1931. NEW ZEALAND.

DEPARTMENT OF LANDS AND SURVEY.

SCENERY-PRESERVATION.

REPORT FOR THE YEAR ENDED 31ST MARCH, 1931, TOGETHER WITH STATEMENT OF ACCOUNTS AND SCHEDULE OF LANDS ACQUIRED AND RESERVED DURING THE YEAR UNDER THE SCENERY PRESERVATION ACT.

Presented to both Houses of the General Assembly pursuant to Section 17 of the Scenery Preservation Act, 1908.

Sir,— Department of Lands and Survey, Wellington, 1st July, 1931.

I have the honour to submit herewith a report on scenery-preservation for the year ended 31st March, 1931.

I have, &c., W. Robertson,

Under-Secretary for Lands.

The Hon. E. A. RANSOM, Minister in Charge of Scenery-preservation, Wellington.

REPORT.

PROCLAMATIONS issued during the year setting land apart as scenic or historic reserves under the provisions of the Scenery Preservation Act covered a total area of 131,415 acres.

In the North Auckland Land District a valuable addition to the Kirk's Bush Scenic Reserve, near Papakura, was made as a result of a gift to the Crown of an area of 2 acres 1 rood 25 perches by Messrs. R. J. and A. Willis. The gift area contains some beautiful native bush, and its reservation has greatly enhanced the value of the reserve, which was already well known as containing native trees in great profusion and variety. It is particularly pleasing to record a public-spirited gift of this nature, and the thanks of the people of the Dominion are due to the generous donors.

In the last report reference was made to the reservation of an area of some 98 acres in Wairoa Parish formerly owned by the Manukau County Council, and it was intimated that some further areas in the locality would be set aside. This matter was completed during the year now under review by the reservation of two further scenic areas of 51 acres and 68 acres 2 roods 22 perches respectively, and the control of all three reserves was vested in the County Council.

For some considerable time the Department has been endeavouring to obtain certain small sections in the Township of Leigh, with a view principally to the preservation of the beautiful pohutukawa-trees growing along the coast-line. An area of 1 acre was secured during the year, and arrangements practically completed for the acquisition of two further areas. Leigh is a particularly charming spot, and now that it is easily accessible from Auckland City by car the Department is anxious to take all possible steps to preserve its natural beauty.

Reservations in the Auckland Land District included an area of 67 acres at the Aratiatia Rapids, and areas totalling 3,318 acres surrounding and including Lake Okareka. In the case of the first reservation the area extends to the top of the hill overlooking the Waikato River, and, although the whole area is not covered with trees, the bush down by the water is very pretty and greatly enhances the beauty of the rapids. So far as the other reservation is concerned, Lake Okareka is an attractive sheet of water, while the surrounding areas are mostly covered with beautiful native bush of high scenic value.

The only reservation made in the Gisborne Land District was that of an area of 613 acres of precipitous and broken bush country on the Ruakituri River, situated in full view of the main Wairoa-Waimana Road. The preservation of this bush will add greatly to the beauty of the route, and the land has also a certain amount of historic interest, as it was from the shelter of the forest there that Captain Carr and Lieutenant Canning, whose graves are on the opposite side of the river, were shot while pursuing the retreating Hauhaus in August, 1868.

In the Taranaki District a narrow bush-clad sidling of $55\frac{1}{2}$ acres fronting on the Kururau Highway near Taumarunui, and possessing considerable interest from a scenic point of view, was permanently

set aside during the year.

An area of 27 acres 3 roods 30 perches adjoining the old Weraroa Experimental Farm, and previously reserved under the Land Act for the preservation of native bush, was declared subject to the Scenery Preservation Act, and a small intersecting closed road area was also proclaimed for

scenic purposes.

Several reservations were made in the Nelson Land District during the year. These included the setting-aside of an area of 527½ acres of splendid native bush overlooking the Buller River near Owen Junction; an area of 471 acres on the road from Christchurch to Reefton by way of the Lewis Pass; and areas totalling 186 acres 2 roods 8 perches facing the Astrolabe Roadstead, Tasman Bay.

