





M.B. Marston
Room 2405-

Annual Report

OF THE MINISTER OF LANDS AND FORESTS

OF THE PROVINCE OF ONTARIO

for the fiscal year ending

MARCH 31, 1955

CONTAINING THE
DETAILED REPORTS OF
THE DIVISIONS OF

ACCOUNTS

AIR SERVICE

FISH AND WILDLIFE

FOREST PROTECTION

LANDS

LAW

OPERATION AND PERSONNEL

PARKS

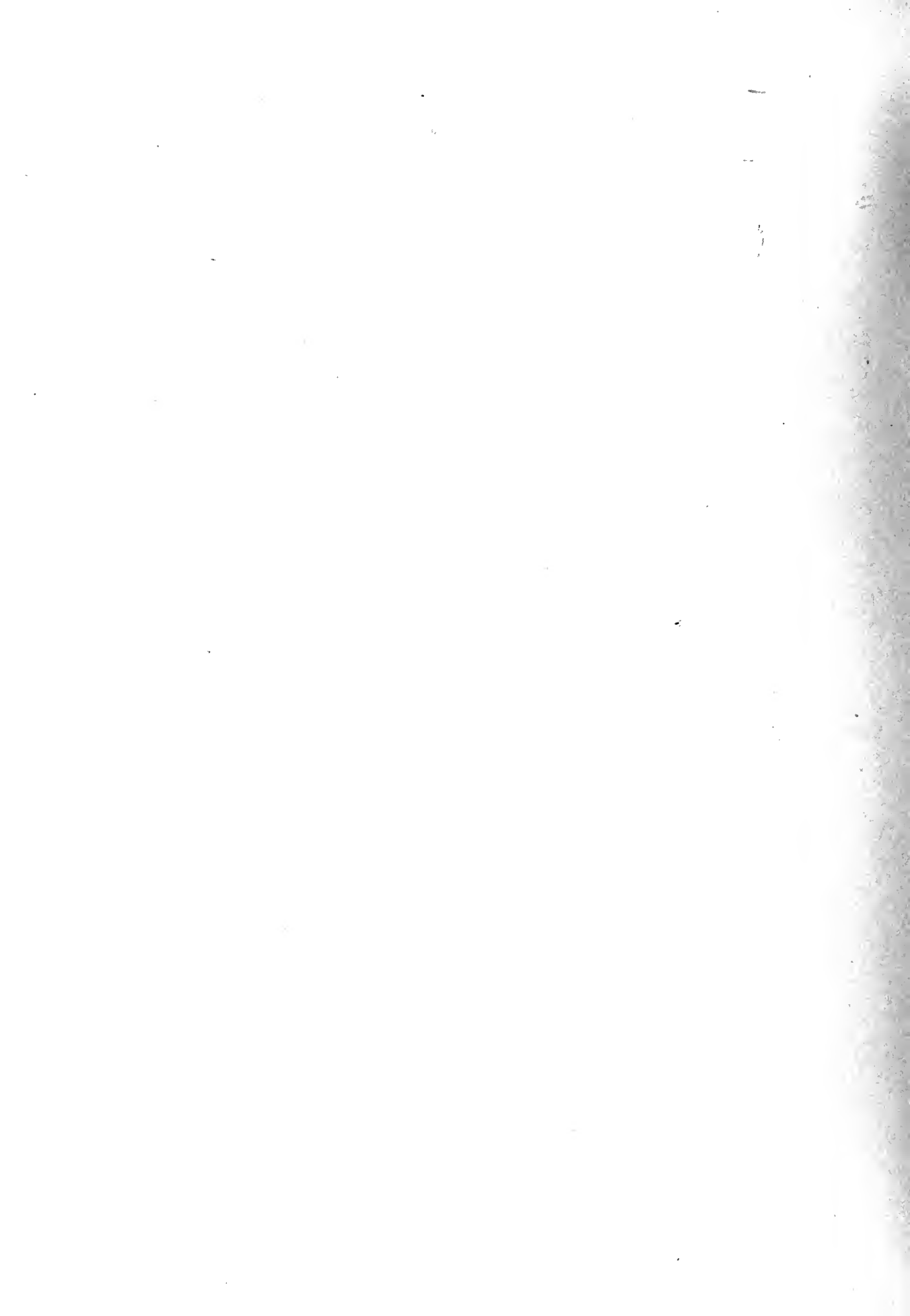
REFORESTATION

RESEARCH

SURVEYS AND ENGINEERING

TIMBER MANAGEMENT





To His Honour,

The Lieutenant Governor
of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned begs respectfully to present to your Honour, the Annual Report of the Department of Lands and Forests for the fiscal year commencing April 1st, 1954 and ending March 31st, 1955.



(Clare E. Mapledoram)
Minister

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THE DETAILED ANNUAL REPORT

of the

MINISTER OF LANDS AND FORESTS

of the

PROVINCE OF ONTARIO

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For the Year ending March 31st, 1955

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SECTION NO. 1

DIVISION of ACCOUNTS

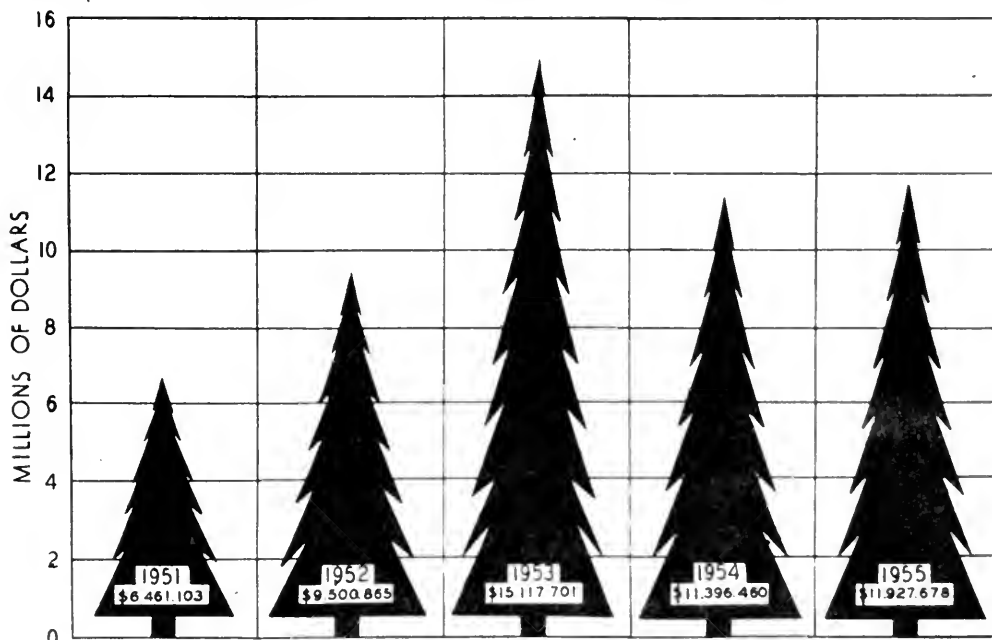
DIVISION OF ACCOUNTS

During the year ending March 31st, 1955, cash receipts for the Department of Lands and Forests totalled \$19,325,785.05. Total cash disbursements amounted to \$12,895,318.42, representing an excess of \$6,430,466.63 in receipts over disbursements.

Total receipts show an increase as compared with the previous year, principally reflected in the returns from the sale of timber and from hunting and fishing licenses, the Department's main sources of revenue. The increase in income derived from Crown timber is due in part to the constant demand for forest products of the pulp and paper trade, and the resulting expansion in that industry. Sale of angling and hunting licenses continues in its upswing, and may be accounted for by the steady population growth and influx of American visitors, and serves to point out the mounting pressure on our game and fish resources. There is every indication that the increased demand for the products of our renewable natural resources will continue.

TREND OF DEPARTMENTAL REVENUE

TIMBER RETURNS-CROWN DUES-GROUND RENT & FIRE TAX CHARGES
FOR THE FIVE YEARS ENDING 31 MARCH 1955



DEPARTMENT OF LANDS AND FORESTS

DIVISION OF ACCOUNTS

FINANCIAL REPORT

FOR YEAR ENDING MARCH 31ST, 1955

1. Cash Receipts and Disbursements

The following summarizes the result of operations for the year:-

Total - Cash Receipts	\$19,325,785.05
Cash Disbursements	<u>12,895,318.42</u>

Excess of Receipts over Disbursements	\$6,430,466.63
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2. Comparison of Results with those of prior years

(a) Receipts

Cash receipts for the year under review compare with those of the previous two years as follows:

<u>Division</u>	Years ending March 31st		
	<u>1953</u>	<u>1954</u>	<u>1955</u>
	\$	\$	\$
Accounts			
Water Power Rentals	1,293,570.	1,672,735.	1,539,686.
Provincial Land Tax	393,236.	562,723.	644,961.
Long Lac Diversion	17,700.	17,250.	16,800.
Miscellaneous	35,548.	23,546.	30,660.
Air Service	11,720.	16,361.	16,724.
Fish and Wildlife	3,409,915.	3,800,735.	3,989,256.
Forest Protection	30,141.	46,269.	46,487.
Land & Recreational Areas	393,322.	408,848.	456,318.
Reforestation	128,220.	157,892.	216,247.
Surveys	844.	1,451.	238.
Timber Management	15,117,701.	11,396,460.	11,927,678.
Mississagi Salvage Project	<u>2,315,958.</u>	<u>1,863,165.</u>	<u>440,730.</u>
	<u>23,147,875.</u>	<u>19,967,435.</u>	<u>19,325,785.</u>

(b) Disbursements

Disbursements for the year under review compare with the previous two years as follows:

	<u>1953</u>	<u>1954</u>	<u>1955</u>
	\$	\$	\$
Chargeable to Ordinary Account	11,486,281.	12,608,258.	12,716,508.
Chargeable to Special Appropriation			
Mississagi Salvage Project	1,654,781.	800,000.	178,810.
	<u>13,141,062.</u>	<u>13,408,258.</u>	<u>12,895,318.</u>

DEPARTMENT OF LANDS AND FORESTS

DIVISION OF FISH AND WILDLIFE

ANALYSIS OF CASH RECEIPTS

FOR YEAR ENDING MARCH 31ST, 1955

GAME

Licenses

Trapping	\$ 53,374.00	
Non-Resident Hunting	453,643.44	
Deer	364,081.94	
Moose	73,460.00	
Ground Hog	21,174.65	
Gun	234,296.34	
Dog	21,766.40	
Fur Dealers	19,413.10	
Fur Farmers	2,865.00	
Tanners	40.00	
Cold Storage	<u>465.00</u>	
Royalty	\$1,244,579.87	
Game	<u>289,846.21</u>	\$1,534,426.08

FISHERIES

Licenses

Commercial Fishing	107,442.00	
Smelt	23,269.05	
Angling	<u>2,204,667.51</u>	
Royalty	2,335,378.56	
Commercial Fish	<u>9,352.69</u>	2,344,731.25

GENERAL

Licenses

Guides	11,856.00	
Tourist Outfitters	17,401.94	
Fines	52,087.64	
Costs Collected	1,274.20	
Sales - Confiscated Articles, etc.	27,008.80	
Miscellaneous	<u>469.71</u>	<u>100,098.29</u>
		<u>\$3,989,255.62</u>

DEPARTMENT OF
DIVISION OF
ANALYSIS OF CASH
FOR YEAR ENDING

DISTRICT	CROWN DUES	GROUND RENT	FIRE TAX	INTEREST SCALERS' WAGES MILL LICENSES ETC.
Chapleau	\$ 332,329.81	\$ 499.00	\$ 6,387.20	\$ 153.31
Cochrane	1,577,883.18	7,116.00	78,755.74	6,308.76
Fort Frances	290,033.45	1,174.60	14,228.83	142.71
Geraldton	1,125,221.38	8,095.00	103,616.00	649.65
Gogama	276,171.30	876.00	13,724.80	129.17
Kapuskasing	1,572,289.95	8,735.00	129,715.10	1,016.08
Kenora	557,669.79	6,611.00	84,525.30	290.21
Lindsay	64,349.73	257.00	3,302.40	714.22
North Bay	881,202.34	3,076.00	39,372.80	462.13
Parry Sound	252,728.97	872.00	11,112.20	222.99
Pembroke	322,179.98	3,857.00	49,369.60	898.63
Port Arthur	1,279,935.81	11,984.00	164,821.60	897.32
Sault Ste. Marie	433,345.30	13,812.86	101,768.54	1,185.49
Sioux Lookout	619,646.80	951.00	12,198.40	423.09
Sudbury	244,472.39	4,415.00	61,290.30	558.83
Swastika	280,297.64	599.00	27,562.00	1,089.17
Tweed	192,168.89	521.00	7,431.20	1,707.10
White River	528,605.74	2,568.00	36,771.20	25.30
Other Districts	3,581.32			798.90
	<u>10,834,113.77</u>	<u>76,019.46</u>	<u>945,953.21</u>	<u>17,673.06</u>

Percentage of Total

Timber Revenue	91.24%	.64%	7.97%	.15%
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LANDS AND FORESTS

TIMBER MANAGEMENT

RECEIPTS BY DISTRICTS

MARCH 31ST, 1955

<u>TOTAL TIMBER REVENUE</u>	<u>CASH DEPOSITS RECEIVED AND REFUNDED</u>	<u>TOTAL TIMBER REVENUE AND CASH DEPOSITS</u>	<u>PERCENTAGE OF TOTAL TIMBER REVENUE AND CASH DEPOSITS</u>
\$ 339,369.32	\$ 1,700.00	\$ 341,069.32	2.86
1,670,063.68	29,527.40 (Cr.)	1,640,536.28	13.75
305,579.59	2,400.00	307,979.59	2.58
1,237,582.03	-	1,237,582.03	10.38
290,901.27	1,800.00 (Cr.)	289,101.27	2.42
1,711,756.13	8,800.00	1,720,556.13	14.42
649,096.30	8,550.50	657,646.80	5.51
68,623.35	7,100.00	75,723.35	.70
924,113.27	2,702.68	926,815.95	7.77
264,936.16	15,160.00	280,096.16	2.35
376,305.21	1,500.00	377,805.21	3.17
1,457,638.73	7,028.43	1,464,667.16	12.28
550,112.19	12,315.81	562,428.00	4.71
633,219.29	-	633,219.29	5.31
310,736.52	700.00	311,436.52	2.61
309,547.81	20,221.12	329,768.93	2.76
201,828.19	3,132.42 (Cr.)	198,695.77	1.66
567,970.24	-	567,970.24	4.76
4,380.22	200.00	4,580.22	
<hr/>			
11,873,759.50	53,918.72	11,927,678.22	100.00%
<hr/>			
100.00%			100.00%

DEPARTMENT OF
STATEMENT OF RECEIPTS
FOR YEAR ENDING

RECEIPTS

<u>DIVISION OF ACCOUNTS</u>			
Water Power Leases	\$1,539,686.19		
Provincial Land Tax	644,960.82		
Long Lac Diversion	16,800.00		
Sale of Maps, Casual Fees, etc.	<u>30,660.01</u>		\$ 2,232,107.02
<u>DIVISION OF AIR SERVICE</u>			
Flying Fees			16,724.19
<u>DIVISION OF FISH AND WILDLIFE</u>			
Licenses, Royalties and Sundry			3,989,255.62
<u>DIVISION OF FOREST PROTECTION</u>			
Recovery of Fire Fighting Costs & Miscellaneous			46,487.37
<u>DIVISION OF LAND AND RECREATIONAL AREAS</u>			
Land Sales	212,985.32		
Land Rentals (other than Parks) Leases and Licenses of Occupation	178,749.02		
Park Revenue			
Algonquin			
Rentals	\$17,474.13		
Miscellaneous	<u>2,265.32</u>	\$19,739.45	
Rondeau			
Rentals	22,187.79		
Miscellaneous	<u>4,740.44</u>	26,928.23	
Quetico			
Rentals	104.35		
Miscellaneous	<u>2,250.00</u>	2,354.35	
Ipperwash Beach			
Rentals	3,056.00		
Miscellaneous	<u>4,157.00</u>	<u>7,213.00</u>	56,235.03
Other Lands Division Receipts		<u>8,348.14</u>	456,317.51
<u>DIVISION OF REFORESTATION</u>			
Sale of Nursery Trees			216,246.77
			<hr/>
	Carried Forward		\$6,957,138.48

LANDS AND FORESTSAND DISBURSEMENTSMARCH 31ST, 1955DISBURSEMENTSMAIN OFFICE

Minister's Salary - Statutory	\$	9,838.71	
Salaries - Permanent and Temporary		1,144,113.76	
Travelling Expenses		54,377.76	
Maintenance and Operating		19,712.38	
Damage and Other Claims, Sundry Contingencies, etc.		3,820.98	
Compensation for Injured Workmen		63,277.51	
Cost-of-Living Bonus - Entire Department		353,520.80	
Unemployment Insurance Stamps		1,904.10	
Annuities and Bonuses to Indians		26,840.00	
Advisory Committee to the Minister		<u>1,337.61</u>	\$1,678,743.61

