

1911.  
NEW ZEALAND.

DEPARTMENT OF LANDS:  
STATE AFFORESTATION IN NEW ZEALAND  
(REPORT ON).

*Presented to both Houses of the General Assembly by Command of His Excellency.*

TABLE OF CONTENTS.

PART I.—STATE AFFORESTATION IN NEW ZEALAND, 1911.		PART II.—REVIEW OF YEAR'S OPERATIONS.	
	Page		Page
Reasons for Afforestation .. .. .	1	General Remarks .. .. .	29
Demand for Timber .. .. .	3	Summary of Operations in the Nurseries ..	31
Inauguration of Afforestation .. .. .	3	Summary of Operations in the Plantations ..	32
<i>Appendix A (Forest-tree Growing in the North Island).</i>		<i>Appendix A (Tree-growing Operations in the North Island, 1910-11).</i>	
Nursery and Plantation Work in Rotorua District ..	6	Counting the Trees .. .. .	33
Raising Trees from Seed .. .. .	7	Prison Labour .. .. .	33
Lining-out .. .. .	8	"Karere" Convalescent Camp .. .. .	34
Sending Trees to Plantations .. .. .	9	Thinning Plantations .. .. .	34
Plantation work .. .. .	10	Survey-work .. .. .	35
<i>Appendix B (Forest-tree Growing in the South Island).</i>		Forestry Literature .. .. .	35
Introductory Remarks .. .. .	11	Proposals for 1911-12 .. .. .	35
Tree-seeds .. .. .	11	Conclusion .. .. .	35
Preparation of Ground for Seed-sowing .. .. .	12	Rotorua Nursery .. .. .	36
Seed-sowing .. .. .	12	Whakarewarewa Plantation .. .. .	40
Tending Seed-beds .. .. .	14	Waiotapu Plantation .. .. .	45
Wrenching .. .. .	14	Ruatangata Nursery .. .. .	50
Lifting and Lining-out seedlings .. .. .	14	Puhipuhi Plantation .. .. .	51
Tending Transplanted Trees .. .. .	16	<i>Appendix B (Tree-growing Operations in the South Island, 1910-11.)</i>	
Lifting and bundling Trees for Transference .. .. .	16	Climatic Influences .. .. .	53
Transport of Trees .. .. .	17	Output of Trees, and Acreage planted .. ..	53
Fencing Areas acquired for Tree-planting .. .. .	17	Trees raised and Expenditure incurred .. ..	53
Extermination of Ground-game .. .. .	18	Brief References to Tree-growth .. .. .	54
Formation of Fire-breaks .. .. .	18	Revision of Records and Subdivisional Plans ..	54
Clearing and Draining .. .. .	18	Correspondence Class on Forestry .. .. .	54
Pitting for Tree-planting .. .. .	19	Fire-breaks .. .. .	54
Tree-planting Methods and Climatic Influences ..	20	Free and Prison Labour .. .. .	55
Planting-systems adopted .. .. .	20	Advisory Work to Public Bodies .. .. .	55
Labour and Supervision .. .. .	21	General .. .. .	55
Summary of Costs .. .. .	22	Tapanui Nursery, Otago .. .. .	55
<i>Appendix C (Schedules of Trees in Plantations).</i>		Dusky Hill Plantation, Otago .. .. .	59
Number and Variety of Trees planted in North Island	23	Conical Hills Plantation, Otago .. .. .	61
Number and Variety of Trees planted in South Island	24	Waitahuna Plantation, Otago .. .. .	63
<i>Appendix D (Forest Diseases and their Relation to Afforestation).</i>		Eweburn Nursery, near Naseby, Otago .. ..	64
Introduction .. .. .	25	Naseby Plantation .. .. .	67
The Damage caused by Disease .. .. .	26	Gimmerburn Plantation Reserve .. .. .	68
Disease-control in Natural and Planted Forests ..	26	Hanmer Springs Nursery, Canterbury .. ..	69
Present Condition of the Plantations .. .. .	26	Hanmer Springs Plantation, Canterbury .. ..	72
Rotorua Nursery .. .. .	26	MAPS TO ACCOMPANY REPORT (BOUND AT END OF REPORT).	
Tapanui Nursery .. .. .	27	Showing Whakarewarewa Nursery and Plantation.	
The Diseases of the Planted Trees .. .. .	27	Showing Waiotapu Plantation.	
Future Prospects .. .. .	28		
Control-measures .. .. .	28		
Line of Action to adopt .. .. .	28		
Acknowledgements .. .. .	29		