Eight small areas, totalling some 315 acres, were set apart in various parts of the Marlborough Land District. Included in these reservations was an area of $50\frac{1}{2}$ acres at Kaireperepe, in Queen

Charlotte Sound, transferred to the Crown for scenic purposes by Mrs. C. W. Parker.

The Lake Rotokino Reserve, Westland District, mentioned in last year's report, was completed by the reservation of an area of 461 acres, comprising the lake itself and portion of the bed of the Rotokino River; but the outstanding feature of the year was the reservation for scenic purposes of areas totalling 125,000 acres in the vicinity of the Fox Glacier and the Copland, Twain, and Karangarua Rivers. This magnificent region embraces numerous glaciers, including the Fox, and many noble peaks, and is destined from its varied attractions to become one of the principal scenic assets of our Dominion. It is intersected by the Copland Track, which continues, via Fitzgerald Pass and the Hooker Glacier, to the Mount Cook Hermitage. The walk over this track already promises to become one of the most popular on the West Coast, and trampers from Canterbury can arrange to be met by horses on the Westland side at Welcome Flat, where there are hot springs and a tourist hut. Last year's report included a most valuable paper on these areas, and also the Franz Joseph Reserve, contributed by Dr. L. Cockayne and Dr. E. Teichelmann, and dealing principally with the botanical features of the reserves. It was hoped this year to publish a further article by Mr. A. P. Harper, president of the New Zealand Alpine Club, on the physical and topographical features of the reserves, but unfortunately publication has had to be held over, for reasons of economy, until a more favourable opportunity.

In the Canterbury Land District an area of 63 acres 1 rood 5 perches on the Port Hills, and lying between the Sugar Loaf Reserve and Victoria Park, was given to the Crown by Mr. J. J. Thomson, and duly set aside under the Scenery Preservation Act on completion of transfer. This gift was a particularly generous one, as Mr. Thomson was one of the donors of the original Sugar Loaf Reserve, and the land will prove a valuable addition to the splendid chain of reserves on the hills. The control

of the new reserve has been vested in the Summit Road Scenic Reserves Board.

A reserve of 37 acres which had been set apart under the Land Act, 1892, for the preservation of forest for scenery and climatic purposes was declared to be subject to the Scenery Preservation Act; and an exchange was completed whereby the Crown received two areas, of 28 acres 1 rood 20 perches and 6 acres 2 roods 27 perches respectively, of scenic value. These three areas are situated on the Port Hills, east of Akaroa.

The Mapoutahi Pa area of 4 acres, near Purakanui, Dunedin, was set apart as an historic reserve during the year. This area, which is practically an island at high tide, is the site of an old Maori pa, and is well known to visitors to the locality. It possesses considerable historical and scientific interest, and is one of the very few places of its kind now left in the South Island. The control of the reserve has been vested in the Otago University Council.

An area of 16 perches on the crown of Puketapu Hill, Palmerston South, was donated by Mr. J. Philip, and was set apart for historic purposes. The land has been utilized as a site for the

Sir John McKenzie Memorial Cairn, which has been erected by the Government.

The revocation of the scenic reservation over areas totalling some 1,469 acres was arranged during the year for various reasons. In all cases very full investigations were made before the issue of the revoking Proclamations. Four portions of Reserve No. 8 in the Buller Gorge, totalling 294 acres 2 roods 38 perches, were taken under the Public Works Act for the purposes of the Westport-Inangahua railway.

The number of scenic reservations in the Dominion is now 871, covering a total area of some

641,738 acres.

Scenery Preservation Board.

Meetings of the Scenery Preservation Board were held in the office of the Under-Secretary, Native Department, Wellington, on the 22nd May, 1930 (North Auckland District), and the 12th June, 1930 (Hawke's Bay District). A meeting was also held in the office of the Surveyor-General, Wellington, on the 22nd July, 1930 (Auckland, Gisborne, Taranaki, Wellington, Nelson, Marlborough, Westland, Canterbury, and Otago Districts).

Twenty-three recommendations were submitted by the Board to His Excellency the Governor-General for the acquisition and reservation of areas of scenic and historic interest throughout the

Dominion under the provisions of the Scenery Preservation Act.