FIELD SERVICESBASIC ORGANIZATION - including District Offices

Salaries		6,415,879.56	
Travelling Expenses		470,851.01	
Maintenance and Operating		<u>2,068,780.38</u>	8,955,510.95

EXTRA FIRE FIGHTING

Salaries, etc. Maintenance & Operating			704,486.48
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DIVISION OF AIR SERVICE

Salaries		398,994.79	
Travelling Expenses		15,471.91	
Maintenance and Operating - including purchase of aircraft		<u>327,228.13</u>	741,694.83

DIVISION OF RESEARCH

Salaries, etc. Maintenance & Operating			284,510.46
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DIVISION OF SURVEYS

Aerial Surveys		21,819.61	
Ground Surveys		157,625.71	
Lac Seul Storage Dam - control and Maintenance		<u>373.90</u>	179,819.22

Carried Forward

\$12,544,765.55

RECEIPTS

FOR YEAR ENDING MARCH 31st, 1955

Brought Forward \$ 6,957,138.48

DIVISION OF SURVEYS

Sundry Aerial Photographs

238.37

DIVISION OF TIMBER MANAGEMENT

Crown Dues \$ 10,834,113.77

Ground Rent 76,019.46

Fire Tax 945,953.21

Interest, Scalpers' Wages, Mill Licenses,
etc. 17,673.06

Cash Deposits (Net) \$ 11,873,759.50
53,918.72

11,927,678.22

MISSISSAGI SALVAGE PROJECT (See Contra)

Proceeds of sale of fire-damaged
timber

Ordinary 261,919.89

Capital 178,810.09

440,729.98

TOTAL RECEIPTS

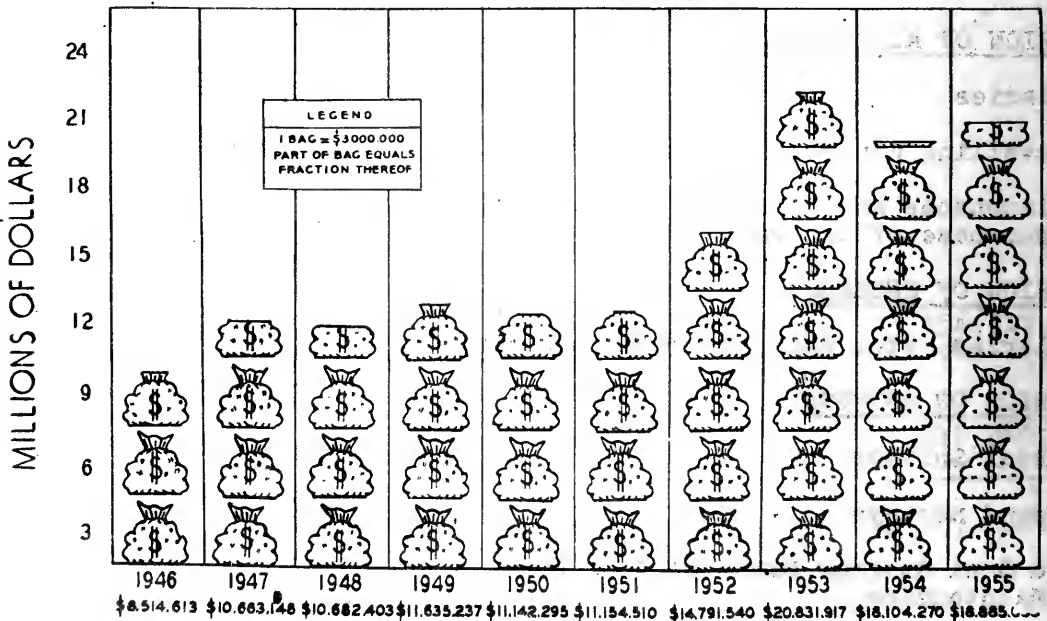
\$19,325,785.05

TREND OF TOTAL ANNUAL RECEIPTS

FOR THE TEN YEARS ENDING 31 MARCH 1955

INCLUDES FORMER GAME AND
FISHERIES DEPARTMENT

DOES NOT INCLUDE MISSISSAGI
SALVAGE PROJECT



DISBURSEMENTS

FOR YEAR ENDING MARCH 31ST, 1955

Brought Forward \$12,544,765.55

PUBLIC INFORMATION ON (1) FIRE PREVENTION, (2) FISH AND WILDLIFE. (3) REFORESTATION AND (4) TIMBER MANAGEMENT

Salaries, etc., Maintenance and Operating 107,849.78

GRANTS

Association of Ontario Land Surveyors	\$ 200.00	
Canadian Forestry Association	6,500.00	
Jack Miner Migratory Bird Foundation Inc.	1,500.00	
Thomas N. Jones	300.00	
E. L. Marsh	100.00	
Ontario Fur Breeders' Association Inc.	2,500.00	
Ontario Federation of Commercial Fishermen	<u>2,500.00</u>	13,600.00

WOLF BOUNTY 38,703.00

BEAR BOUNTY 11,590.00

MISSISSAGI SALVAGE PROJECT (See Contra)

Salvaging fire-damaged timber - Payments to contractors, and other incidental expenses 178,810.09

TOTAL DISBURSEMENTS **\$12,895,318.42**

Excess of Receipts over Disbursements 6,430,466.63

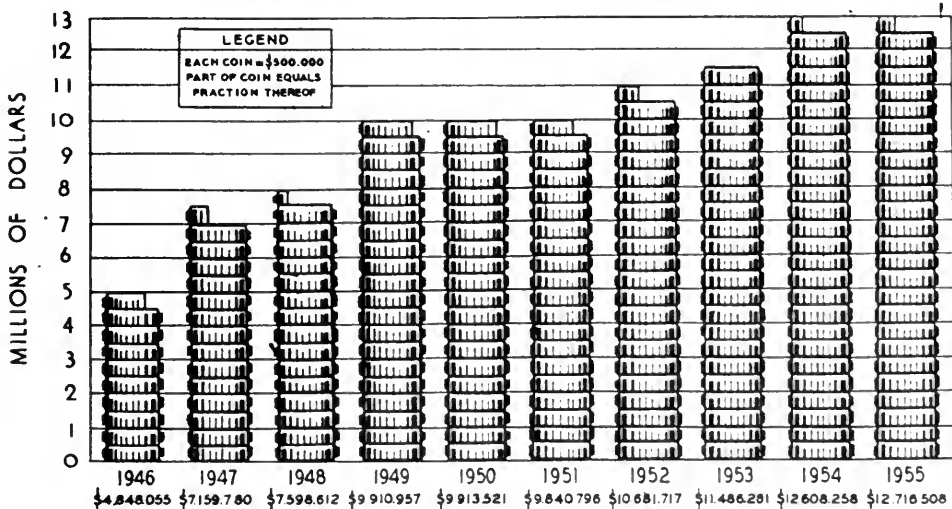
\$19,325,785.05

TREND OF TOTAL ANNUAL DISBURSEMENTS

FOR THE TEN YEARS ENDING 31 MARCH 1955

INCLUDES FORMER GAME AND FISHERIES DEPARTMENT

DOES NOT INCLUDE MISSISSAGI SALVAGE PROJECT



DEPARTMENT OF LANDS AND FORESTS

RESEARCH DIVISION - PROJECTS

STATEMENT OF EXPENDITURE

FOR YEAR ENDING MARCH 31st, 1955

PROJECT

Research Station, Maintenance and Operating and Sundry Projects	\$67,787.96
Statistician - Salary and Expenses	9,955.51
Soil Surveys	43,015.57
Regeneration Surveys	60,045.65
Wildlife	53,637.76
Mechanical Research	20,760.97
Forest Genetics	9,184.48
Biology	36,230.00
South Bay Fisheries	36,705.36
Seed Production	2,041.91
Pathology	4,383.38
Deer Investigation	519.25
Great Lakes Fisheries	<u>36,389.94</u>
Net Direct Expenditure on Projects	380,657.74
Main Office Administration	<u>40,484.09</u>
	<u>\$421,141.83</u>

DISTRIBUTION OF EXPENDITURE

Research - Field Services	\$284,510.46
Main Office	40,484.09
Basic Organization - Equipment and Improvements	30,664.84
Main Office Projects	519.25
District Office Establishments	<u>64,963.19</u>
	<u>\$421,141.83</u>

SECTION NO. 2

DIVISION of AIR SERVICE

D I V I S I O N O F A I R S E R V I C E

G E N E R A L

Insofar as the Division of Air Service is concerned, the fiscal year 1954-55 was normal in every respect. There were no unusually large fires nor was there any enduring period in which a high hazard maintained for any length of time. The number of fires fought was not out of the ordinary nor was the damage arising therefrom.

During the period we were able to more fully assess the performance of the three Otter aircraft acquired during the preceding fiscal year. We have found that a limited number of these large aircraft can be used to advantage and I refer particularly to the long trips made from Sioux Look-out to the Hudson's Bay coast on which it is frequently necessary to carry quite heavy loads of staff and equipment. This ship serves this particular purpose very well and on many occasions has avoided the necessity of flying two smaller aeroplanes to accomplish the same purpose. The aircraft has been relatively free from engineering modifications and gives every promise of being a very useful piece of equipment.

Our Beaver fleet continued to give us fine outstanding service and I think I can say that the Department has never used an aeroplane that has been so versatile in its application as this particular type.

Two helicopters were again leased during the period under review and again they performed very useful service. We find that they are especially well-suited to certain phases of our operations and each year we find some new use with it. I am personally of the opinion that there is still a lot to be done in the development of the helicopter and am not prepared to recommend that the Department go into their purchase at present because of the uncertainty of future development and complications of present operating procedures and difficulties associated therewith.

MAINTENANCE, NEW CONSTRUCTION
and EXPANSION

No new construction was undertaken during the fiscal period under review but normal maintenance was performed where required. Painting and repairs were carried out to the end that the condition of our buildings and equipment was not permitted to deteriorate.

It is hoped that the completion of our plan to add sanitary facilities to all our summer operating bases will be completed this year. The work at some points had been deferred because of the possibilities of changes while that at two or three other points had been deferred in order to obtain some engineering advice from the Department of Public Works.

WINTER OPERATIONS

Winter operations were conducted from Toronto, Algonquin Park, Sudbury, Sault Ste. Marie, Gogama, Chapleau, Geraldton, Port Arthur, Eva Lake, Kenora and Sioux Lookout. Again much of it had to do with supervision of Fish and Wildlife activities but part of it was also associated with Timber Management and the running of a Base Survey Line in the Patricia Country.

A C C I D E N T S

I am very pleased to report there were no fatal accidents during the period under review.

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The following tables are submitted as supplementary to this Report:-

T A B L E 1

Allocation of Aircraft

1954 - 55

<u>BASE</u>	<u>REGISTRATION</u>	<u>TYPE</u>
Algonquin Park	CF-ODC	Beaver
Carey Lake	CF-OBY	Beaver
Caribou Lake	CD-OCT	Beaver
Chapleau	CF-ODB	Beaver
Eva Lake	CF-OCU	Beaver
Fort Frances	CF-OBV	Beaver
Geraldton	CF-ODG	Beaver
Gogama	CF-OCB	Beaver
Ignace	CF-OBU	Beaver
Kenogami	CF-OCD	Beaver
Kenora	CF-OBW CF-OCP	Beaver Beaver
Oba Lake	CF-OBS	Beaver
Orient Bay	CF-OCV	Beaver
Pays Plat	CF-OCO	Beaver
Parry Sound	CF-OCL	Beaver
Pickle Lake	CF-OCS	Beaver
Port Arthur	CF-OCR	Beaver
Red Lake	CF-OCX	Beaver
Remi Lake	CF-OCQ	Beaver
Sault Ste. Marie	CF-ODL CF-OBX CF-OCH	Otter Beaver Beaver
Sioux Lookout	CF-ODK CF-OCZ CF-OCC	Otter Beaver Beaver
South Porcupine	CF-OCA	Beaver
Sudbury	CF-ODF	Beaver
Temagami	CF-OCE	Beaver
Twin Lakes	CF-OCG	Beaver
Toronto	CF-OCY CF-ODE CF-ODI	Beaver Beaver Dove
Photography	CF-ODJ	Otter

T A B L E 1A

Table 1 shows the original allocation of aircraft but the following A/C operated for periods at the Bases shown:

<u>BASE</u>	<u>REGISTRATION</u>	<u>TYPE</u>
Chapleau	CF-OBY	Beaver
Eva Lake	CF-OCC	Beaver
Geraldton	CF-ODA	Beaver
Gogama	CF-OBX	Beaver
Pays Plat	CF-OCH	Beaver
Port Arthur	CF-OCK	Beaver
Sault Ste. Marie	CF-OCK	Beaver
	CF-OCB	Beaver
	CF-ODG	Beaver
	CF-OCR	Beaver
	CF-ODN	Beaver
Sioux Lookout	CF-OCU	Beaver
	CF-OCJ	Beaver
South Porcupine	CF-ODF	Beaver
Sudbury	CF-OBT	Beaver
Temagami	CF-OCU	Beaver
Toronto	CF-OCJ	Beaver

.

T A B L E 11

Transport Aircraft - Effective Loads Carried

1954-55

<u>Aircraft</u>	<u>Hours Flown</u>	<u>Effective Loads</u>	
<u>BEAVER</u>			
CF-OBS	512.45	416,902 lbs;	208 tons 902 lbs.
CF-OBT	345.50	186,845 lbs;	93 tons 845 lbs.
CF-OBU	295.05	123,716 lbs;	61 tons 1716 lbs.
CF-OBV	389.15	270,155 lbs;	135 tons 155 lbs.
CF-OBW	307.00	130,205 lbs;	65 tons 205 lbs.
CF-OBX	401.00	308,790 lbs;	154 tons 790 lbs.
CF-OBY	345.40	153,687 lbs;	76 tons 1687 lbs.
CF-OBZ	417.35	415,870 lbs;	207 tons 1870 lbs.

cont'd.....

T A B L E 11 cont'd.

<u>Aircraft</u>	<u>Hours Flown</u>	<u>Effective Loads</u>	
<u>BEAVER</u>			
CF-OCA	206.35	127,770 lbs;	63 tons 1770 lbs.
CF-OCB	285.10	263,225 lbs;	131 tons 1225 lbs.
CF-OCC	473.00	311,994 lbs;	155 tons 1994 lbs.
CF-OCD	305.25	167,575 lbs;	83 tons 1575 lbs.
CF-OCE	254.45	202,575 lbs;	101 tons 575 lbs.
CF-OCG	240.50	193,215 lbs;	96 tons 1215 lbs.
CF-OCH	123.45	59,015 lbs;	29 tons 1015 lbs.
CF-OCJ	62.30	18,240 lbs;	9 tons 240 lbs.
CF-OCK	350.20	128,360 lbs;	64 tons 360 lbs.
CF-OCL	262.25	105,565 lbs;	52 tons 1565 lbs.
CF-OCN	365.55	244,550 lbs;	122 tons 550 lbs.
CF-OCO	250.45	211,055 lbs;	105 tons 1055 lbs.
CF-OCF	437.00	161,520 lbs;	80 tons 1520 lbs.
CF-OCQ	463.45	136,418 lbs;	68 tons 418 lbs.
CF-OCR	240.05	111,045 lbs;	55 tons 1045 lbs.
CF-OCS	276.15	138,715 lbs;	69 tons 715 lbs.
CF-OCT	248.00	64,210 lbs;	32 tons 210 lbs.
CF-OCU	150.20	93,615 lbs;	46 tons 1615 lbs.
CF-OCV	264.30	87,520 lbs;	43 tons 1520 lbs.
CF-OCX	203.15	86,535 lbs;	43 tons 535 lbs.
CF-OCY	329.00	81,910 lbs;	40 tons 1910 lbs.
CF-OCZ	284.00	151,620 lbs;	75 tons 1620 lbs.
CF-ODA	260.20	163,170 lbs;	81 tons 1170 lbs.
CF-ODB	498.55	329,150 lbs;	164 tons 1150 lbs.
CF-ODC	491.55	307,679 lbs;	153 tons 1679 lbs.
CF-ODD	101.30	22,040 lbs;	11 tons 40 lbs.
CF-ODE	67.50	10,760 lbs;	5 tons 760 lbs.
CF-ODF	295.45	113,305 lbs;	56 tons 1305 lbs.
CF-ODG	183.50	123,915 lbs;	61 tons 1915 lbs.
CF-ODN	72.50	9,870 lbs;	4 tons 1870 lbs.
<u>DOVE</u>			
CF-ODI	410.35	59,810 lbs;	29 tons 1810 lbs.

cont'd.....

T A B L E II cont'd.

<u>Aircraft</u>	<u>Hours Flown</u>	<u>Effective Loads</u>	
<u>OTTER</u>			
CF-ODJ	279.00	67,370 lbs;	33 tons 1370 lbs.
CF-ODK	396.35	225,690 lbs;	112 tons 1690 lbs.
CF-ODL	237.40	272,465 lbs;	136 tons 465 lbs.

