32 4 6	26 15 6
Bowen ...	23 11 2	7 14 7	13 1 4	19 1 2	11 16 0	12 0 0	7 2 0	2 14 0
Brisbane ...	1,750 11 2	1,805 7 5	1,723 15 4	2,083 13 0	3,823 13 0	3,664 7 6	5,101 9 0	6,748 1 2
Bundaberg ...	277 13 6	495 19 3	1,123 13 2	1,656 8 7	1,413 12 6	1,402 3 7	2,297 13 7	2,444 14 0
Burketown ...	24 5 0	10 15 9	8 0 5	4 14 2	3 2 0	8 13 3	130 14 9	23 5 0
Cairns ...	451 1 3	504 19 11	802 6 6	1,358 16 6	1,369 10 5	1,312 4 7	842 14 5	1,402 0 4
Charleville ...	30 13 5	75 6 2	117 7 8	42 18 7	48 14 3	30 17 8	72 15 1	43 6 3
Charters Towers ...	928 0 8	1,334 16 3	1,664 3 4	1,153 6 9	1,351 1 7	1,139 13 7	1,252 10 3	1,650 12 11
Clermont ...	29 7 1	99 7 1	146 11 7	59 7 5	229 12 9	555 4 11	488 17 7	1,150 6 6
Cloncurry ...	19 10 0	17 15 0	34 0 8	58 1 0	264 15 8	97 8 10	176 7 0	124 5 5
Cooktown ...	53 2 0	44 16 6	2 13 6	122 14 9	68 18 10	335 6 3	80 19 11	87 1 7
Cunnamulla ...	12 14 0	8 6 6	4 17 0	4 11 3	7 2 0	10 16 11	30 0 2	51 7 6
Dalby ...	219 4 6	193 14 5	393 9 10	623 13 10	1,065 14 0	1,128 3 8	3,561 12 7	3,569 9 0
Gayndah ...	9 3 7	91 4 1	143 5 2	16 4 2	11 0 5	56 18 4	71 2 5	221 17 4
Georgetown ...	51 16 8	57 14 11	28 17 4	32 13 0	38 15 11	37 2 9	32 8 6	246 7 0
Gladstone ...	256 4 0	477 9 7	657 19 9	644 11 8	1,243 8 10	1,704 0 1	2,057 6 10	1,569 13 9
Goondiwindi ...	14 11 5	50 8 4	80 0 11	89 16 7	117 9 10	89 6 1	88 9 5	37 5 0
Gympie ...	2,636 8 9	2,711 1 9	3,168 19 1	3,816 9 5	4,965 10 1	4,971 19 10	6,882 4 3	9,570 15 1
Herberton ...	869 17 6	871 9 8	375 19 6	49 4 1	134 11 0	300 5 3	319 18 1	1,612 3 0
Hughenden ...	13 6 3	77 2 2	441 7 0	173 17 10	43 18 8	118 0 4	189 5 2	383 7 1
Ingham ...	44 6 2	275 4 9	377 6 0	851 3 6	340 12 7	487 4 0	396 13 10	337 6 7
Inglewood ...	68 17 10	317 1 11	636 1 10	225 7 5	506 15 0	1,605 10 9	998 2 8	1,469 6 1
Innisfail ...	13 5 0	40 0 0	17 14 6	255 8 1	559 16 5	422 5 2	583 7 11	387 19 3
Ipswich ...	397 10 4	548 0 1	710 17 9	1,053 5 7	1,588 5 6	2,172 16 1	4,386 8 5	3,122 15 9
Isisford ...	7 12 11	21 2 11	2 8 6	1 12 0	7 9 0	2 8 6	3 14 6	7 16 8
Jundah ...			1 13 0	0 16 0		1 3 6	4 5 6	58 12 8
Longreach ...					21 12 6	30 8 4	107 18 3	67 11 10
Mackay ...	55 12 4	95 13 1	118 1 11	204 8 10	448 16 4	282 4 9	596 2 10	739 9 1
Maryborough ...	666 19 2	967 19 5	1,147 14 9	1,175 6 3	2,136 3 0	1,936 15 4	1,996 3 8	2,957 14 4
Nanango ...	813 4 0	923 14 0	2,551 18 2	3,657 1 8	5,183 10 5	6,637 10 4	11,323 3 0	12,676 15 7
Normanton ...	74 4 4	44 13 9	25 15 5	13 13 9	10 16 1	10 17 11	4 2 0	40 19 0
Port Douglas ...	20 9 6	16 1 0	3 0 0	41 17 8	66 10 6	217 7 5	137 13 4	37 11 6
Ravenswood ...	162 3 3	139 15 11	321 18 5	117 14 10	54 5 1	33 4 9	191 8 5	199 15 2
Rockhampton ...	553 18 0	689 11 0	1,762 8 4	1,656 12 7	2,182 19 11	1,451 5 1	1,290 5 7	1,669 2 6
Roma ...	221 13 6	258 14 2	112 4 7	111 14 7	198 18 4	242 12 11	697 14 3	944 13 3
St. George ...	50 10 3	48 16 5	13 0 3	85 6 1	74 13 10	120 14 0	115 10 2	139 16 3
St. Lawrence ...		3 1 0				1 13 9		2 0 0
Springsure ...	195 0 6	143 2 3	332 16 11	136 5 9	155 0 2	186 5 8	202 6 10	387 11 9
Stanthorpe ...	2 0 0	11 9 9	10 0 2	28 11 9	39 13 8	11 8 3	18 5 7	0 11 6
Surat ...		5 2 2	32 16 7	5 13 4	8 0 11	10 19 1	3 5 0	10 15 9
Tambo ...	12 10 0	28 8 5	27 15 8	30 0 0	4 11 1	11 19 11	17 18 0	21 15 4
Taroom ...	5 8 2	2 5 0	4 18 4	4 10 9	20 11 1	17 1 9	16 16 2	22 17 9
Thargomindah ...	5 5 0	5 17 6	1 19 6	1 9 6	1 5 0	2 3 6	1 7 0	229 10 6
Torres ...	51 18 2	66 9 7	73 1 6	53 18 5	146 19 7	188 4 1	122 10 3	73 14 10
Toowoomba ...	171 9 2	73 1 8	420 10 3	2,104 2 0	2,505 5 7	3,350 13 8	2,239 5 9	1,637 16 7
Townsville ...	105 4 9	139 14 0	318 2 3	67 1 5	80 5 11	28 17 6	170 19 0	340 15 10
Warwick ...	123 19 7	666 6 11	475 12 11	665 15 2	458 5 5	687 0 8	903 14 2	1,859 4 7
Windorah ...	0 5 0		1 14 0	0 9 0	0 19 0	16 2 4		0 2 0
Winton ...	6 7 6	17 7 6	9 3 6	16 14 6	38 12 6	19 17 6	30 2 2	35 7 8
Totals ...	11,576 10 1	14,560 9 1	22,236 9 4	27,979 6 6	35,200 8 10	39,645 4 3	53,840 8 0	63,446 16 8

* Now Barcaldine and Longreach.