SUPERVISION OF RESERVES.

During the year special Scenic Boards were appointed or reappointed as follows: Whangaroa County Council, to control the Ranfurly Bay Scenic Reserve; Manukau County Council, to control the Clevedon Scenic Reserves; Akaroa County Council, to control the Otepatotu Scenic Reserve; Dunedin City Council, to control the Waipori Falls Scenic Reserves and the Kaikorai Valley Scenic Reserve; Otago University Council, to control the Mapoutahi Pa Historic Reserve; Invercargill City Council, to control the Waihopai River Scenic Reserve; and the Tapuinikau Pa, Waikaka, and Rotoiti Scenic Boards, to control their respective reserves.

Five warrants were issued placing additional areas under the control of the Kirk's Bush, Pelorus

Bridge, Hundalee, and Summit Road Scenic Reserves Boards respectively.

During the year 107 ladies and gentlemen were appointed honorary inspectors for scenic reserves throughout the Dominion, and a certificate of appointment was issued in each case.

Vacancies were filled on the Pongaroa and Kirk's Bush Scenic Boards, and additional members

were appointed to the Pelorus Bridge Scenic Board.

A warrant was issued revoking the vesting of control of the Taihape Scenic Reserves in a special

Scenic Board, and the control of the reserves was vested in the Taihape Borough Council.

Warrants under the hand of the Minister pursuant to the provisions of section 2 of the Scenery Preservation Amendment Act, 1926, were issued authorizing the use of firearms for the destruction of goats on the Everett Road Scenic Reserves, and of pigs and goats on the Pelorus Bridge Reserves.

DAMAGE TO RESERVES, ETC.

Reports from all districts indicate that the great majority of our scenic reserves are in a good state

of preservation. A few cases of timber trespass were reported and fully investigated.

In February a serious fire broke out in the north-east portion of the Trounson Kauri Park, near Kaihu, and threatened to destroy the whole of the reserve, as a strong wind was blowing on to the park at the time. Fortunately, the caretaker, with the aid of settlers and others, was able to cope with the outbreak, and although a number of kauri-trees were destroyed and will have to be removed, the untiring zeal displayed by the workers undoubtedly saved the main forest from total destruction. Special attention is being given to improving fire-breaks in order to render the forest immune, as far as possible, from further outbreaks.

The Electrical Branch of the Public Works Department was granted permission to clear a traverse line through a scenic reserve in Blocks V, VII, and VIII, Patetere North Survey District, for the purposes of the Arapuni–Waikaremoana transmission-line, the total area to be dealt with

comprising some $51\frac{1}{2}$ acres.

Excavation work in connection with the Westport-Inangahua Railway has to some extent marred the attractiveness of the Hawk's Crag Reserve in the Buller Gorge. However, it is probable that vegetation will soon become re-established and cover the scars caused by the railway-construction works.

Three small fires occurred in scenic reserves in Marlborough during the year, but were, fortunately, got under control without a great deal of damage being done. One of these started in the Pelorus Bridge Reserve, and at one stage threatened to endanger the whole area. However, settlers in the vicinity performed splendid work, and their exertions, assisted by a change in the wind and a fortunate rain-shower, confined the fire to a space of about half an acre.

GENERAL.

Experiments in the spraying of blackberry were carried out on the Te Reinga Scenic Reserve

during the year, but were not particularly successful.

Large numbers of applications are being received by the Department for the right to remove posts and general fencing-material from scenic reserves. The great majority of these applications are declined, and, although in some cases it is possible to give favourable consideration to a request for the removal of dead timber where there is no possibility of damage being done, the Department has no intention of allowing scenic reserves to be used as a source of supply for fencing-timber.

Some further applications have also been made for permission to mill timber on scenic reserves. This matter was briefly discussed in last year's report, and it is hardly necessary to state that the

applications received during the year under review were very definitely refused.

APPENDICES.

A schedule of reserves made and reservations revoked during the year, accompanied by a statement of expenditure, follows as Appendix A, while Appendix B records the work carried out on Kapiti Island.