Total Transport Section:-

Total Flying Time, Hours:	12,388.30
Total Loading, lbs.	6,857,641
Total Loading, tons	3,428 tons, 1641 lbs

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T A B L E III

Hours Flown on Various Phases of Flying Operations

	<u>1949-54</u>	<u>1954-55</u>	<u>TOTAL</u>
Fire Ranging (Detection & Supression)	28,214.25	5,095.05	33,309.30
Timber Management	4,100.45	1,047.45	5,148.30
Fish & Wildlife	9,712.25	2,361.50	12,074.15
Lands	1,071.45	246.05	1,317.50
Commercial Flying	1,423.15	397.55	1,821.10
Administration	18,318.40	3,239.50	21,558.30
	62,841.15	12,388.30	75,229.45

Break-down of Administration

Mercy Flights	33.55	33.55
Tests (Radio & Aircraft)	94.45	94.45
Ferrying & Instructions	201.40	201.40
Research, Incl. Entomology and Dusting	284.20	284.20
Forced Landings & Operations	360.10	360.10
Transportation Ordinary	1,038.55	1,038.55
Transportation Special	801.00	801.00
Photography	244.25	244.25
Surveys	180.40	180.40
	3,239.50	3,239.50

T A B L E IV

Passengers and Personnel Carried

	<u>1924-54</u>	<u>1954-55</u>	<u>TOTAL</u>
Passengers Carried	310,858	29,256	340,114
Personnel Carried	118,265	5,465	123,730
Total Passengers and Personnel Carried	429,123	34,721	463,844
Effective Loads Flown, lbs;	90,485,737	6,857,641	97,343,378
Effective Loads Flown, Tons;	45,241 tons 3,737 lbs.	3,428 tons 1,641 lbs.	48,669 tons 5,378 lbs.

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T A B L E V

Hours Flown At Bases

1954 - 55

<u>BASE</u>	<u>HOURS FLOWN</u>
Algonquin Park	466.05
Caribou Lake	196.25
Carey Lake	298.30
Chapleau	501.15
Eva Lake	459.50
Fort Frances	384.10
Geraldton	375.55
Gogama	592.35
Ignace	306.30
Kenogami	310.45
Kenora	658.35
Lauzon Lake	316.30
Oba Lake	503.30
Orient Bay	261.45
Parry Sound	246.20
Pays Plat	300.50
Pickle Lake	262.55
Port Arthur	388.10
Red Lake	190.50

T A B L E V cont'd.

Hours Flown At Bases

1954 - 55

<u>BASE</u>	<u>HOURS FLOWN</u>
Remi Lake	458.55
Sault Ste. Marie	543.20
Sioux Lookout	702.30
South Porcupine	355.20
Sudbury	399.45
Temagami	360.45
Toronto	844.00
Twin Lakes	226.40
White River	386.00
Photographic Operations	248.55
Air Service Operations, testing, ferrying etc.	840.55
	12,388.30

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T A B L E VI

Flying Time - Pilots

<u>Pilots</u>		<u>1924-54</u>	<u>1954-55</u>	<u>TOTAL</u>
Allen	DW	567.45	242.15	810.00
Beaushene	GD	774.20	267.00	1,041.20
Burton	EC	3,680.40	270.10	3,950.50
Burt	AE	4,627.35	405.55	5,033.30
Buckworth	WB	3,019.15		3,019.15
Calladine	TJ	1,859.20	311.40	2,171.00
Canfield	GS	1,054.45	399.35	1,454.20
Calver	DR	319.30	326.45	646.15
Campbell	GE	420.10	313.10	733.20
Colfer	AP	1,364.40	389.00	1,753.40
Cooke	TC	3,200.25	381.05	3,581.30
Culliton	JP	3,688.15	88.25	3,776.40
Denley	JG	4,244.45	607.10	4,851.55
Dinnin	AR		241.20	241.20

T A B L E VI cont'd.

Flying Time - Pilots

<u>Pilots</u>		<u>1924-54</u>	<u>1954-55</u>	<u>TOTAL</u>
Evans	FB	1,698.25	362.35	2,061.00
Fawcett	TB	1,904.15	466.15	2,370.30
Hoar	HA	1,194.25	247.35	1,442.00
Hoeberg	PS	459.30	294.10	753.40
Hugill	WA	142.00	251.05	393.05
Kincaid	J	3,818.30	437.30	4,256.00
Kirk	CJ	1,847.50	350.20	2,198.10
Lamont	JA	866.35	514.50	1,381.25
Lanktree	WJ	1,009.50	311.30	1,321.20
LeFeuvre	CJ	5,363.25	459.40	5,823.05
MacDougall	FA	4,508.35	39.40	4,548.15
Parsons	R	5,400.45	245.55	5,646.40
Ponsford	GE	999.15	100.05	1,099.20
Phillips	GHR	10,370.50	491.55	10,862.45
Poulin	LD	5,230.20	505.55	5,736.15
Reid	DM	2,640.55	261.20	2,902.15
Siegel	J	2,794.55	206.00	3,000.55
Stone	RWE	2,194.45	317.40	2,512.25
Speight	HC	3,636.55	421.00	4,057.55
Smith	AB	4,426.15	425.30	4,851.45
Thompson	FJ	189.40	374.15	563.55
Taylor	JM	3,028.00	48.20	3,076.20
Trussler	GE	5,376.00	215.35	5,591.35
Thomas	E	1,038.30	477.45	1,516.15
Other Pilots		139,169.05	318.35	139,487.40
		238,130.55	12,388.30	250,519.25

T A B L E VII

Flying Time - Aircraft

<u>A/C</u>	<u>1924-54</u>	<u>1954-55</u>	<u>TOTAL</u>
<u>Beaver</u>			
CF-OBS	2,592.40	512.45	3,105.25
CF-OBT	1,774.10	345.50	2,120.00
CF-OBU	2,042.15	295.05	2,337.20
CF-OBV	1,878.20	389.15	2,267.35
CF-OBW	1,995.25	307.00	2,302.25
CF-OBX	1,682.15	401.00	2,083.15
CF-OBY	1,903.35	345.40	2,249.15
CF-OBZ	1,759.50	417.35	2,177.25
CF-OCA	1,508.50	206.35	1,715.25
CF-OCB	1,916.30	285.10	2,201.40
CF-OCC	1,735.35	473.00	2,208.35
CF-OCD	1,317.35	305.25	1,623.00
CF-OCE	2,056.30	254.45	2,311.15
CF-OCG	1,480.55	240.50	1,721.45
CF-OCH	1,743.10	123.45	1,866.55
CF-OCJ	1,577.00	62.30	1,639.30
CF-OCK	1,626.10	350.20	1,976.30
CF-OCL	1,730.30	262.25	1,992.55
CF-OCN	1,646.35	365.55	2,012.30
CF-OCO	1,167.25	250.45	1,418.10
CF-OCP	1,202.25	437.00	1,639.25
CF-OCQ	1,909.10	463.45	2,372.55
CF-OCR	1,550.00	240.05	1,790.05
CF-OCS	1,901.20	276.15	2,177.35
CF-OCT	1,288.20	248.00	1,536.20
CF-OCU	1,694.45	150.20	1,845.05
CF-OCV	1,130.10	264.30	1,394.40
CF-OCX	1,069.15	203.15	1,272.30
CF-OCY	917.35	329.00	1,246.35
CF-OCZ	728.20	284.00	1,012.20
CF-ODA	887.50	260.20	1,148.10

T A B L E VII cont'd.

Flying Time - Aircraft

<u>A/C</u>	<u>1924-54</u>	<u>1954-55</u>	<u>TOTAL</u>
<u>Beaver</u>			
CF-ODB	1,106.00	498.55	1,604.55
CF-ODC	1,066.15	491.55	1,558.10
CF-ODD	290.25	101.30	391.55
CF-ODE	385.55	67.50	453.45
CF-ODF	808.40	295.45	1,104.25
CF-ODG	680.45	183.50	864.35
CF-ODN		72.50	72.50
<u>Dove</u>			
CF-ODI	222.55	410.35	633.30
<u>Otter</u>			
CF-ODJ	259.55	279.00	538.55
CF-ODK	334.45	396.35	731.20
CF-ODL	218.35	237.40	456.15
All Other Aircraft	182,401.15		182,401.15
	<hr/> 237,189.50	12,388.30	<hr/> 249,578.20

MERCY AND EMERGENCY FLIGHTS 1954-55

<u>DATE</u>	<u>AIRCRAFT</u>	<u>PILOT</u>	<u>JOURNEY</u>	<u>TIME</u>	<u>REASON</u>
May 23/54	CF-OBY	D. R. Calver	Carey Lake to Government Lake to Carey Lake	1:45	Man seriously injured by bear.
May 18/54	CF-ODC	G.H.R. Phillips	Portal Lake to North Tea Lake to Vernon Lake to Portal Lake	1:15	Man seriously ill with ruptured appendix.
June 10/54	CF-OCB	J.G. Denley	Gogama to Sudbury	90 miles	Maternity case flown to Sudbury.
June 11/54	CF-OCQ	E. Thomas	Tatnall Lake to Kapuskasing via Goat Lake	1:00	Seriously ill girl flown to hospital.
June 12/54	CF-OCH	R. Parsons	Sault to Toronto to Sault	5:20	Man critically ill flown to hospital.
June 26/54	CF-OBS	J.A. Lamont	Wabatonquish Lake to Chapleau to Wabatonquish Lake	1:10	Partially drowned man flown to hospital.
June 27 and June 28/54	CF-ODB	L.D. Poulin	Chapleau to Toronto to Chapleau	6:45	Seriously ill man flown to hospital.
July 13/54	CF-OCC	T.B. Fawcett	Eva Lake to Bell Lake to Ely, Minnesota to Eva Lake	1:30	Boy Scout with severed arm flown to hospital.
July 22/54	CF-OCL	D.M. Reid	Parry Sound to Dorset Black Lake to Parry Sound	2:15	Drowning Accident.
July 22/54	CF-ODC	G.H.R. Phillips	Smoke Lake to Radiant Lake to Source Lake	:50	Boy Scout seriously injured flown to hospital.
July 26/54	CF-ODB	L.D. Poulin	Bisco to Peter's Lake to Chapleau	:45	Seriously ill man flown to hospital.
Aug. 23/54	CF-OCO	G.E. Campbell	Specticle Lake to Walker Lake to Specticle Lake	:20	Two persons believed to have flown out of bush.
Aug. 24/54	CF-OBT	A.B. Smith	Sudbury to McGregor Bay to Sudbury	:55	Man with severe hearing condition flown to hospital.
Sept. 3 and Sept. 4/54	CF-OBX	J.G. Denley	Trout River to Gogama to Sudbury to Gogama	2:00	Injured Boy Scout flown to Hospital.

cont'd...

MERCY AND EMERGENCY FLIGHTS 1954-55 cont'd.

<u>DATE</u>	<u>AIRCRAFT</u>	<u>PILOT</u>	<u>JOURNEY</u>	<u>TIME</u>	<u>REASON</u>
Sept. 6 and Sept. 7/54	CF-OBX	J.G. Denley	Gogama to Sudbury to Gogama	1:40	Seriously ill baby flown to hospital.
Sept.13/54	CF-OCN	F.B. Evans	Lauzon to Deagle to Lauzon	:30	Injured man flown to hospital.
Sept.16/54	CF-OCL	D.M. Reid	Parry Sound to San Soucie to Parry Sound	:20	Injured man flown to hospital.
Sept.16/54	CF-OCV	G.D. Beaushene	Orient Bay to Paul Island to Port Arthur to Orient Bay	1:55	Severely burned men flown to hospital.
Sept.14/54	CF-ODI	R. Reynolds	Toronto to Kapuskasing to Sudbury to Toronto	5:45	Serum flown to hospital.
Sept.29/54	CF-OCL	D.M. Reid	Parry Sound to Toronto to Parry Sound	2:30	Seriously ill child flown to hospital.
Oct.11 and Oct.12/54	CF-OCD	R.W.E. Stone	Kenogami L. to Clarice Lake to Gull Island to Kenogami	2:05	Hunting Accident.
Oct. 13/54	CF-OBX	J.G. Denley	Gogama to Sudbury to Gogama	1:45	Seriously burned woman flown to hospital.
Oct.27/54 & Oct.28	CF-OCR	T.J. Calladine	Sault to Wawa to Sault	2:40	Drowning Accident.
Dec. 26/54	CF-ODB	L.D. Poulin	Chapleau to Foleyet to Chapleau	1:00	Seriously ill woman flown to hospital.
Jan. 10/55	CF-OCK	A.E. Burt	Port Arthur to Gull Bay to Port Arthur	1:45	Epidemic among Indian
Jan. 13/55	CF-OBX	J.G. Denley	Gogama to Reserve to Gogama to Reserve to Gogama	:55	Nurse flown to Reserve to look after sick infant.
Mar. 24/55	CF-OBX	J.G. Denley	Gogama to Reserve to Gogama	:25	Pneumonia case.
Mar. 26/55	CF-OBX	J.G. Denley	Gogama to Reserve to Gogama	:30	Nurse flown Reserve to take care of seriously ill man.

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DIVISION of FISH and WILDLIFE

W I L D L I F E S E C T I O N

Open Seasons

The following open seasons were established by regulation -

Deer

(a) October 1st to November 25th: North of the northernmost east-west line of the Canadian National Railway from the Quebec boundary to the Manitoba boundary and south of the southern boundary of the "Hinterland Area".

(b) October 15th to November 25th: South of (a) and north of a line following the road from the Quebec boundary westerly along the south boundaries of Brethour and Hilliard townships to Highway No. 11, north-westerly and northerly along Highway No. 11 to its junction with the Englehart-Westree road, westerly along the last mentioned road to the line of the Canadian National Railway at Westree, southeasterly along the Canadian National Railway to the east boundary of Blewett Township, southerly along the east boundaries of Blewett, Shelley, Onaping, Fairbairn, Emo, Munster, Hess and Cartier Townships to the southeast angle of Cartier Township, westerly to the northeast angle of Township 125, southerly to southeast angle of Township 125, westerly to Little White River at the south boundary of Township 169, northerly along the Little White River, Distant Lake, Kindiogami River, Kindiogami Lake and the east boundaries of Townships 3C and 4C to the south boundary of Township 5C, westerly to the southwest angle of Township 5F, northerly to the northeast angle of Township 7G, and westerly to the southwest angle of Township 28, Range 15, and its production westerly to Lake Superior, excepting therefrom:

- (1) The District of Rainy River; and
- (2) That part of the District of Thunder Bay lying south of the main transcontinental line of the Canadian National Railway from Fowler Station east to the easterly boundary of the Township of Nakina.

(c) October 23rd to November 13th: That part of the District of Thunder Bay lying south of the main transcontinental line of the

Canadian National Railway from Fowler Station east to the easterly boundary of the Township of Nakina.

(d) November 1st to November 25th: The District of Rainy River and the area south of (b) and north of the French and Mattawa Rivers, the north shore of Georgian Bay, the north shore of the North Channel, and including Cockburn, Great Cloche, Little Cloche, and Phillip Edward Islands, and the islands in McGregor Bay and Bay of Islands.

(e) November 15th to November 25th: St. Joseph Island, Manitoulin Island, and the other islands in Manitoulin district except those referred to in (d).

(f) November 8th to November 20th: The District of Parry Sound; the District of Muskoka (except the townships of Medora and Wood); that part of the District of Nipissing lying south of the northerly boundary of the Township of West Ferris and the Mattawa River; the counties of Haliburton, Lanark and Renfrew; the Township of Rama in the County of Ontario; the townships of Dalton, Longford and Somerville, and the Township of Digby (except concessions 1 and 2) in the County of Victoria; those parts of the counties of Peterborough, Hastings and Lennox and Addington lying north of No. 7 Highway; and those parts of the County of Frontenac and the Township of North Crosby in the County of Leeds lying north of No. 7 Highway from the west boundary of the Township of Kennebec, in the County of Frontenac, easterly to the Frontenac County road between concessions 2 and 3, Township of Alden, thence southerly along this county road through Mountain Grove and along the west side of Eagle Lake to No. 38 Highway at Parham, thence easterly along No. 38 Highway to the Mass Road at a point between Parham and Tichborne, thence southerly, easterly and northerly along the Mass Road around the south shore of Bob's Lake to the county road at Fermoy, thence easterly along this county road through Westport in the County of Leeds to the north shore of the Upper Rideau Lake, thence easterly along the north shore of the Upper Rideau Lake to the east boundary of the Township of North Crosby in the County of Leeds.

Excepting therefrom those portions of the District of Nipissing and the County of Haliburton which comprise Algonquin Park.

(g) November 8th to November 13th: That part of the County of Carleton lying west of the Rideau River.

(h) November 10th to November 13th:

(1) Those parts of the counties of Peterborough, Hastings and Lennox and Addington, lying south of No. 7 Highway, and that part of the County of Frontenac lying south of the line defined in (f).

(2) (1) The counties of Dundas, Glengarry, Grenville, Prescott, Russell and Stormont;

(ii) That part of the County of Carleton lying east of the Rideau River; and

(iii) The County of Leeds (except that part of the Township of North Crosby lying north of the line defined in (f)).

Only shotguns may be used during this open season in the areas specified in subclause (2) of the preceding clause (h).