The detailed reports from the various land districts are not being published this year, owing to

lack of space.

APPENDICES.

 ${\bf APPENDIX} \ \ {\bf A.}$ Reserves made in 1930-31 under the Scenery Preservation Act, 1908, and Amendments.

nem	o Local Name. Local Name.		Description.	Area		Date of Proclamation.	
<u> inc</u>			North Auckland Land District.	Α.	в. Р.		
688	Kirk's Bush (addition		Lot 23, D.P. 15387, part Allotment 11, Opaheke Parish		1 25	25/7/30	
658	Clevedon		Allotment 53, Parish of Wairoa		2 24.3	18/9/30	
600	Leigh		Allotment 83, Parish of Wairoa Section 47, Village of Leigh		$\begin{array}{ccc} 2 & 22 \\ 0 & 0 \end{array}$	$18/9/30 \ 13/2/31$	
000 (Auckland Land District.				
686	Aratiatia Rapids		Section 4, Block XI, Tatua S.D		0 0	16/4/30	
			Lot 2 of Section 2, Block II, Tarawera S.D.; Sections 1 and 12, Block III,	2,452	2 26	20/11/30	
690	Lake Okareka	••	Tarawera S.D.; and Okareka Lake Section 2, Block VI, Tarawera S.D	866	0 0	20/11/30	
l				1 000	0 0	20/11/80	
	D. Litani Diman		Gisborne Land District. Section 3, Block VII, Tuahu S.D	613	0 0	17/11/30	
691	Ruakituri River	••		(010	0 0	(11/11/00	
004	77 D 1		Taranaki Land District. Section 3, Block II, Piopiotea West S.D	55	2 0	14/11/30	
694	Kururau Road	••		1 00	2 0	(11/11/00	
,			Wellington Land District. Portion of a closed road passing through	f 0	1 36	14/11/30	
696	Weraroa		Section 61, Block II, Waitohu S.D.	1		' '	
090	Weiaioa	••	Part Section 61, Block II, Waitohu S.D. Part Section 61, Block II, Waitohu S.D.	$\begin{vmatrix} 26 \\ 1 \end{vmatrix}$	$egin{array}{ccc} 2 & 26 \\ 1 & 4 \end{array}$	$\begin{array}{ c c c c c }\hline 14/11/30 \\ 14/11/30 \\ \hline \end{array}$	
			Nelson Land District.				
703	Buller		Part Section 12, Block VII, Matiri S.D	527	2 32	6/10/30	
702	Lewis Pass		Section 1, Block IV, Lewis S.D. Sections 13, 14, 15, 35, and 90, Block VI,	471 186	$\begin{array}{ccc} 0 & 0 \\ 2 & 8 \end{array}$	14/11/30 $14/11/30$	
701	Astrolabe		Kaiteriteri S.D.			12/11/00	
	•		Marlborough Land District.				
676	Kaireperepe	••	Parts of Sections 7A and 7B, Kaireperepe Native Reserve, Block VIII, Linkwater S.D.	50	2 16	15/8/30	
705	Hapuka River		Section 71, Block V, Mount Fyffe S.D Section 29, Town of Lochmara	18 11	$\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$	18/9/30 22/10/30	
704	Onahu		Section 45, Town of Lochmara	12	0 0	22/10/30	
653	Hundalee (addition)		Section 7, Block XV, Hundalee S.D Section 12, Block XVIII, Hundalee S.D.	$\frac{2}{7}$	$\begin{array}{ccc} 1 & 0 \\ 2 & 16 \end{array}$	$\begin{array}{c} 22/11/30 \\ 22/11/30 \end{array}$	
605	Blackwood Bay		Section 16, Block XVIII, Hundalee S.D. Part of Section 8, Town of Blackwood Bay,	80 133	$\begin{array}{ccc} 0 & 0 \\ 3 & 23 \end{array}$	$22/11/30 \ 2/12/30$	
000	Diackwood Day		Block II, Arapawa S.D.			1	
			Westland Land District.				
	Lake Rotokino Copland, Twain, and	 Karangarna	Situated in Blocks III and VII, Watasoa S.I. Reserve 1019, Blocks XIII, XIV, XV, and	64.000	$\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$	$15/8/30 \ 25/8/30$	
706	Rivers	Transmiganda	XVI, Karangarua S.D.; Blocks II, III, IV, VI, VII, VIII, X, and XI, Mount	1		' '	
			Sefton S.D.; Blocks XIII and XIV,				
,	,		Mount Cook S.D.; and Blocks I, II, and V, Moorhouse S.D.	1			
665	Fox Glacier		Situated in Blocks IV, VIII, and XII, Karangarua, and I, II, III, V, VI, VII,	61,100	0 0	25/8/30	
			VIII, IX, X, and XI, Mount Cook Survey Districts				
	1			•		1	
680	Otepatotu	1.0	Canterbury Land District. Reserve 2791, Block V, Okain's S.D	37	0 0	30/4/30	
707	Thomson Park		Reserve 4259, Block III, Halswell S.D		$\begin{smallmatrix}1&5\\1&20\end{smallmatrix}$	6/10/30 6/10/30	
650	Peraki		Reserve 4239, Block VII, Akaroa S.D	1	2 27	6/10/30	
			Otago Land District.				
682	Mapoutahi Pa		Section 57A, and closed road, Section 1340n	4	0 0	22/7/30	
			Block IV, North Harbour and Blueskir S.D.			70 10 100	
709	Sir John McKenzie M	Iemorial	Portion of Lot 2 of Section 65, being also part Lot 2, L.T.P. 2935, Block IV	0	0 16	12/9/30	

REVOCATION OF RESERVATIONS.

Land.	Area.		Date of Proclamation.					
	Aucklar	nd Land	District	•		Α.	R. P.	
Part of Allotment 483, Taupiri Parish, Hapual Portions of Hauturu East No. 3B, Sections 1, 2 Block X, Orahiri S.D.			 ks, and	part Sect	ion 8,	193 138	0 0	$\begin{array}{c} 4/9/30 \\ 20/11/30 \end{array}$
	Welling	gton Lan	d Distri	ct.				
Lot 3 of part Lot 2 of Section 28, Block VIII, Portion of Section 13, Block I, Ruahine S.D. Parts of Section 3, Block II, Owatua S.D.		ıku S.D.	•••	 	••	$\begin{matrix} 0 \\ 5 \\ 168 \end{matrix}$	$\begin{array}{ccc} 2 & 0.4 \\ 1 & 20 \\ 3 & 28.6 \end{array}$	$\begin{array}{c c} 9/5/30 \\ 29/5/30 \\ 18/9/30 \end{array}$
	Nels	on Land	Distric	t.				
Section 44, Block V, Inangahua S.D.	• •]	17	0 20	13/2/31
	Marlbor	ough Lar	nd Distr	ict.				
Lot A of plan 1546/76, being originally part o		•			Native	8	1 23	15/12/30
Block, Block XV, Puhipuhi S.D. Lot B of plan 1546/76, being originally part of	the abo	ve Native	Block			0	0 7.6	15/12/30
	Canterb	oury Lan	d Distra	ict.				
Reserve No. 3884, Block XV, Four Peaks S.D.).		• •	••	1	41	0 5	5/8/30
	Otago	Land D	istrict.					
MOU	NT CAR	ALL SCE	NIC RES	ERVE.				
Sections 31 and 34, parts Sections 24, 25, 26, Sections 60 and 62, part Section 61, Block North Harbour and Blueskin S.D.	27, 28, k VIII ;	29, 30, 3 Sections	2, and 3 s 8 and	33, Block 23, Block	VII;	360	0 15	27/9/30
Parts of Sections 24 and 92, Block VII, North Part of Section 48, Block VIII, North Harbou	n Harbour ar and E	ur and B Blueskin S	lueskin S.D.	S.D.		0	$\begin{array}{cc}1&29\\2&9\cdot5\end{array}$	$27/9/30 \ 27/9/30$
F	LAGSTAF	F SCENIC	RESER	VE.				
Allotments 13 to 17, Stanley Estate; Allotment 18, Stanley Estate;	ments 2 and Sec	1 and 22 stions 24 ,	, Daisy 1 of 49	Bank E	state, of 35,	239	3 8	27/9/30
Block V, Dunedin and East Taieri S.D.						1 174	1 6.1] .