Moose

Schedule 1: South of the southern boundary of the "Hinterland Area" and north of the northernmost east-west line of the Canadian National Railway, easterly from the Ontario-Manitoba boundary to the Little Jackfish River, southerly along the Little Jackfish River and the easterly shore of Lake Nipigon to Macdiarmid, easterly to Highway 11 and easterly along Highway 11 to the Nagagami River, northerly along that river to the line of the Canadian National Railway and easterly along that railway to the Ontario-Quebec boundary:

Except: That portion of the District of Kenora lying north of the northernmost east-west line of the Canadian National Railway between Canyon Lake and the 6th meridian line; east of Canyon Lake, Canyon River, Wabigoon River, Ball Lake, Tide Lake, and Maynard Lake, and their connecting waters and the connecting waters between Maynard Lake and Oak

Lake to the 7th Base Line, the 7th Base Line easterly to Highway 105 (Red Lake Road), Highway 105, northwesterly to the south boundary of Heyson Township, westerly to the south-west angle of Baird Township, and northerly to the 9th Base Line; south of the 9th Base Line easterly to the 6th meridian line; and west of the 6th meridian line southerly to the line of the Canadian National Railway.

(a) October 1st to October 15th;

Bulls only--resident and non-resident hunters.

(b) November 26th to December 24th;

Any moose--resident hunters only.

Schedule 2: South of the northernmost east-west line of the Canadian National Railway easterly from the Ontario-Manitoba boundary to the 4th meridian line; west of the 4th meridian line southerly to the base line surveyed in 1893 by A. Niven, O.L.S.; north of that base line westerly to the meridian line surveyed in 1927 by Speight and Van Nostrand, O.L.S.; west of that meridian line southerly to the south boundary of Kenora District; north of that south boundary westerly to the Ontario-Manitoba boundary; and east of that boundary northerly to the line of the Canadian National Railway; and

Including the area comprising the exception defined in Schedule 1.

(a) October 15th to October 30th; and

(b) November 26th to December 24th;

Any moose--resident hunters only.

Schedule 3: (1) South of the northernmost east-west line of the Canadian National Railway easterly from the 4th meridian line to the west boundary of Nipigon Provincial Forest; west of that boundary southerly and its production southerly to the base line surveyed in 1921 by Phillips and Benner, O.L.S.; north of that base line westerly, and continuing westerly along the south boundary of Grand Trunk Pacific Railway land grant, Block 4, surveyed in 1907 by Thomas Fawcett, O.L.S., to the line of the Canadian National Railway, that line of railway northwesterly to the first

intersection with the west boundary of Thunder Bay District, that boundary southerly to the south boundary of Kenora District, that boundary westerly to the meridian line surveyed in 1927 by Speight and Van Nostrand, O.L.S., and north, east and north along the east boundary of Schedule 2 to the junction of the 4th meridian line and the line of the Canadian National Railway.

(2) Easterly along Highway 17 from Nipigon River to Highway 11, northerly along Highway 11 to Macdiarmid, along the southern boundary of Schedule 1 easterly from Macdiarmid to the Ontario-Quebec boundary; south along that boundary to the north boundary of Temiskaming District, west along that boundary to the north-west angle of Black Township, south to the Elk Lake-Westree Road where it intersects the west boundary of James Township; west along that road to its intersection in Westree with the line of the Canadian National Railway, south-east along that line of railway to its intersection with the south boundary of Lampman Township, west to the line of the Canadian Pacific Railway where it intersects the south boundary of Township No. 7, northwesterly along that line to the west boundary of Sudbury District, southerly along that boundary to the south boundary of Range 23, westerly along that boundary to the shore of Lake Superior (Michipicoten Harbour); northwesterly along the south boundaries of Algoma and Thunder Bay Districts to the Nipigon River and northerly along that river to the point of commencement.

(a) October 15th to October 30th;

Bulls only--resident and non-resident hunters.

(b) November 26th to December 24th;

Any moose--resident hunters only.

Schedule 4: South of the northernmost east-west line of the Canadian National Railway easterly from the west boundary of the Nipigon Provincial Forest to the Little Jackfish River, southerly along that river and the east shore of Lake Nipigon to Macdiarmid, east to Highway 11, south along Highway 11 to Highway 17, west along Highway 17 to the Nipigon River

and south along the Nipigon River to the south boundary of Thunder Bay District; southwesterly along that south boundary to the west boundary of Thunder Bay District; northerly along that west boundary to its intersection with the second right-of-way of the Canadian National Railway, south-easterly along that right-of-way to its intersection with the south boundary of the Grand Trunk Pacific Railway land grant Block 4, easterly along that south boundary surveyed in 1907 by Thomas Fawcett, O.L.S., and continuing east along the base line surveyed in 1921 by Phillips and Benner, O.L.S., to the production southerly of the west boundary of the Nipigon Provincial Forest, and northerly along that production and that west boundary to the point of commencement.

November 26th to December 15th;

Bulls only--resident hunters only.

Schedule 5: South of the south boundary of Schedule 3 (2) from the Ontario-Quebec Boundary easterly to the shore of Lake Superior (Michipicoten Harbour); southerly along that shore to the south boundary of Range 15; easterly along that south boundary to the north-west angle of Township 7F, southerly to the south-west angle of Township 5F, easterly to the north-west angle of Township 4B, southerly to the north shore of Kindiogami Lake where it intersects the west boundary of Township 3B, southerly along Kindiogami Lake, Kindiogami River, Distant Lake and Little White River to the south boundary of Township 168, easterly to the north-west angle of Township 138, southerly to Serpent Lake where it intersects the west boundary of Shedden Township, easterly along Serpent Lake to the east boundary of the Serpent River Indian Reserve, southerly along that boundary to Highway 17, easterly along Highway 17 and Highway 63 through North Bay to the north shore of Trout Lake, easterly along that shore, Talon Lake and connecting waters to the Mattawa River, easterly along that river to the Ontario-Quebec boundary; and northerly along that boundary to the point of commencement.

November 26th to December 11th;

Bulls only--resident hunters only.

Upland Game Birds and Small Game Animals

Hungarian Partridge: September 15th to November 20th. Bag Limit - 8 per day; Possession Limit - 16. See Schedule 1.

September 18th to November 20th. Bag Limit - 8 per day; Possession Limit - 16. See Schedule 3.

October 2nd to October 30th. Bag Limit - 8 per day; Possession Limit - 16. See Schedule 4 and Schedule 5.

Grouse and Spruce Partridge: October 2nd to 11th and November 8th to 20th. Bag Limit - 5 per day. Possession Limit - 15. See Schedule 1, Schedule 2 and Schedule 4.

November 1st to November 6th. Bag Limit - 3 per day. Possession Limit - 15. See Schedule 5.

Ptarmigan: September 1st, 1954, to March 31st, 1955. Bag Limit - 5 per day. Possession Limit - 15. See Schedule 1, Schedule 2, Schedule 4 and Schedule 5.

*Pheasants: 1. Pelee Island: October 27th and 28th: 8.00 a.m. to 5.00 p.m. Possession Limit - 9 cocks and 5 hens.

2. (a) East Whitby, Pickering and Whitby townships (Ontario County); and

(b) Markham and Whitchurch Townships (York County): October 29th and 30th: 8.00 a.m. to 5.00 p.m. Bag Limit - 3 per day (cocks only).

3. Brant, Halton, Huron, Oxford, Waterloo, Wellington and Wentworth counties: October 27th, 29th and 30th: 8.00 a.m. to 5.00 p.m. Bag Limit - 3 per day (cocks only).

4. The remainder of Ontario, not described in 1, 2 and 3: October 27th to October 30th, inclusive: 8.00 a.m. to 5.00 p.m. Bag Limit - 3 per day (cocks only).

Squirrel: (Black, Gray and Fox) November 1st - November 6th. Bag Limit - 5 per day. Possession Limit - 10 at any one time.

*Fox: August 15th, 1954 to August 15th, 1955.

Raccoon: October 1st, 1954 to February 18th, 1955.

*Rabbits: (1) November 1st, 1954, to January 31st, 1955 - Counties of Essex and Kent. Non-resident licences not valid in this area for rabbit.

(2) November 1st, 1954 to February 28th, 1955 (a) In the counties of Elgin, Haldimand, Lambton, Lincoln, Middlesex, Norfolk, Peel, Welland and York. (b) The townships of East Whitby, Whitby and Pickering (Ontario County); Adjala, Tecumseth and West Gwillimbury (Simcoe County); and Darlington and Clarke (Durham County).

(3) October 27th and October 29th, 1954 - February 28th, 1955 -

(a) In the counties of Brant, Halton, Oxford and Wentworth.

(b) The townships of Hay, Stanley and Stephen (Huron County); Wilmot (Waterloo County) and Puslinch (Wellington County).

(4) September 1st, 1954 to August 31st, 1955 - in other parts of Ontario. Bag Limit - cottontails 6 per day.

Schedule 1: North of the northernmost east-west line of the Canadian National Railway from the Quebec boundary to the Manitoba boundary.

Schedule 2: All of Ontario not described in Schedule 1;

Except: That portion lying south and west of a line drawn east from Georgian Bay along the north boundary of Muskoka District to Highway No. 69; thence south along Highway No. 69 and Highway No. 12 to the south boundary of Reach Township (Ontario County); thence east along the south boundaries of Reach Township, and Cartwright and Manvers townships (Durham County); thence south along the east boundary of Clarke Township (Durham County) to Lake Ontario.

Schedule 3: That part of Ontario described in Schedule 2;

Except: That part of Thunder Bay District south of the northernmost east-west line of the Canadian National Railway.

Schedule 4: (1) Bruce, Dufferin, Grey, Huron, Perth, Waterloo and Wellington counties;

(ii) Simcoe County, except Adjala, Tecumseth and West Gwillimbury townships and that part of Orillia Township east of Highway No. 69.

(iii) Muskoka District (part) west of Highway No. 69; and

(iv) Ontario County; except:-

(a) East Whitby, Pickering and Whitby townships; and

(b) That part lying east of Highway No. 69 and Highway No. 12 south from the west boundary of Rama Township to the south boundary of Reach Township:

Schedule 5: (i) Brant, Elgin, Essex, Haldimand, Halton, Kent, Lambton, Lincoln, Middlesex, Norfolk, Oxford, Peel, Welland, Wentworth and York counties;

(ii) Adjala, Tecumseth and West Gwillimbury townships (Simcoe County);

(iii) East Whitby, Pickering and Whitby townships (Ontario County) and

(iv) Clarke and Darlington townships (Durham County).

*Special Township Hunting Licences are required to authorize the hunting of pheasants, rabbits and foxes in specified townships in the counties of Brant, Durham, Elgin, Essex, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Ontario, Oxford, Peel, Prince Edward, Simcoe, Waterloo, Welland, Wellington, Wentworth and York. Special licences obtainable only through local Departmental Offices are required in order to hunt raccoon at night with hounds.

Fur

Beaver: (By quota only) November 1st, 1954 to May 21st, 1955. In that part of Ontario lying north and west of the French and Mattawa Rivers.
2. November 15th, 1954 to April 30th, 1955. In that part of Ontario lying south of the French and Mattawa Rivers.

Fisher and Marten: (On registered traplines and by quota only).

November 1st, 1954 to January 21st, 1955. In all parts of Ontario.

Fox: August 15th, 1954 to August 15th, 1955. In all parts of Ontario.

Lynx: (On registered traplines and by quota only) November 1st, 1954 to February 28th, 1955. In all parts of Ontario.

Mink: 1. November 1st, 1954 to February 28th, 1955. (a) North of the northernmost transcontinental railway line.

(b) In the counties of Elgin, Essex, Haldimand, Kent, Lambton and Norfolk on registered traplines only.

2. November 1st, 1954 to January 21st, 1955. South of the northernmost transcontinental railway line.

Raccoon: October 1st, 1954 to February 28th, 1955. In all parts of Ontario.

Otter: November 1st, 1954 to April 30th, 1955. In all parts of Ontario except in the counties of Brant, Dufferin, Elgin, Essex, Grey, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Ontario, Oxford, Peel, Perth, Simcoe, Waterloo, Welland, Wellington, Wentworth, York, and in the townships of Arran, Brant, Bruce, Carrick, Culross, Elderslie, Greenock, Huron, Kincardine, Kinross, and Saugeen in the county of Bruce, where there is NO OPEN SEASON.

Muskrat: 1. November 1st, 1954 to May 31st, 1955. North of the northernmost transcontinental railway line.

2. November 1st, 1954 to May 21st, 1955. In the remainder of the province north of the French and Mattawa Rivers.

3. March 1st, 1954 to April 21st, 1955. In the counties of Brant, Bruce, Carleton, Dufferin, Dundas, Durham, Elgin, Essex, Glengarry, Grenville, Grey, Haldimand, Halton, Huron, Kent, Lambton, Leeds, Lincoln, Middlesex, Norfolk, Northumberland, Ontario, Oxford, Peel, Perth, Peterborough, Prescott, Prince Edward, Russell, Simcoe, Stormont, Victoria, Waterloo, Welland, Wellington, Wentworth, and York, and in those parts of the counties of Frontenac, Hastings, Lanark, and Lennox and Addington, lying southerly and easterly of Highway No. 7, Highway No. 15 between Perth and Carleton Place, and Highway No. 29 from Carleton Place to where it intersects the boundary between the counties of Lanark and Carleton.

4. March 15th, 1954 to May 5th, 1955. In the districts of Muskoka and Parry Sound, in that part of the district of Nipissing lying south of Trout Lake and the Mattawa River, in the county of Renfrew and the Provisional County of Haliburton, and in those

parts of the counties of Frontenac, Hastings, Lanark, and Lennox and Addington lying northerly and westerly of Highway No. 7, Highway No. 15 between Perth and Carleton Place, and Highway No. 29 from Carleton Place to where it intersects the boundary between the counties of Lanark and Carleton.

NOTE: On all registered traplines the muskrat season opens on November 1st and extends to the closing date given above for the region in which the trapline is located.

All trapping of Beaver, Fisher, Lynx, and Marten is on a quota basis only, set by the Department.

Quotas are set for Fisher, Lynx, and Marten for registered traplines only.

All Beaver, Fisher, Lynx, Marten, Mink, and Otter are to be sealed by a Department Officer before being sold by the trapper.

Migratory Birds

Duck hunters in Ontario were allowed a daily bag limit of eight ducks during the 1954 hunting season. This bag limit does not include mergansers, and may include not more than one woodduck. Five geese, twenty-five rails, coots and gallinules (in the aggregate), eight Wilson's snipe and eight woodcock may also be taken each day in this Province, and the possession limit for all is 2 days' bag.

Open seasons will be as follows: (all dates inclusive) Ducks, Geese, Rails, Coots, Gallinules, Woodcock, Wilson's Snipe in the Northern District, September 15th to December 15th; in the central district, September 18th to December 15th; in the southern district, October 2nd to December 15th (except that in Essex County the open season for geese is from October 2nd to December 31st inclusive).

The Northern District of Ontario comprises that part of the Province lying north of a line described as follows: Commencing at the point where the right of way of the Canadian National Railways intersects the east boundary of the Province near Goodwin Station; thence westerly along the

said right of way of the Canadian National Railways through Cochrane, Kapuskasing, Hearst and Sioux Lookout to the intersection of the said right of way with the west boundary of the Province near White Station.

The Southern District of Ontario comprises: those parts of Muskoka District and Simcoe County lying west of Highway 69; in Ontario County, those parts of the townships of Rama, Mara, Thorah, Brock, and Reach lying west of Highways 69 and 12, and the townships of Scott, Uxbridge, Pickering, Whitby, and East Whitby; in Durham County, the townships of Darlington and Clarke; and the counties of Brant, Bruce, Dufferin, Elgin, Essex, Grey, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Oxford, Peel, Perth, Waterloo, Welland, Wellington, Wentworth and York.

The Central District of Ontario comprises all that part of the Province which is not included in the Northern District or the Southern District.

ANNUAL REPORT

BIG GAME AND FUR MANAGEMENT

YEAR 1954-55

BIG GAME MANAGEMENT.

Moose.

The moose inventory first started in 1948 was improved in some Forest Districts with the inclusion of aerial surveys carried out from the Department's heavier aircraft. The results of this inventory are summarized in Table 1 and indicate a further small increase in the moose population.

Schedule of Seasons.

The inventory and other factual information collected by the field staff in the Districts indicated that it would be possible to liberalize moose hunting regulations in many parts of Ontario in 1954. Accordingly changes were made with respect to the length of the season, to new areas open, to an extension of the area open to non-residents, and to the shooting of cows and calves.

There was a considerable increase in the number of moose licences sold in 1954 as the following figures show:

	<u>1952</u>	<u>1953</u>	<u>1954</u>
Resident	3620	5196	7502
Non-resident	<u>0</u>	<u>637</u>	<u>735</u>
TOTAL	3620	5833	8237

The distribution of hunting pressure was still poor although progress was made particularly in the Kenora District in spreading out hunter concentrations. Table 2 gives the figures of licences sold, returns made by the hunters, and hunter success calculated from the returns from sixteen Forest Districts concerned with the moose hunt.

TABLE 1.

ONTARIO MOOSE POPULATION ESTIMATES, 1954.

	<u>1953</u>	<u>Mile/Moose</u>	<u>1954</u>	<u>Mile/Moose</u>
Chapleau	1200	5.4	1489	4.4
Cochrane	1853	2.7	2348	2.1
Fort Frances	392	19.0	368	19.9
Geraldton	2957	3.1	2844	3.2
Gogama	1610	4.0	1690	3.7
Kapuskasing	3204	3.2	3249	3.1
Kenora	1946	5.6	2221	4.9
Lindsay	86	63.0	118	45.6
North Bay	1400	4.2	900*	6.5
Parry Sound	187	37.0	285	24.1
Patricia Central	6127	16.0	7194	13.8
Patricia East	3500	22.0	2861	26.7
Patricia West	7745	5.9	6950	6.5
Pembroke	475	13.0	582	9.7
Port Arthur	3399	5.0	2908*	5.9
Sault Ste. Marie	1345	7.1	1878	5.1
Sioux Lookout	1135	4.2	1185	3.9
Sudbury	950	11.0	924*	11.0
Swastika	1000	5.5	1000	5.5
Tweed	90	80.0	116	62.3
White River	<u>1350</u>	<u>5.2</u>	<u>1350</u>	<u>5.2</u>
TOTALS:	41,949	8.6	42,460	8.5

* Not a decrease. Revision based on more accurate information.

TABLE 2.

ANALYSIS OF MOOSE LICENCES SOLD, RETURNS MADE, AND HUNTERS'SUCCESS, 1954.

District	RESIDENT			NON-RESIDENT		
	Licences Issued	Returns Made	Hunters' Success	Licences Issued	Returns Made	Hunters' Success
Chapleau	274	265	20.2%	36	36	28.6%
Cochrane	1224	868	24.1%	62	55	62.9%
Fort Frances	107	0 [*]	0	0	0	0
Geraldton	685	377	41.1%	39	29	75.9%
Hogama	247	114	23.9%	20	16	50.0%
Kapuskasing	933	698	29.0%	69	53	66.0%
Kenora	534	591 [*]	53.3%	234	205	53.7%
North Bay	307	202	24.2%	0	0	0
Patricia Central	0	25 [*]	44.0%	0	2 [*]	100.0%
Patricia West	0	312 [*]	50.0%	0	289 [*]	63.0%
Port Arthur	840	820	21.3%	36	23	65.2%
Sault Ste. Marie	129	106	20.7%	0	0	0
Siouxs Lookout	364	306	44.0%	191	2	0
Sudbury	573	353	24.0%	7	1	100.0%
Swastika	792	400	19.5%	19	2	0
White River	386	104	23.2%	25	14	94.0%
TOTALS:	7395 [#]	5541		738	727	

* Hunters returns were made to the Districts where they hunted and not necessarily to the District where the licence was bought.

This figure does not include complimentary licences.

The number of sportsmen cooperating in reporting on the success of their hunt improved this year when 77% returned the questionnaires. The important study of the age of moose shot was continued but the collection of jaws upon which the project depended was disappointing. Only 493 jaws were received from over 2000 moose known to have been killed. The results of this study are summarized in Table

TABLE 3.

AGE DISTRIBUTION OF MOOSE SHOT IN 1954.

Years of Age	Northern Region		Central Region		Mid-Western Region		Western Region	
	Number	%	Number	%	Number	%	Number	%
Calf	4	3%	8	6%	11	8%	17	19%
1½	19	15%	22	15%	17	13%	14	16%
2½	29	23%	24	17%	33	24%	12	14%
3½	23	18%	21	15%	18	13%	12	14%
4½	15	12%	24	17%	19	14%	13	15%
5½ - 6½	10	8%	8	6%	10	7%	3	3%
6½ - 8½	13	10%	14	10%	13	10%	5	6%
8½ - 10½	7	6%	9	6%	10	7%	3	3%
10½ - 15½	4	3%	6	4%	4	3%	6	7%
15½ or over	1	1%	8	6%	1	1%	3	3%
	<u>125</u>		<u>144</u>		<u>136</u>		<u>88</u>	

The study of moose reproductive rates was also hampered by the receipt of only 66 genital tracts, some of which were incomplete.

Table 4 summarizes the moose kill by resident and non-resident hunters for each District, the yield per 100 square miles and the percentage of the estimated population which was removed.

The 1954 season was the first in which the killing of cow and calf moose was permitted in an extended area south of the Canadian National Railway tracks. It will be seen from these figures that the kill was very light in most Districts and was not excessive anywhere.

TABLE 4.

MOOSE HARVEST STATISTICS FOR 1954.

District	Bulls	Cows	Calves	Unspeci- fied	Total	Yield Per 100 Sq. Mi.	% of Estimated Population Harvested
Chapleau							
Res:	48	9	3	0			
Non-Res:	6	0	0	0	66	1.0	4.4%
Cochrane							
Res:	164	24	11	0			
Non-Res:	34	0	0	0	233	2.2	9.9%
Geraldton							
Res:	126	22	17	0			
Non-Res:	22	0	0	0	187	2.0	6.6%
Gogama							
Res:	59	12	2	0			
Non-Res:	10	0	0	0	83	1.3	4.8%
Kapuskasing							
Res:	129	33	6	32			
Non-Res:	35	0	0	0	235	0.4	7.2%
Kenora							
Res:	115	92	59	0			
Non-Res:	16	0	0	0	282	3.9	12.7%
North Bay							
Res:	49	0	0	0			
Non-Res:	0	0	0	0	49	0.8	5.4%
Patricia Central							
Res:	7	2	2	0			
Non-Res:	2	0	0	0	13	0.01	.18%
Patricia West							
Res:	71	66	19	0			
Non-Res:	183	0	0	0	339	0.7	4.9%
Port Arthur							
Res:	102	21	5	0			
Non-Res:	15	0	0	0	143	1.2	4.9%
Sault Ste. Marie							
Res:	22	0	0	0			
Non-Res:	0	0	0	0	22	0.2	1.2%
Sioux Lookout							
Res:	74	47	15	0			
Non-Res:	0	0	0	0	136	3.4	11.5%
Sudbury							
Res:	85	1	0	0			
Non-Res:	1	0	0	0	87	1.2	0.9%
Swastika							
Res:	63	15	2	0			
Non-Res:	0	0	0	0	80	1.5	8.0%
White River							
Res:	59	36	3	0			
Non-Res:	10	0	0	0	108	1.5	8.0%
TOTAL:	1507	380	144	32	2063		

Caribou.

This species, because of its irregular wandering habits, is most difficult to census.

Progress has been made particularly in the Geraldton District in defining the range of individual herds. Most Districts report herds which are slowly increasing. The following table summarizes the caribou population estimates for 1954.

<u>Forest District</u>	<u>Estimated Population</u>
Cochrane	44
Kapuskasing	380
White River	100
Geraldton	525
Port Arthur	60
Sioux Lookout (Including Patricia West and Central)	5185
TOTAL:	6294

White-tailed Deer.

The 1954 deer seasons were similar in most of Ontario to those of 1953. The only changes were made in the Port Arthur area where the season was reduced by twenty days, and in southwestern Ontario where the counties of Bruce, Grey, Huron, Oxford, Perth, and Waterloo were closed.

The 1954 deer hunting licence sales are compared below with those of 1953.

	<u>1954</u>	<u>1953</u>
Residents Licences	79,000	73,500
Resident Camp Licences	620	785
Farmers Licences	13,180	18,500
Non-Resident Licences	<u>10,400</u>	<u>8,300</u>
TOTAL	103,200	101,085

Many people not entitled to Farmers Deer Hunting Licences bought them in 1953. Education and enforcement was probably responsible for the swing of over 5000 of these to buying Resident Licences in 1954. There was little change in the combined number of Resident and Farmer licences taken out, but there was an increase of over 2000 in the number of Non-Resident licences sold. Nearly all of these non-residents hunted in the Western Region where hunting pressure is light and where there are plenty of deer available for them.

The collection of statistics concerning the condition of the deer herd and the success of the hunt in 1954 was carried out along the same lines as in previous years. Eleven checking stations operated across the Province at which 16,050 hunters were interviewed and 6083 deer were examined. Table 5 summarizes the results for each Forest District.

On the whole, the 1954 deer season gave slightly higher hunter success. In most Districts the effort or hunter-days required to kill a deer was less.

The study of the ages of the deer shot was continued and valuable basic information on the condition of the herd was obtained. The percentages of deer in each sex and age class are summarized in Table 6. A healthy age distribution exists in the districts lying south of the French and Mattawa Rivers. North of this line there continues to be a relatively high proportion in the 5½ years and over age group. The deer there could and should be hunted harder if range deterioration from overuse is to be avoided. In the Western Region there was a shortage of 1½ year old deer. Weather information suggests that fawns produced in 1953 failed to survive their first winter. History may be about to repeat itself in this part of the

TABLE 5.

SUMMARY OF DEER CHECKING STATION RESULTS BY FOREST DISTRICTS

	<u>1954</u>										
	Lindsay	Tweed	Pembroke	Parry Sound	North Bay	Sudbury	Manitoulin Is.	Sault Ste. Marie	Fort Frances	Kenora	Sioux Lookout
Residents	2409	2956	798	-	230	2899	2306	64	-	-	-
Non-Residents	124	104	46	-	43	623	345	287	-	-	-
Total Hunters	2533	3060	844	2250	273	3522	2651	351	41*	448*	7
Resident Deer	678	927	278	-	63	1168	858	25	-	-	-
Non-Resident Deer	69	53	17	-	17	305	182	106	-	-	-
Total Deer Checked	747	980	295	867	80	1473	1040	131	30*	394*	4
Resident Success	28%	31%	35%	-	27%	40%	37%	39%	-	-	-
Non-Resident Success	56%	51%	37%	-	40%	49%	53%	37%	-	-	-
Total Hunter Success	30%	32%	35%	39%	29%	42%	39%	37%	73%	88%	6
Hunter Days Per Deer	17.7	15.8	15.0	-	21.9	8.7	8.1	16.1	6.8	6.7	9
1953 Hunter Days Per Deer	18.9	17.4	15.0	21.0	20.0	11.8	9.4	18.0		7.4	

** Nearly all Non-residents.

Province. A severe decline in deer numbers occurred there in the period of 1948 to 1950 when a series of hard winters decimated successive fawn crops in a range damaged by overuse.

TABLE 6.

ANALYSIS OF SEX AND AGE OF DEER CHECKED.

	Lindsay	Tweed	Pembroke	Perry Sound	North Bay	Sudbury	Manitoulin Is.	S. S. Marie	Fort Frances	Kenora	Sioux Lookout	South Canonto Deer Study Area
1954												
1 1/2	39%	35%	37%	34%	43%	32%	33%	45%	33%	27%	38%	38%
2 1/2	23%	32%	24%	36%	30%	23%	26%	28%	33%	38%	29%	20%
3 1/2	24%	19%	22%	19%	11%	23%	20%	13%	29%	15%	21%	20%
4 1/2	8%	8%	11%	5%	0%	11%	10%	8%	0%	6%	3%	12%
5 1/2 +	6%	7%	6%	5%	13%	11%	11%	6%	5%	13%	8%	9%
No. of deer Checked	302	623	157	424	53	298	717	85	21	331	34	84
Bucks	40%	37%	41%	38%	38%	30%	38%	33%	37%	42%	30%	37%
Does	33%	31%	31%	33%	40%	36%	31%	33%	41%	43%	54%	39%
Fawns	27%	32%	28%	29%	22%	26%	30%	33%	22%	15%	15%	24%

Elk.

This species formally occurred in south and south-eastern Ontario. Once abundant along the Saint Lawrence, it was extirpated in the Province prior to 1800. Introductions were made at many points some years ago but the species is not thriving.

Protection for elk is not desirable because they are an important host for the large liver fluke which also infects sheep, cattle and deer.

The following table summarizes the Elk distribution, estimated numbers and kill in the 1954 season.

<u>Forest District</u>	<u>Estimated Population</u>	<u>Estimated Kill 1954</u>
Kapuskasing	a few	0
Chapleau	a few	0
Sault Ste. Marie	18	0
Sudbury	100 to 150	11
Cochrane	27	0
Swastika	a few	2
North Bay	15	0
Lindsay	45	10
Pembroke	<u>a few</u>	<u>0</u>
TOTAL:	275 approximately	23

FUR MANAGEMENT

There was an improvement (see Table 7) in the price paid for the raw pelts of most burbearers in Ontario during the 1954-55 trapping season. This was a welcome change in the steady downward trend which had prevailed since 1950-51.

Beaver.

The improved beaver prices probably stimulated trappers to take a larger crop than they would otherwise have done, but the harvest is still far smaller than it should be in most areas. Beaver have become so abundant in some districts that they have destroyed most of the nutritious food plants available and are having to subsist on a second rate diet. Malnutrition has probably been the basic cause of

TABLE 7.
AVERAGE PRICES PAID FOR RAW PELTS IN ONTARIO FROM 1949-50 TO 1954-55.

	Beaver	Fisher	Fox (Col)	Fox (Arc)	Lynx	Marten	Mink	Muskrat	Otter	Raccoon	Skunk	Weasel
1949-50	\$19.95	\$34.37	\$.78	\$ 7.83	\$ 7.62	\$18.30	\$27.17	\$2.04	\$21.27	\$1.30	\$.56	\$1.15
1950-51	\$23.63	\$34.57	\$1.15	\$13.57	\$11.61	\$20.00	\$27.45	\$2.04	\$27.36	\$2.55	\$.82	\$1.76
1951-52	\$14.15	\$21.90	\$.70	\$ 8.60	\$ 4.40	\$13.20	\$20.95	\$1.55	\$19.90	\$1.80	\$.75	\$.95
1952-53	\$13.15	\$19.75	\$.70	\$11.00	\$ 4.90	\$10.20	\$18.70	\$1.45	\$21.40	\$1.95	\$1.20	\$1.05
1953-54	\$ 9.65	\$15.35	\$.50	\$12.00	\$ 2.85	\$ 6.50	\$15.95	\$1.02	\$20.65	\$1.35	\$.70	\$.70
1954-55	\$14.15	\$21.27	\$1.05	\$13.40	\$ 7.04	\$ 8.90	\$21.06	\$1.38	\$25.75	\$1.78	\$.91	\$1.04

AVERAGE EARNINGS PER TRAPPER

ESTIMATED VALUE OF FUR CROP

1946-47	\$417.64	\$4,594,050.00
1947-48	\$491.03	\$5,401,330.00
1948-49	\$360.27	\$3,963,035.00
1949-50	\$372.40	\$4,096,446.00
1950-51	\$473.86	\$5,212,486.00
1951-52	\$332.88	\$3,656,193.00
1952-53	\$351.67	\$3,868,352.00
1953-54	\$243.84	\$2,682,312.00
1954-55	\$389.60	\$4,285,611.00

a number of die-offs that have been reported during the winter. Disease of some kind, possibly tularemia, was probably the agent which actually removed the animals. The area most seriously affected by beaver die-offs was part of the Severn River drainage of Patricia Central and West in extreme northern Ontario. This was the area similarly affected in 1950. Some of the large traplines near Sachigo had no occupied beaver houses left in the spring of 1955. This is a serious situation because these fine Indians are dependent on the fur resource and when this fails, there is no alternative source of income for them.

Fisher.

The catch of this valuable furbearer was the highest since the season of 1928-29. In north western Ontario particularly a great increase was evident during the winter of 1954-55.

Marten.

The catch of marten in Ontario has not exceeded this year's harvest for 31 years. The animals are steadily extending their range and are being harvested safely where there is a surplus.

Marten Stocking.

The marten live trapping program was continued in the Chapleau Crown Game Preserve and Algonquin Park. The following releases were made:

Big Trout Lake, Patricia West	17
Albany River, Patricia East	17
Tyson Lake, Sudbury District	7
Tweed	5

Investigations into the success of previous plantings have indicated that the animals have established themselves in most cases. In the Patricia portion of Ontario there is evidence that the animals have bred and have spread out for considerable distances from the site of release.

Mink.

The overall catch of this important furbearer was down from 1953-54. In the area bordering Hudson's Bay, however, a record catch was taken. Over 2000 high quality mink were traded at Winisk and Severn during the winter. South of this area and in the central part of the province the catch was down, but in southern Ontario an increase was reported.

The Study of Sex Ratios.

The study of sex ratios of trapped marten, fisher, mink, and otter was continued in 1954-55. The data was obtained from the records of Sealing Officers in the same manner as in previous years.

The significance of the steadily dropping proportion of males in the catch of fisher and marten should be investigated further.

The results of this study are summarized in Table 8.

Muskrat.

Except for the catch of 1947-48 the harvest this year was the highest on record. It might have been the highest had the spring storms in the south not reduced the yield on many of the productive Lake Erie marshes.

The institution of fall trapping in many areas in the south should increase the catch by harvesting many muskrats which would normally die in the winter.

Experimental Traplines.

The experimental trapline program started in 1951-52 was continued during the 1954-55 season. The catch is summarized in Table 9.

Certain changes were made in the procedures on the traplines this winter. For the last two years the traps have been baited with cans of sardines in which several small slits have been made. It was noticed that frequently mice or shrews were able to enter the can and clean out the fish. This, however, did not seem to make much difference to the attractiveness of the bait since furbearers were frequently caught with nothing but an empty can in the cubby.