SUMMARY OF RESERVES.

District.						Number.	Area.		
								Α.	в. Р.
North Aucklan	₹						3	131	2 31·3
Auckland			• •		• •		$\tilde{2}$	3,385	2 26
Hisborne							ī	613	0 0
l'aranaki	• •	• •	• •	• •			1	55	2 0
Wellington							1	28	1 26
Nelson							3	1,185	1 0
Marlborough							5	315	1 15
Westland								125,561	0 0
Canterbury							3 3	135	1 12
Otago	••	• •	• •	• •		• •	2	4	0 16
Т	otals						24	131,415	$\phantom{00000000000000000000000000000000000$
Reserved up to 31st March, 1930						851	511,792	0 28.66	
						.	875	643,207	1 34.96
less reservation	s revol	ced, and are	eas tak	en for ra	ilway pu	$_{ m rposes}$	4	1,469	$0 4 \cdot 1$
		-					871	641,738	1 30.86

STATEMENT SHOWING EXPENDITURE ON SCENERY-PRESERVATION FOR YEAR ENDED

31st March, 1931.			
	£	s.	d.
Acquisition of Section 47, Village of Leigh	20	0.	0
Compensation for Native lands taken for scenery purposes (including historic spots)			
under the Public Works Act, 1908, and Native Land Act, 1909	115	9	4
Grant to Hawera Borough Council for planting trees on Turuturumokai Reserve	6	0	0
Mangamaunu Scenic Reserve—Half cost of boundary-fence (on account)	90	0	0
Payment for lessee's interest in Allotment 53, Wairoa Parish	38	10	0
Ross Borough endowment exchange	400	0	.0
Scenery Preservation Board, expenses of	2	7	4
Summit Road Scenic Reserves—Ranger	300	0	0
Surveys, valuations, and incidental expenses	92	8	-1
Trounson's Kauri Forest, charges in connection with protection of	491	10	9
Administration of reserves (including fencing, &c.)— £ s. d.			
Eradication of noxious weeds			
Destruction of rabbits			
Extinguishing fire, Pelorus Bridge Reserve 5 19 0			
Fencing, repairs to bridges, &c			
Cost of printing annual report, &c 82 0 10			
Cost of making scenic-reserve notices (on metal) 49 14 0			
Planting of trees			
Ranger, Lake Wakatipu			
	747	5	11
Gross expenditure for year	2,303	11	5
Recoveries	1	0	0
Net expenditure	£2,302	11	5
	,		

COMPARISON OF EXPENDITURE.

It is interesting to note how money raised under the Act or provided from other sources has been expended. It will be seen that the cost of administration has been reduced to a very small proportion of the total expenditure.

Year.	Compensation for Land.	Fencing and Maintenance.	Surveys, Valuations, &c.	Board's Expenses.	Salaries.	Total.
	£	£	£	£	£	£
1904–5	216	Nil	52	1,822	*	2,090
1905–6	3,336	٠,,	527	1,221	*	5,084
1906-7	7,856	304	801	185	*	9,146
1907–8	4,286	382	555	86	175	5,484
1908–9	3,813	1,063	540	24	325	5,765
19 09–10	1,688	1,159	2,603	\mathbf{Nil}	325	5,775
1910–11	1,066	685	1,643	11	325	3,730
1911–12	2,619	715	2,237	22	345	5,938
1912–13	12,997	798	2,697	6	345	16,843
1913–14	10,467	627	1,547	3	365	13,009
1914–15	6,253	758	476	12	388	7,887
1915–16	1,530	698	104	6	390	2,728
1916–17	252	836	76	1	390	1,555
1917–18	428	602	114	3	390	1,537
1918–19	1,295	1,964†	49	1	280	3,589
1919–20	510	188	12		40	750
1920-21	3,031	471	299	• •	25	2,825
1921–22	57,768	227	224		25	58,244
1922-23	6,306	377	290		25	6,998
1923–24	1,488	118	1,589	• •	25	3 ,210
19 24–2 5	1,158	1,565	24 0		18	2,981
1925–26	17,923	2,310	305	9		20,547
1926-27	2,617	1,182	75	17		3,891
1927–28	5,182	1,342	58	17		6,599
1928-29	11,642	1,810	538	1	150‡	14,141
1929–30	445	1,548	108	6	300‡	2,407
1930-31	574	1,335	92	2	300‡	2,303
Grand total	# 8. C					215,056