TABLE 8.

SEX RATIOS OF MARTEN, FISHER, MINK, AND OTTER.

	♂	♀	??	Total	♂ : C ♀
<u>MARTEN</u>					
1952-53	823	459	510	1792	179 : 100
1953-54	1786	1020	126	2932	175 : 100
1954-55	2318	1554	139	4011	149 : 100
<u>FISHER</u>					
1952-53	603	604	672	1879	100 : 100
1953-54	1106	1199	178	2483	92 : 100
1954-55	1395	1766	231	3392	79 : 100
<u>MINK</u>					
1953-54	20,035	11,622	2341	33,998	172 : 100
1954-55	18,745	10,838	1260	30,843	173 : 100
<u>Otter</u>					
1953-54	3034	2272	592	5898	134 : 100
1954-55	3298	2334	664	6296	141 : 100

TABLE 9.

EXPERIMENTAL TRAPLINE CATCH, 1951-52 TO 1954-55.

<u>CHAPLEAU</u>	<u>1951-52</u>	<u>1952-53</u>	<u>1953-54</u>	<u>1954-55</u>
Beaver	79	7	0 [*]	0 [*]
Marten	64	67	74	25
Fisher	15	14	10	1
Mink	9	6	4	1
Otter	14	8	6	3
Fox	4	9	7	0
Weasel	5	13	22,	1
Lynx	0	0	0	0
<u>GOGAMA</u>				
Beaver	28	6	0 [*]	0 [*]
Marten	19	17	21	6
Fisher	4	5	6	7
Mink	6	6	7	5
Otter	1	2	1	0
Fox	3	2	3	1
Weasel	21	49	8	0
Lynx	0	1	0	0

* No beaver trapping undertaken.

In order to check the effectiveness of shiny metal as a lure, small aluminium tags were suspended without other bait in alternate cubbies. One marten and one mink were caught in traps baited with mirrors and another mink pulled free. Evidently shiny metal by itself is an inadequate bait for those species of furbearers inhabiting the experimental traplines.

Probably as a result of this change in trapping technique the catch of most furbearers was down.

SUMMARY OF FUR RETURNS BY ONTARIO GAME MANAGEMENT DISTRICTS

COMPILED FROM DISTRICTS FORM G-22.4 FOR YEAR 1954-55

DISTRICT	NO. OF AREAS	NO. OF TRAP	RETS MADE	RETS MISS	BEAVER QUOTA	F.I.S. QUO.	MAR. QUO.	BEAVER CATCH	BOB CAT	F.I.S.		ARC. FOX	COL. FOX	LYNX	MAR.	MINK	MUSKRAT	OTT.	RAC.	SKUNK	SQUIR	WEASEL	BR. WOL.	TIM. WOL.
										FIS.	ARC.													
CHAPLEAU	RTA 123	99	97	0.0	4230	528	668	2800	-	157	1	15	37	253	425	2300	137	-	-	-	-	4/5	-	
COCHRANE	RES -	75	74	1.0	2432	348	344	1637	-	167	1	34	44	160	407	1778	44	1	-	-	28	497	-	
	RES -	23	23	0.0	137	-	-	-	-	2	-	-	1	2	7	512	-	-	-	-	6	41	-	
	RTA 121	120	111	7.5	9116	283	33	6214	4	144	-	15	7	11	910	5719	84	-	-	1035	594	6		
FORT. FRANCES	RES -	114	45	60.5	1490	-	-	891	5	1	-	28	-	-	92	2034	3	-	-	-	87	256	8	
	RTA 118	124	124	0.0	7342	334	1004	3406	-	110	-	38	82	545	382	855	121	-	-	-	91	464	-	
GERALDTON	RTA 119	110	101	8.2	3156	340	385	2083	-	146	-	28	16	260	471	2124	126	-	-	237	499	19		
GOCAMA	RTA 100	100	82	18.0	6500	410	808	3913	-	167	1	15	98	717	370	2022	188	-	-	77	1125	-		
KAPUSKASING	RES -	40	40	0.0	80	-	-	111	-	8	-	-	37	5	11	106	-	-	-	-	-	-	-	
	RTA 274	353	281	20.4	12195	343	-	6205	18	119	-	31	9	1	1391	13745	68	-	-	32	1824	816	2	
KENORA	RES -	28	3	89.3	-	-	-	26	-	-	-	-	-	-	-	2	-	-	-	-	-	-	2	
	RTA 64	64	64	0.0	-	-	-	-	-	-	-	2	-	-	151	85017	-	-	51	2	-	-	2	
LAKE ERIE	RES -	1055	1043	1.1	-	-	-	9	-	-	-	288	-	-	545	86222	-	-	3474	1019	-	-	14	
	FAR -	-	168	-	-	-	-	-	-	-	-	-	-	-	14	3336	-	-	20	25	-	-	352	
	RES -	1048	1044	0.4	-	-	-	2	-	-	-	289	-	-	1488	83609	2	-	3810	472	-	-	10	
LAKE HURON	FAR -	-	-	-	-	-	-	-	-	-	-	39	-	-	48	3032	-	-	181	36	-	-	2	
	RES -	23	23	0.0	814	-	-	524	-	-	-	16	-	-	149	2384	19	-	56	5	-	-	25	
LAKE SIMCOE	RES -	482	475	1.5	-	-	-	495	-	-	-	493	-	-	807	42429	24	-	1054	194	-	-	5	
	FAR -	-	22	-	-	-	-	-	-	-	-	-	-	-	3	713	-	-	-	-	-	-	-	
LINDSAY	RTA 128	146	142	2.7	3792	96	21	3590	-	27	-	32	-	17	492	7995	62	-	93	-	-	-	58	
	RES -	648	503	22.4	2358	-	-	2097	-	3	-	199	-	-	550	27597	40	-	321	34	-	-	100	
NORTH BAY	RTA 152	165	155	6.1	4734	55	1	3222	-	35	-	73	5	5	896	4232	124	-	7	10	-	-	487	
PARRY SOUND	RTA 138	134	118	11.4	4459	394	218	3292	-	108	-	45	-	129	670	5110	143	-	41	3	-	-	107	
	RES -	463	339	28.8	-	-	-	2261	-	4	-	66	-	2	866	9734	78	-	175	3	-	-	370	
PATRICIA CENTRAL	RTA 276	607	700	13.3	32166	290	186	14732	-	86	11	180	245	153	6178	18612	2360	-	-	-	-	-	5325	
PATRICIA EAST	RTA 233	442	418	5.5	20889	398	903	9644	-	138	64	205	390	490	2875	9935	802	-	-	15	-	-	770	
PATRICIA WEST	RTA 308	855	649	24.1	25787	1131	138	10356	-	466	1	228	275	5	2781	26942	705	-	-	15	-	-	4851	
PENBROKE	RTA 62	62	62	0.0	3066	331	137	2419	-	153	-	22	-	76	468	4851	107	-	23	-	-	-	205	
	RES -	59	59	0.0	-	-	-	359	-	4	-	18	-	6	91	2740	3	-	8	-	-	-	23	
	FAR -	-	5	-	-	-	-	-	-	-	-	-	-	-	1	143	-	-	-	-	-	-	-	
PORT ARTHUR	RTA 193	233	233	0.0	8944	1021	575	6712	9	246	-	38	28	109	565	3209	173	-	-	-	203	-	-	
	RES -	58	45	22.5	-	-	-	312	-	-	-	-	-	-	5	243	2	-	-	-	-	-	25	
RIDEAU	RES -	907	886	2.3	-	-	-	505	-	-	-	182	-	-	346	70063	7	-	73	6	-	-	29	
	FAR -	393	318	19.6	-	-	-	2	-	2	-	32	-	-	-	9287	1	-	104	5	-	-	28	
SAULT STE. MARIE	RTA 260	236	236	0.0	10444	570	160	3343	3	162	-	12	24	70	1087	2111	170	-	-	-	-	-	150	
	RES -	87	87	0.0	820	-	-	417	-	3	-	25	-	1	165	1809	5	-	-	13	-	-	828	
STOIX LOOKOUT	RTA 89	113	93	17.7	5002	316	434	2106	3	77	-	5	55	81	386	1851	66	-	-	-	-	-	24	
SUBBURY	RTA 212	206	179	13.1	14039	97	62	5949	2	72	-	29	14	-	1180	5596	163	-	6	1	-	-	58	
	RES -	141	131	7.1	-	-	-	1022	-	1	-	18	22	-	256	2060	-	-	1	-	-	-	772	
SWASTIKA	RTA 141	159	159	0.0	4147	280	7	3042	-	145	-	29	56	7	383	3477	75	-	-	-	-	-	60	
	RES -	12	12	0.0	39	-	-	25	-	1	-	1	4	-	4	141	-	-	-	-	-	-	11	
	FAR -	-	24	-	-	-	-	1	-	4	-	-	8	-	25	160	2	-	-	-	-	-	3	
TWEEED	RTA 185	184	178	3.3	7270	26	-	3552	-	15	-	19	-	-	433	15115	46	-	64	-	-	-	40	
	RES -	1241	1187	4.4	6523	-	-	3950	-	-	-	107	-	-	653	85354	56	-	79	2	-	-	239	
	FAR -	-	63	-	-	-	-	-	-	-	-	-	-	-	13	3671	-	-	-	-	-	-	295	
WHITE RIVER	RTA 141	119	119	0.0	7147	472	657	4184	-	145	-	11	64	460	510	868	198	-	-	-	-	-	4	
TOTALS	3528	12310	11218	-	208918	8063	6741	115439	46	2915	98	2879	1501	3587	29520	640865	6224	9641	1879	16133	28813	200	301	
RTA REGISTERED TRAPLINE AREAS				4929				10.8	PER. RTA TRAPPERS											55.2	PER. OF BEAVER QUOTA CAUGHT			
RES RESIDENT TRAPPING LICENCES				6406				7.6	" RES "											36.2	" FISHER "			
FAR FARMER TRAPPER				975				-	" FAR "											53.2	" MARTEN "			

Fox and Raccoon

Hunting foxes with hounds has been a highly popular sport for many years, particularly in the area south of Ottawa.

Raccoon hunting is becoming popular in the four southernmost districts of the Province. License sales have risen from 233 in 1950, the year they were first instituted, to 755 in 1954 - 55. Table No. 10 gives the raccoon kill and average seasonal bag per hunter for four southern districts.

TABLE 10.

<u>District</u>	1954 - 55 License Sales	Trappers Reporting	Raccoons Reported Killed	Average Bag per Trapper Reporting
Lake Erie	301	257	7504	29
Lake Huron	277	277	7745	28
Lake Simcoe	40	30	673	22
Lindsay	<u>20</u>	<u>20</u>	<u>462</u>	<u>23</u>
TOTALS	638	584	16384	

Waterfowl

There was a better flight of waterfowl through Ontario in the fall of 1954 than in the previous year. The results of checks carried out on the opening day of the season on various marshes in the southern part of the Province are summarized in Table No. 11. The species composition of the bag is summarized in Table 12.

Various districts cooperated with the Canadian Wildlife Service in breeding season counts and the midwinter waterfowl inventory. Table No. gives the results of this.

TABLE 11.

Duck Hunters Success

	Hunters Checked	Ducks Shot	Average Bag	Banded Ducks
<u>October 2, 1954</u>				
Luther Marsh	729	494	1.5	3
Rondeau	265	315	1.2	0
<u>September 18, 1954</u>				
Southern Tweed	298	921	3.1	4
Northern Tweed	167	134	.8	0

TABLE 12.

Percentage Composition of Waterfowl Species
Checked in Hunters Bags

	Luther Marsh Oct. 2	Rondeau Marsh Oct. 2	Southern Tweed Sept. 18	Northern Tweed Sept. 18	Western Region Sept. and Oct.
Black Duck	10	10	25	36	0
Mallard	11	17	17	1	23
Blue-wing Teal	25	53	37	9	2
Green-wing Teal	30	6	11	6	0
Wood Duck	3	15	8	21	0
Pintail	.4	0	.8	0	0
Baldpate	.2	0	0	0	1
Shoveler	.4	0	0	0	0
Ring-necked Duck	2	0	.3	22	17
Scaup (sp.)	.4	0			24
Redhead	0	0	0	0	2
Goldeneye	.4	0	0	0	14
Bufflehead	0	0	0	0	14
Ruddy Duck	2	0	0	0	0
Mergansers	1	0	.5	5	2
Coot	13	0	0	0	1

TABLE 13.January Waterfowl Inventory in the
St. Lawrence

	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>
Goldeneye	7447	9905	3241	5341	5413
Mergansers	409	354	395	454	578
Black Duck	282	199	341	617	803
Mallard	6	1	10	0	5
Scaup (sp.)	6	0	475	180	335
Canvasback	<u>10</u>	<u>0</u>	<u>100</u>	<u>0</u>	<u>0</u>
TOTALS	8160	10459	4562	6592	7134

January Waterfowl Inventory for
Eastern Lake Ontario

	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>
Goldeneye	383	828	1014	1889	1869
Old Squaw	536	912	283	229	861
Merganser	30	21	68	36	23
Scaup (sp.)	0	22	500	114	3410
Redhead	0	2	0	0	0
Black Duck	21	0	55	544	155
Mallard	0	0	0	23	0
Bufflehead	0	0	0	3	0
Unidentified	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>116</u>
TOTALS	970	1785	1920	2838	6434

Upland Game and General Distribution

The numbers of ruffed grouse and Hungarian partridge declined sharply throughout most of the range of these species in Ontario. For ruffed grouse it is probable that the birds are at the low point of their ten-year cycle in most parts of the Province, and from now on their numbers may be expected to increase. Hungarian partridge appear to be following a similar cycle of numbers. In doing so they have been subject to very unfavourable weather

conditions both in the open season and during the winter. In consequence, the prospect for next year is that they will be at a low ebb.

The ring-necked pheasant by contrast has shown a substantial increase in those parts of the Province in which it is found. There was good hunting not only in the Niagara Peninsula and Lake Erie Counties but also in some areas east of Toronto. Hunting conditions west of Toronto were made unfavourable and in some instances birds were destroyed by hurricane Hazel which took place a few days before the open season. This same storm, however, resulted in a great many crops being left unharvested in the fields so that winter survival should be better than it has been in many years.

Pelee Island Pheasant Shoot

	<u>1953</u>	<u>1954</u>
No. of hunters	1400	1617
No. of cock pheasants killed	11000	11463
No. of hen pheasants killed	3000	9305
No. of pheasants killed	14000	20768
No. of cock pheasants after shoot	1640	864
No. of hen pheasants after shoot	13430	11034

There was a two day season in 1954, October 27th and 28th, with a bag limit of 9 cocks and 5 hens.

More licences were issued by the Pelee Island Council for the 1954 two day season than for any previous two day shoot.

The reduction of hen pheasants brings the cock-hen ratio to a satisfactory state and the number of birds left on the Island to the desired level of approximately one bird per acre.

Distribution of Pheasants by Counties

	<u>Chicks</u>	<u>Poults</u>	<u>Adults</u>
<u>Lake Erie District</u>			
Elgin	400	790	
Essex	5350	1725	
Haldimand	300	1125	
Kent	2600	1025	
Lambton	2550	1050	
Lincoln	1150	1000	
Middlesex	600	1005	
Norfolk		630	
Welland County	2050	1200	
<u>Lake Huron District</u>			
Brant	1100	600	75
Halton	600	650	75
Huron	1200	900	
Oxford	5200	2975	90
Waterloo	600	400	40
Wellington	400	200	75
Wentworth	1300	1145	75
Miscellaneous (Gun Clubs, etc.)	50	200	70
<u>Lake Simcoe District</u>			
Ontario	2900	2900	
Peel	1050	1000	
Simcoe	900	500	
York	2400	3650	
<u>Lindsay District</u>			
Durham	6900	200	600
Northumberland	200		300
<u>Rideau District</u>			
Carleton	400	75	
Grenville	200	50	
Lanark	100		
Leeds	1100	150	
Prescott	300	75	
Renfrew	300	50	
Stormont	200	100	
	<u>42,400</u>	<u>25,370</u>	<u>1,400</u>
			<u>69,170</u>

Sale of Township Licences by Counties

	<u>Resident</u>	<u>Non-Resident</u>
<u>Lake Erie District</u>		
Elgin	1035	1138
Essex	4194	3599
Haldimand	791	2325
Kent	1863	2778
Lambton	1456	1624
Lincoln	1954	2116
Middlesex	889	2017
Norfolk	783	601
Welland	2994	2629
<u>Lake Huron District</u>		
Brant	261	554
Halton	298	401
Oxford	1082	1553
Waterloo	240	407
Wellington	81	499
Wentworth	1242	3712
<u>Lake Simcoe District</u>		
Ontario	432	787
Peel	378	368
Simcoe	85	68
York	713	1352
<u>Lindsay District</u>		
Durham	297	376

Wild Turkey - Thirty wild turkeys were reared at the Normandale pheasantry, and were released in Rondeau Park, the Township of Mosa in Middlesex County, and at the Normandale Bird Farm. Some of these birds were observed to have survived the winter, and a nesting was reported at Normandale this spring.