^{*} Included in Board's expenses. for Summit Road Scenic Reserves.

 $[\]dagger$ Includes £1,750 paid to Summit Road Scenic Reserve Board.

[‡] Ranger

It must be noted that the above expenditure does not include expenses of raising loans and recoupment of interest, &c.

APPENDIX B.

KAPITI ISLAND.

(H. W. C. MACKINTOSH, Commissioner of Crown Lands, Wellington.)

The most pleasing and, to the bird-life of Kapiti, the most important matter I have to report is the remarkable regeneration of the plant-life on the island during the past year, and this notwithstanding the fact that no great amount of rain fell. Visitors to the island have expressed surprise at the growth even round the coast and near tracks. Areas that were once nothing but grass are now becoming clothed with young bush trees, particularly houhou and akeake. The latter is valuable for providing shelter for the more useful berry-bearing trees.

Some thousands of trees were planted out last winter, including such useful varieties as taupata, ngaio, akeake, puka, and pohutukawa. Wharekohu, owing to the great number of goats and sheep that formerly roamed there, was very bare of any kind of bush growth, but it is pleasing to note that

taupata is now becoming well established in that locality.

The work of destroying vermin on the island was rigorously pursued during the year, some 250 rats having been trapped, shot, or poisoned, while two wild cats were shot by the opossum-trapper.

I have again to express my appreciation of the work being done by Mr. A. S. Wilkinson, the caretaker of the island. The Department is fortunate in having such a man as Mr. Wilkinson in charge of the reserve, both for his profound knowledge of, and his intense interest in, the flora and fauna of New Zealand.

The following is extracted from Mr. Wilkinson's annual report:—

"In the Maraetakaroro Valley the flax flowered better this season than I have ever seen it, and was alive with honey-eating birds, providing a sight reminiscent of the old days. The Kaiwharawhara Valley is showing great improvement, and the flax has flowered very well in this sheltered spot. The manuka ridges leading into Kaiwharawhara, which were devoid of any other growth but manuka a few years ago, are now well covered with young plants of nearly every species of tree and shrub that grows on Kapiti. The undergrowth is not so noticeable in the Waterfall Valley as at Kaiwharawhara, except in places, for the roof of the bush is in many places too thick for the light to penetrate. On the spurs, however, the bush-lawyer is very prominent, making it difficult to traverse these ridges. The large area of bush between Taepiro and Te Rere includes open spaces which, a few years ago camping-places for goats, are now well covered with young trees. The most conspicuous amongst these is the miro, of the fruit of which the pigeon is so fond. The taupata, akeake, and other trees are rapidly covering the open spaces at Paripatea. Just north of Rangatira the two species mentioned are also growing well. At this place some pohutukawa flowered for the first time. From Rangatira southwards a considerable amount of planting was done last winter. Along the shore at Maraetakaroro a few hundred trees were also planted.

"Some of the trees at Rangatira have flowered more profusely this season than they have for many years. The rata was, if anything, better than last year, and when in flower was a most magnificent sight. Tuis, bell-birds, and kakas were feasting on the nectar in hundreds. As the trees near the beach flowered quite a month before those on the higher parts of the island, the honey-eaters were provided with this delicious repast for a long time. The perfume exuded by the rata when in full bloom was almost overpowering, reminding one of the old honey-mead making days. The rewarewa, another nectar-producing plant, was also conspicuous during the flowering-period, and, like the rata, was well patronized by the honey-eaters. The karaka, beautiful at all times, is made more beautiful when loaded with orange berries. To see one of these trees covered with berries, in which eight or ten pigeons are feeding, is a sight very much appreciated by the nature-lover. Titoki, makomako, houhou, horoeka, porokaiwhiri, toru, matipo, hangehange, the coprosma species, and others are all carrying their share of berries. The vines also are fruiting well, although the tataramoa and kaiwhiria are not loaded like they were last season. The kareao has had a good load of berries during the year.