The Toronto Anglers and Hunters Association imported a number of wild turkeys from Pennsylvania which were released at various localities from the Grand River in South Dumfries Township east to Orono. These plantings were scattered by hurricane Hazel shortly after the birds had been released. In spite of that, however, it is known that they survived the winter in South Dumfries Township, and scattered reports indicate survival elsewhere. These can only be judged after one or two nesting seasons have passed. The release of 1949 which resulted in turkeys being established in the Grand Bend area has now spread to Warwick Township where twenty-seven turkeys were observed on November 29th.

Rabbits - There are still a few areas in the Province where snowshoe rabbits remain at a peak of abundance. In a great many parts, however, the cyclic dying-off has already taken place. The cottontail rabbits in southern Ontario again show an increase. European hares also seem to be slightly more numerous than last year, and have extended their range along the St. Lawrence River as far as Gananoque.

BEAR BOUNTY

1954 - 1955.

The following is a resume of the conditions on which bounty is paid under The Wolf and Bear Bounty Act, to control the population of bears.

A \$10.00 bounty is paid on any bear 12 months of age or over, and a \$5.00 bounty is paid on any bear under 12 months of age. The bear must be killed between April 15th, and November 30th, in a township of which 25% of the total area is devoted to agriculture and which is located in a district, or one of the counties described in the Regulations. The Act also requires that the bear must be killed in defence or preservation of livestock or property by a bona fide resident of the township.

The following table shows the number of bears killed and the bounty paid for a period of five years.

Period	Adults	Cubs	Bounty
For year ending Mar.31,1951	453	47	\$ 4,645.00
For year ending Mar.31,1952	408	29	\$ 4,180.00
For year ending Mar.31,1953	662	57	\$ 6,805.00
For year ending Mar.31,1954	947	145	\$10,000.00
For year ending Mar.31,1955	1126	99	\$11,590.00

A total of 957 claims, including 6 which were brought forward from the previous year, representing 1,126 bears and 99 cubs, were considered by the Department. 18 claims representing 14 bears and 5 cubs were refused.

With the increase in the bear kill this year, it would appear that the peak of the bear cycle has been reached and that a decrease in the kill may result next year.

The following table shows the number of bear killed in each county and district on which claims for bounty were received. These figures do not include the number of bears hunted and killed by sportsmen, on which bounty is not applicable.

<u>County or District</u>	<u>Bears 12 Mos. or over</u>	<u>Cubs under 12 Mos.</u>
Algoma	37	
Bruce	28	10
Cochrane	160	13
Frontenac	11	1
Haliburton	28	6
Hastings	70	7
Kenora	10	2
Lanark	1	
Lennox & Add.	3	
Manitoulin	3	
Muskoka	12	
Nipissing	131	18
Parry Sound	74	5
Peterboro	20	6
Rainy River	30	1
Renfrew	139	9
Sudbury	124	8
Temiskaming	205	10
Thunder Bay	39	3
Victoria	1	
<hr/>		
TOTAL -	1126	99

WOLF BOUNTY

1954 - 1955.

Under The Wolf and Bear Bounty Act the Department pays a \$25.00 bounty on a timber or brush wolf 3 months of age or over, and a \$15.00 bounty on a timber or brush wolf under 3 months of age.

On wolves killed in the provisional judicial districts, the Department pays the whole bounty, whereas on wolves killed in the counties, the Department pays 40% and the respective county pays 60% of the bounty.

The whole pelt must be presented as evidence, on wolves killed in the counties and the provisional judicial district of Manitoulin. However, under an amendment to the Act, the whole unskinned head may be presented instead of the whole pelt, on wolves killed in the provisional judicial districts, excepting Manitoulin.

This amendment was effective June 5th, 1954, and was made to encourage the destruction of wolves. However, there was a decrease of 66 wolves taken in the districts where the amendment was applicable.

The following table shows the number and species of wolves killed and the amount of bounty paid during the past five years.

Period	Timber	Brush	Pups	Total	Bounty
For year ending Mar.31,1951	1405	651	44	2100	\$46,457.00
For year ending Mar.31,1952	1198	634	63	1895	\$41,803.00
For year ending Mar.31,1953	1313	739	68	2120	\$46,550.00
For year ending Mar.31,1954	1101	720	70	1891	\$41,853.00
For year ending Mar.31,1955	1075	620	41	1736	\$38,703.00

In the period covered by this report, the Department considered 1,334 claims for bounty. 8 claims representing 3 wolves, 5 dogs and 2 foxes, were refused.

The following is a summary of the number of wolves killed in each of the counties and districts, on which claims for bounty were received.

<u>COUNTY</u>	<u>TIMBER</u>	<u>BRUSH</u>	<u>PUPS</u>	<u>TOTAL</u>
Brant				
Bruce		12		12
Carleton				
Dufferin				
Dundas				
Durham		5		5
Elgin		5	1	6
Essex				
Frontenac	3	13		16
Glengarry				
Grenville		4		4
Grey		5		5
Haldimand		3		3
Halton		4		4
Hastings	4	18		22
Huron		4		4
Kent		10	1	11
Lambton		5		5
Lanark		20		20
Leeds		11		11
Lennox & Add.	2	16		18
Middlesex				
Norfolk		2	5	7

<u>COUNTY</u>	<u>TIMBER</u>	<u>BRUSH</u>	<u>PUPS</u>	<u>TOTAL</u>
Northumberland		9		9
Lincoln		3		3
Ontario		7		7
Oxford		1		1
Peel				
Perth				
Peterboro	1	8		9
Prescott				
Prince Edward		4		4
Renfrew	8	25		33
Russell				
Simcoe		24		24
Stormont				
Victoria	3	17		20
Waterloo		1		1
Welland		11	6	17
Wellington				
Wentworth		5		5
York		2		2
<hr/>				
TOTAL -	21	254	13	288

<u>DISTRICT</u>	<u>TIMBER</u>	<u>BRUSH</u>	<u>PUPS</u>	<u>TOTAL</u>
Algoma	116	64	1	181
Cochrane	73	1		74
Haliburton	13	1		14
Kenora	296	35		331
Manitoulin	37	62	16	115
Muskoka	8	8		16
Nipissing	104	6	1	111
Parry Sound	34	20		54
Rainy River	47	62	8	117
Sudbury	131	72	1	204
Timiskaming	16	1		17
Thunder Bay	179	34	1	214
<hr/>				
TOTAL FOR DISTRICTS	1054	366	28	1448
TOTAL FOR COUNTIES	21	254	13	288
<u>GRAND TOTAL</u>	1075	620	41	1736

FUR FARMING
1954.

The stability of the fur market, particularly for mink, is dependent to a large degree on the activity of the stock market. During 1954, the stock market reached some all time high trading records which were reflected by the strong demand at high prices for mink. Mink prices advanced 10% to 25% by March and the average was substantially above the 1953 level.

One of the main factors responsible for the increasing demand for mink was the interest shown in the European countries. Nearly all the restrictions on the importation of furs to France, were removed. Italy is fast becoming an international fashion centre and the demand for mink in that country, as well as Switzerland and Germany, is increasing.

The domestic and U. S. markets were stimulated by a reduction in taxes. The Canadian excise tax of 15% at point of dressing, was removed and in the United States, the 20% excise tax at retail level, was reduced to 10%. Both these measures were effective during the spring and while full benefit was not enjoyed during 1954, a stimulating effect should be noticed in the coming year.

On October 15th-16th of the year under review "Hurricane Hazel" hit Southern Ontario a devastating blow. Floods resulted in disastrous losses to four fur farmers located in the Counties of York and Peel.

Inspections were made and estimates of the damages were computed by the Inspector of Fur Farms and a Committee from the Ontario Fur Breeders' Association. Total damages were estimated at \$67,260.00.

A brief was submitted to the Commission on Hurricane Damage and the Ontario Hurricane Relief Fund setting out the extent of damage and it pointed out the urgency of obtaining immediate assurance of financial assistance in order that the ranchers affected, could make arrangements for replacing their breeding stock prior to the pelting season which would start three weeks hence.

It is gratifying to report that payments were made from the fund which were considered sufficient to enable the ranchers to re-establish their means of livelihood.

There has been a constant decrease each year in the number of ranches as compared to the previous year, since 1947. 1954 proved no exception and a net decrease of 82 ranches is reported. While the number of ranches has decreased, the production of mink in quantity and quality has increased.

A total of 551 licences were issued in 1954. Of these, 512 were renewals, 37 were new and 2 licences were issued with retroactive provisions, to legalize the operations of the ranches during the previous year.

The following table shows the location by
County or District of licensed fur farms.

1954.

<u>County or District</u>	<u>Number</u>
Algoma	3
Brant	7
Bruce	25
Carleton	2
Cochrane	1
Dufferin	2
Dundas	1
Durham	5
Elgin	9
Essex	13
Frontenac	6
Glengarry	1
Grenville	2
Grey	30
Haldimand	8
Halton	20
Hastings	1
Huron	14
Kenora	8
Kent	15
Lambton	6
Lanark	11

Leeds	4
Lennox & Add.	2
Lincoln	16
Manitoulin	9
Muskoka	5
Middlesex	16
Nipissing	3
Norfolk	4
Northumberland	4
Ontario	13
Oxford	15
Parry Sound	12
Peel	10
Perth	38
Peterboro	3
Prescott	2
Rainy River	10
Renfrew	8
Simcoe	32
Sudbury	3

Timiskaming	1
Thunder Bay	29
Victoria	2
Waterloo	19
Welland	6
Wellington	16
Wentworth	27
York	50

TOTAL - 549

SUMMARY OF BREEDING STOCK
 Licensed Fur Farms
 January 1st.

	1950	1951	1952	1953	1954
<u>OTHER ANIMALS</u>					
Beaver (Pens)	17	16	8	3	0
Beaver (S. C.)	39	6	8	12	26
Fisher	23	21	13	10	9
Marten	43	35	36	54	62
Muskrat (Pens)	0	4	2	6	2
Muskrat (S.C.)	125	95	190	258	705
Raccoon	76	46	47	68	57
Skunk	4	6	2	0	0
<u>FOX</u>					
Blue	256	200	75	56	68
Cross	10	2	1	1	1
Red	30	11	6	1	3
Standard Silver	3391	2813	1567	760	583
Platinum	903	559	267	159	136
Pearl Platinum	476	449	349	294	230
White Marked	384	225	110	50	26
<u>MINK</u>					
Standard & dark half-blood	#67943	#73034	40691	27727	22315
Silverblu			15798	17710	20443
Pastel			12381	16926	22869
Other Mink			4665	7797	9713

Breakdown for Mink not available for 1950 & 1951.

REVENUE RECEIVED FROM EXPORT PERMITS
JULY 1st, 1954 to JUNE 30th, 1955.

	<u>Total amount of pelts</u>	<u>Total amount of revenue</u>
Beaver	134,729	135,919.50
Fisher	3,267	3,272.50
Cross fox	387	88.30
Red fox	4,171	417.10
Fox (silver, black or blue)	66	15.40
Fox (white)	619	336.00
Fox (not specified)	2	.20
Lynx	1,341	221.55
Marten	3,917	3,917.00
Mink	31,251	31,251.00
Muskrat	527,209	52,720.90
Otter	7,510	9,296.00
Raccoon	27,107	2,710.70
Skunk	3,199	159.95
Weasel	43,277	2,163.85
Wolverine	- -	- -
		\$ 242,489.95
TOTAL REVENUE		\$ 242,489.95

REVENUE RECEIVED FROM TANNERS PERMITS
JULY 1st, 1954 to JUNE 30th, 1955.

	<u>Total amount of pelts</u>	<u>Total amount of revenue</u>
Beaver	561	643.00
Fisher	14	14.50
Fox (cross)	50	6.60
Fox (red)	759	75.90
Fox (silver, black or blue)	6	2.20
Fox (white)	16	11.00
Fox (not specified)	3	.30
Lynx	59	11.40
Marten	51	51.00
Mink	2,388	2,388.00
Muskrat	313,926	31,392.60
Otter	43	52.75
Raccoon	1,299	129.90
Skunk	42	2.10
Weasel	261	13.05
Wolverine	- -	- -

TOTAL REVENUE

\$ 34,794.90

STATEMENT OF WILD PELTS EXPORTED OR TANNED
SHOWING NUMBER AND VALUE OF PELTS AND ROYALTY
RECEIVED FROM JULY 1st, 1954 to JUNE 30th, 1955.

	<u>Pelts Exported</u>	<u>Pelts Tanned</u>	<u>Total Pelts</u>	<u>Value of Pelts</u>
Beaver	134,729	561	135,290	1,995,527.50
Fisher	3,267	14	3,281	69,721.25
Fox (cross)	387	50	437	633.65
Fox (red)	4,171	759	4,930	3,451.00
Fox (silver, black or blue)	66	6	72	187.20
Fox (white)	619	16	635	8,509.00
Fox (not specified)	2	3	5	3.50
Lynx	1,341	59	1,400	9,870.00
Marten	3,917	51	3,968	35,315.20
Mink	31,251	2,388	33,639	708,100.95
Muskrat	527,209	313,926	841,135	1,160,766.30
Otter	7,510	43	7,553	194,489.75
Raccoon	27,107	1,299	28,406	50,562.68
Skunk	3,199	42	3,241	2,949.31
Weasel	43,277	261	43,538	45,714.90
Wolverine	- -	- -	- -	- -
	<u>788,052</u>	<u>319,478</u>	<u>1,107,530</u>	<u>4,284,902.19</u>

Revenue received from Export Permits -	\$ 242,489.95
Revenue received from Tanners Permits -	\$ <u>34,794.30</u>
TOTAL REVENUE -	\$ <u><u>277,284.25</u></u>

STATEMENT OF RANCH RAISED PELTS EXPORTED OR
TANNED SHOWING NUMBER AND VALUE OF PELTS FROM
JULY 1st, 1954 to JUNE 30th, 1955.

	Exported	Tanned	Total Pelts	Value of Pelts
Fox (silver, Black or blue)	1,011	92	1,103	7,721.00
Mink	152,285	6,377	158,662	2,935,247.00
	153,296	6,469	159,765	\$2,942,968.00
	153,296	6,469	159,765	\$2,942,968.00

TOURIST OUTFITTERS' CAMPS

Under the provisions of Section 21 of the Game and Fisheries Act, both the establishment and operation of tourist resorts catering to sportsmen and vacationists interested in angling, hunting and camping were controlled and regulated by licence in that part of the Province lying north of the line of the Canadian National Railway from Parry Sound to Pembroke, but excluding the "Hinterland Area" in the Patricia portion of the District of Kenora lying approximately north of latitude fifty-one degrees forty-eight minutes.

By application of conservation principles embodied in the Recreational and Land Use Zoning Plan of the Department, dispersal of additional Tourist Outfitters' Camp to localities where the fishing and hunting resources are in average or better abundance was encouraged. Also the improvement and standardization of existing fishing and hunting camps to meet the increasing demand for better accommodation and modern facilities.

Although 56 new camps or conversions were completed and licenced during the year, 17 licenced camps were closed indefinitely or reverted to other purposes so there was a net gain of only 39 licenced Outfitters.

TOURIST OUTFITTERS' CAMP FRANCHISES

<u>APPLICATIONS:</u>	Received or under consideration		109
	Granted - In the Districts of:		
	Algoma.....7	Sudbury.....9	
	Cochrane.....4	Temiskaming...4	
	Kenora.....16	Thunder Bay..11	
	Manitoulin.....4	Rainy River..13	
	Nipissing.....0	Renfrew.....0	
	Parry Sound....27	Total.....	95
	Refused, withdrawn and pending	<u>14</u>	109
<u>RECAPITULATION:</u>	Permits in force April 1st, 1954	131	
	Issued during the year	<u>95</u>	226
	Camps completed & licenced	56	
	Authorities lapsed	<u>15</u>	<u>71</u>
	Potential camps at March 31st, 1955		<u>155</u>

TOURIST OUTFITTERS' CAMP LICENCES

ANALYSIS BY DISTRICTS

Current Licences Issued

<u>DISTRICT</u>	<u>Resident Fee</u> <u>\$10.00</u>	<u>Non-Resident</u> <u>Fee \$25.00</u>	<u>Total</u>
Algoma	164	38	202
Cochrane	34	0	34
Kenora	304	105	409
Manitoulin	93	12	105
Nipissing	197	29	226
Parry Sound	279	25	304
Rainy River	41	12	53
Renfrew County	18	2	20
Sudbury	122	15	137
Temiskaming	42	5	47
Thunder Bay	61	10	71
	<u>1355</u>	<u>253</u>	<u>1608</u>

ACCUMULATIVE SUMMARY BY DISTRICTS

<u>DISTRICT</u>	<u>1936</u>	<u>1941</u>	<u>1946</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>
ALGOMA	66	92	120	196	203	200	200	202
COCHRANE	0	7	11	26	26	27	26	34
KENORA	85	160	201	358	380	395	396	409
MANITOULIN	32	56	73	95	94	100	110	105
NIPISSING	79	93	120	190	221	217	216	226
PARRY SOUND	74	109	164	254	261	280	291	304
RAINY RIVER	27	37	35	49	52	52	55	53
RENFREW COUNTY	7	14	15	22	24	24	24	20
SUDBURY	38	59	78	122	129	128	126	137
TEMISKAMING	0	6	12	43	46	50	49	47
THUNDER BAY	19	32	27	65	64	70	76	71
TOTAL	427	665	856	1420	1500	1543	1569	1608
Annual Increase				10%	6%	3%	2%	2%

ALGONQUIN PROVINCIAL PARK NATURALIST PROGRAMME

Although the Algonquin Park Naturalist Programme has been in operation since 1943, this was only the second year for the Nature Museum. The Programme consisted of illustrated lectures, conducted hikes, labelled nature trails, and special programmes for children's camps.