"A very noticeable feature in the regeneration of the bush is the spread of ferns through the portion of the sanctuary between Te Rere and Taepiro. The beautiful kidney-fern is now seen in many places where formerly it was entirely absent or so scarce as to be unnoticed. Another fern that has spread about this section of the sanctuary is that handsome though common species known to botanists as Blechnum discolor and to the Maoris as piupiu. Still another that is to be seen in several places is that very beautiful Leptolepia novae-zealandiæ, which, like the kidney-fern, is a true New-

Zealander, being found nowhere else.

"With the exception of perhaps one or two species, the birds have had a very successful season. Bell-birds, tuis, whiteheads, robins, and tomtits have all done well. The tomtits that live about our house and gardens have made a record this season. This pair of birds built four nests. The first nest was built in the top of a kaikomako and three young were reared. The second nest was abandoned after three eggs were laid. The hen bird, who does all the building and incubating, was evidently alarmed by something to make her leave the nest. The third nest was also built in a kaikomako, from which five young birds appeared. The last nest was in a tree of the same species, and produced two young ones, so this pair of tomtits reared ten young ones during the nesting season just finished.

"The house pipits, in spite of having their first eggs broken, managed to rear eight young from other nests. Several new nesting-sites of the red-fronted parrakeets were found, and every nest

produced young birds.

"For some reason fantails are very scarce on Kapiti this season. We had only one nest under observation, compared with half a dozen or more during previous seasons. We have always had at least six or eight pairs of fantails handy to our house. This season only three or four pairs were seen in different parts of the sanctuary. Another bird which has also been very plentiful is the long-tailed cuckoo, but very few have been heard this season. One was heard a few days ago—the 28th March—a late record. Pigeons and kakas seem to be more than holding their own.

"Shags, blue herons, terns, and both species of gull have had a very good season. The absence of storms enabled the birds nesting on Tokamapuna to rear all their young. A blue heron nested there and reared one young. This is the first time to my knowledge that they have nested there. Petrels have apparently increased, as there were several new building-grounds noted this season—one on the hill at Paripatea, one on the hilltop north of Kaiwharawhara Stream, and another along the top of

the cliffs at Onepoto.

"A consignment of paradise ducks (Casarca variegata) was received from the Southland Acclimatization Society through the kindness of Mr. Tripp, chairman of the Wellington Society. When first received, the paradise ducks were liberated with the teal. Three of them were rather sickly, but soon recovered. Unfortunately, a harrier killed one of the drakes, in spite of the fact that we were keeping a constant watch over them. I have now placed the remaining eleven ducks in my wire

netted swamp.

"In regard to new habitats of plants, I wish to correct an error that appeared in my last annual report. I mentioned that I had discovered the fern *Doodia media*, whereas Mr. Morris Jones should have had the honour of being the first to record this species as occurring on Kapiti, he having discovered it six months before I did. During the year I have found three plants which, as far as I know, have not hitherto been recorded from Kapiti. They are *Blechnum Banksii* and *Euphorbia glauca*, growing at the south end near Split Rock, and *Pellaea falcata*, growing on the steep face of the cliff of Kapikatea."

I desire to thank the following ladies and gentlemen for donations of plants and birds or for assisting the caretaker with planting: Mr. A. Morris Jones—plants and assistance in planting; Messrs. Britton and Priestley—assisting with planting; Mrs. Blyth, Wanganui, and Misses Pike and Kebbell, Levin—plants; Messrs. Duncan and Davies, New Plymouth—plants; Mr. E. Maxwell, Opunake—plants; Wellington City Council (per Mr. MacKenzie, Director of Reserves)—plants; Mr. J. Webber, Kapiti—pair of grey teal (Querquedula gibberiferons).

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