In the Museum were displayed live fish, amphibians and reptiles, and mounted specimens of birds and mammals. Although the specimens were representative of the Park, they were arranged in a way which stressed the importance of the animal in the natural environment and its value to man. During Museum hours a Park Naturalist was on duty to answer questions concerning the Park and its wildlife.

The Museum opened on May 1 and was open during week-ends until June when it was kept open seven days per week until September 30. During October it was open only during week-ends. During the period May 1 to October 31 the museum register was signed by 67,304 visitors of whom 84% were Canadian, 13% were American and 3% were from other countries. Of the total registration 82% were from Ontario.

A programme consisting of a brief talk illustrated with slides and a film was given every afternoon at the Museum during the summer season. Topics, such as deer, bear, beaver, forest communities, and predators were discussed. There were 64 afternoon programmes and these were attended by a total of 3,259 visitors.

An evening programme of illustrated lectures and films was presented during three evenings each week. A variety of subjects were discussed at greater length and with more detail. A total of 2,539 people attended the 30 evening programmes.

The four labelled nature trails were continued. These trails led from the highway and enabled the visitor to walk a mile or more into the forest. Along each trail labels named and described the various trees, shrubs and other plant life. Evidence of animal life was noted where possible. During the period June 24 - October 31 the trail

registration books were signed by 17,725 hikers.

During each week three nature hikes were conducted by one of the Park Naturalist Staff. On these hikes the Naturalist described the purpose, geology, topography and history of Algonquin Park. The flora and fauna were described and discussed as they were encountered. Emphasis was laid upon forest fire prevention, problems of forest and wildlife management, and conservation. A total of 29 conducted hikes were attended by 709 hikers.

A programme for the children's camps was continued. This consisted of visits to the various camps by a member of the Museum Staff to give illustrated talks and to show films. During July and August 12 camp visits were made and a programme was presented to a total of 1,389 campers.

This year saw the continuation of awards by the Museum in the form of certificates and crests to campers who, under the guidance of a camp counsellor passed the requirements for Junior, Intermediate or Senior Naturalist Certificates. The response from the camps was much greater this year and with greater cooperation between the counsellors and the Museum Staff the numbers of awards increased greatly over last year. This year 66 campers qualified as Junior Naturalist, 31 obtained their Intermediate Certificates and 10 met the requirements for the Senior Naturalist Certificate. This made a total of 107 Naturalist Awards.

During the summer, requests were made by groups for special talks and films. These groups which numbered eleven and included Boy Scouts, Guides, classes from local schools, camps from outside the Park, and the R.A.F. and U.S.A.F. Cadets. The total attendance for these groups was 485.

Summary

Total Museum Attendance	- 67,304
Afternoon Programme Attendance	- 3,259
Evening Programme Attendance	- 2,539
Nature Trail Registration	- 17,725
Conducted Nature Hike Attendance	- 709
Children's Camp Programme Attendance	- 1,389
Special Groups Attendance	- <u>485</u>
Total	<u>93,410</u>

The year 1954 which continued the Naturalist Programme in Algonquin Park for the eleventh year and saw the second year for the Nature Museum enjoyed greater success in attendance figures than in any preceding year. With the advent of shorter routes and improved highways extending from the large centres of population, Algonquin Park has become a great attraction to thousands of summer visitors.

Through the presentation of the Park Naturalist Programme there were more than 90,000 contacts made with the public who received some insight into the natural environment. Visitors became more familiar with Ontario's forests and wildlife. They perhaps gained an appreciation of the importance of the management and proper use of Ontario's natural resources.

SIBLEY PROVINCIAL PARK NATURALIST PROGRAMME

The Naturalist Programme which operated in Thunder Bay District at boys and girls camps in 1946 and 1947 was re-initiated and reorganized in 1954 with its centre in Sibley Provincial Park.

A headquarters was based at Lake Marie Louise in Sibley Park where a tent "Nature Museum" containing over 85 specimens of fish, amphibians, reptiles, birds and mammals was established. The museum was open to the public on 10 week-ends and 20 week days through the summer. During these 37 days, 680 people signed the visitors' register.

Three Nature Trails were planned and one was labelled and put into operation. The labels described and named the flora along the trails and illustrated natural phenomena of special interest. 225 hikers used this trail from July 1st to October 11th.

Eighteen public Nature Hikes were scheduled using six different trails. 165 persons attended twelve of these conducted hikes. Six hikes were cancelled.

Nine evening Nature Talks illustrated with coloured slides and films were held at five centres with audiences totalling 589 persons. (children and adults).

Fifteen Hikes and 11 Talks at four boys and girls camps visited on 11 occasions, enjoyed an attendance of 353 and 451 respectively (70 adults).

Eight small projects involving Park improvements relative to the Programme, were completed with the assistance of the Junior Rangers. A limited programme of trapping and wildlife observation was carried on. Four methods were used to publicize the Naturalist Programme and the Park.

By the combined operation of Public Hikes and Talks, Camp Hikes and Talks, a Nature Trail and a Nature Museum, a total of 2,474 persons were contacted during the two month period. This represents four to five times the number of contacts made in previous years.

There is no doubt, from the evidence of this first year's operation that a much more extensive programme, well advertised, can be established in this area. That part of the public contacted, expressed their interest in and appreciation of this type of educational programme.

RONDEAU PROVINCIAL PARK NATURALIST PROGRAMME

In its third consecutive summer, the Rondeau Park Naturalist Programme attracted increased public interest in all its features.

Although in a temporary building, the Museum continued to be a centre of interest. Open for 57 days from June 26 to September 12 between the hours of 2.00 p.m. and 5.00 p.m. the Museum was visited by 4,855 people. The greatest daily attendance was 280. The average attendance per day was 85 which was a 50% increase over last year.

In the Museum were displayed representative flora and fauna of Rondeau Park in the form of mounted specimens and study skins. Outside were live displays of amphibious reptiles and mammals including badger, skunk and raccoon.

Throughout the summer three conducted nature hikes were held each week. In addition, five dawn bird hikes were held. Two special hikes were arranged for groups from two local public schools. The total of 57 hikes were attended by 479 hikers.

Three labelled nature trails were maintained. Along these trails were labelled the plants, shrubs, trees and other points of nature interest. During the season, 647 hikers signed the trail registration books.

Public lectures, illustrated with coloured slides, were given once a week. These included various topics concerning the natural environment. A total of 313 attended the nine lectures. In addition, lectures were given to special groups, such as schools, Sunday schools and Scout Troops. This year there were four such meetings with a total attendance of 336.

In addition to the programme, a display was arranged to represent the Department at the Chatham Fair. Throughout the summer, assistance was given to visiting naturalists and the collection of plant specimens was continued.

Summary

Total Museum Attendance	-	4,855
Conducted Nature Hike Attendance	-	479
Nature Trail Registration	-	647
Public Lecture Attendance	-	313
Special Groups Attendance	-	<u>336</u>
		<u>6,630</u>

The Programme for 1954 enjoyed an increase in attendance figures over all preceding years. With the establishment and development of a permanent museum in the future it is seen that it will become a main centre of interest in the Park.

GUIDE PROGRAMME

Since 1945, the number of licensed guides has almost doubled, now numbering some seven thousand. With this increase has come a corresponding decrease in experience and efficiency of the licenses. The need for changes in regulations, training and organization has been evident.

Basic changes in regulations and licensing have been recommended in 1954-55 as a result of a study of the guide situation during the last four years. These changes are generally acceptable to the guides themselves, and incorporate many of the guides' own ideas.

The one week training course for guides at the Forest Ranger School was attended by guides from one District in 1952. The course was enlarged in 1953 to include guides selected by the Guide Councils in Simcoe, Lindsay and Parry Sound Districts.

In 1955, Councils in six Districts will be asked to send representatives. In this way, each council will have members attending the course each year, gaining information, direction and new ideas, and as a result keeping the interest of the Councils strong.

By the end of the fiscal year, over fifty-two groups or their representatives were instructed in the organization and purpose of Guide Councils. Before Province-wide representation is complete, about forty more Councils will have to be formed.

The guides' Councils are the essential unit in this programme. Some Councils have been extremely successful in improving their local guide situation, by working as self-regulatory groups. Only through the cooperation of active guide councils, with instruction and guidance from the Department, can we hope to improve the guide situation.

GAME FISH SECTION

The game fish resources of Ontario are managed by a field staff operating in twenty-two districts. Part of this staff consists of eighteen biologists, who are engaged in applying the best scientific information available to problems relating to fish and wildlife management in the districts.

The primary aim of fish management is to obtain the highest possible sustained yield from our fish stocks. To realize this aim it is necessary to have adequate knowledge of the fish population of the waters, including the composition of the population and the rate of growth of the fish. With this knowledge we may provide for the full utilization of the fisheries surplus without endangering the future supply.

The management of the fisheries resource is facilitated by the use of a number of management tools and techniques. The Department is presently operating 25 fish cultural stations for the purpose of raising desirable game and commercial fish for introduction to or restocking of public waters. Biological surveys of lakes and streams are being conducted systematically throughout the province as a basic requirement of all fish management. Other important management practices currently employed by the Department includes, the harvest and transfer of black bass, the removal of coarse fish, which includes the trapping of sea lamprey, the tagging of fish and creel census studies, the reclamation of lakes by poisoning, and assistance with the development of farm ponds. A brief review of the work conducted in these various phases of management is set forth in the following paragraphs.

HATCHERY OPERATIONS

Twenty-five fish cultural stations were in operation during the current year. The renovation of the Sault Ste. Marie Trout Rearing Station which was closed in September, 1953, is proceeding on schedule. It is expected that this station will be completed in time to begin operations with the incubation of eyed eggs in the fall of 1955.

The Southampton hatchery was closed because a suitable supply of lake trout eggs was not available, owing to the great decline in the production of lake trout in Lake Huron. Sarnia hatchery was closed chiefly because the stocks of spawn available for the hatchery can be handled without difficulty by the Kingsville hatchery, and, also, because of the scarcity of suitable local supplies of spawn of the species of fish handled by the hatchery.

This year approximately 1,000,000 Pacific "Chum" salmon eggs were transferred to the Port Arthur hatchery from the Samish State Hatchery in Washington, U.S.A. The shipment which was received in excellent condition will be cultured at the Port Arthur station for subsequent transfer and planting in the eyed egg and fingerling stages in the Winisk and Attawapiskat Rivers in the Hudson and James Bay watersheds. The purpose of this project is to establish a desirable commercial species in this vast inland sea which is presently relatively unproductive of fish.

HATCHERY INVESTIGATIONS

During the year considerable study was conducted on various fish cultural practices and techniques employed within the hatchery field. Some of the more important advances were as follows:-

(a) Transportation and distribution

Distribution methods are continually under surveillance to improve the facilities for transferring and handling fish. This year the aircraft fish carrying equipment was modified and standardized for use in the Department's Beaver aircraft. Being an economical method of transfer the practice is receiving widespread attention and use throughout the province.

(b) Egg storage and transfer

Experimental studies on the storage of "green" lake trout eggs were continued at the Sault Ste. Marie hatchery during the past year. Recent results indicate that eggs may be stored for periods up to three weeks without reducing their viability or increasing their natural mortality. This procedure in handling eggs will eliminate considerable mortality encountered with egg stocks, particularly where hatchery water temperatures are excessively high during the early part of the season.

Newly designed hatchery egg cases were used for the first time this year. These cases, insulated with foam plastic and constructed with 1/4 inch plywood, are lighter in weight and considerably more serviceable than older type cases.

(c) Nutrition

Feeding studies were conducted at the Dorion hatchery during the current year in which experimental lots of fish were fed prescribed amounts of food on the basis of average size, total weight of the lot of fish and the existing water temperature. The results of the studies were very favourable, illustrating that larger fish could be produced more economically when the size and the weight of the fish are considered in developing the feeding schedule. The method is currently being considered for introduction to all of the trout rearing stations in the province.

(d) Hybrid species

The experimental culture of the splake or Wendigo hybrid trout, the progeny of a cross fertilization between a female lake trout and a male speckled trout, was continued at three trout rearing stations. The hybrids held at Dorion hatchery were found to be mature and fertile in their third year. The fish were spawned and the fertilized eggs were cultured for further study. The adult stock was then planted in Cavern Lake, Dorion Township.

The hybrid trout stock held at the Chatsworth and Codrington stations were planted as yearling fish for subsequent survival and growth studies. The waters stocked were as follows,-

<u>Waters</u>	<u>County</u>	<u>Township</u>
Cavern Lake	Thunder Bay	Dorion
Jack Lake	Nipissing	Sproule
McCrae Lake	Muskoka	Baxter
Mace Lake	Algoma	163
Panache Lake	Sudbury	Dieppe
Pine Point Lake	Sudbury	Ogilvie
Red Rock Lake	Nipissing	Bower
South Bay	Manitoulin	---
Splake Lake	Nipissing	---
Sproule Lake	Nipissing	Sproule
Unnamed Lake	Sudbury	Macbeth

Inter-specific crosses, the cross between domesticated hatchery stock of speckled trout and natural stock of speckled trout, were cultured at Dorion hatchery and planted in Sheila Lake, a small barren lake in the Geraldton District. The returns from these studies are not yet complete, but the results are expected to provide interesting and valuable data relative to the growth and survival of the two strains of hatchery reared trout.

Lake and Stream Surveys

The investigation of the physical, chemical and biological condition of lake and stream environments is the basis of all management. Such studies are presently being conducted throughout the province as rapidly as possible.

In general, the study includes a qualitative and quantitative assessment of the habitat and the fish species contained therein. The investigator usually considers such features, area and depth of the waters, the shoreline, inlets and outlets, bottom types and aquatic vegetation. Water temperatures and chemical analyses including oxygen and pH are determined at various depths. The fish species, their condition and abundance, are usually determined by a rather extensive netting program which may employ the use of trap nets, gill nets and seine nets.

Most of these studies are conducted during the summer months when the investigator has the opportunity of working on open waters. However, a few investigations are carried out during the winter particularly when fish distribution and population studies are involved.

Tagging and Census Studies

Growth rates, relative abundance and distribution of fish populations are very significant requirements for the proper management of any fishery. Such data are obtained in part from the results of survey investigations, but unless the study is conducted specifically for this purpose a detailed analysis is not always secured. Therefore, to augment this work and to facilitate a more accurate and complete picture, sample fish are marked, either by fin-clipping or tagging, and released for subsequent harvest. The return of these fish, when recorded in detail, provides valuable data relative to the status of the fishery. Such work is currently being conducted quite extensively in nearly all the districts.

The results from creel census returns also supplement growth and population studies. Information provided voluntarily by interested sportsmen has provided very worthwhile records on fisheries, particularly in the Kenora, Sault Ste. Marie and North Bay Districts where rather extensive studies have been initiated.

Reclamation and Restoration Program

Certain lakes and streams which have been subject to mismanagement either by the introduction of an undesirable fish species, thoughtlessly and illegally, or by improper or inadequate harvest, resulting in an unbalanced and/or stunted fish population, have been treated with commercial toxicants to eliminate the existing fish population. Such treatment is followed by the introduction of one or more desirable fish species.

In general the program is limited to small lakes that do not exceed 25 acres, because of the difficulty of performing a controlled treatment on larger water areas and the cost of the toxicant.

Most of this work has taken place in the Lake Erie, Huron and Swastik Districts. In nearly all instances the projects have been sponsored by local fish and game groups.

Construction of Farm Ponds

In southern Ontario, particularly, landowners are taking more and more interest in the development of farm ponds. The establishment of such reservoirs ranging from 1/2 acre or less to 15 acres, provides valuable water storage, and at the same time permits the rearing of a fish population for food, recreational and, in some instances, commercial purposes.

Although the construction of farm ponds in Ontario is developed almost wholly by private enterprise, Department Biologists may assist wherever possible as consultants on the construction of the ponds, and the establishment of a desirable fish population. When the desired fish species, usually speckled trout, smallmouth or largemouth bass or bluegills cannot be procured from private hatcheries the Department may assist by providing stock for purchase if the stock is available after the requirements of public waters are fulfilled.

Most of the farm pond construction is currently being developed in the Lake Simcoe, Erie and Huron Districts. A growing interest in the venture is also noted in the Rideau, Quinte, Parry Sound and North Bay Districts.

Bass Harvesting

When a smallmouth bass population becomes unbalanced, sport fishing for the species is generally poor. If overpopulated, the fish often become stunted as a result of crowding and/or an inadequate food supply which usually results in undersized fish.

In instances where an overpopulation is evident, control measures are initiated to reduce the population by netting. The fish harvested in such operations are introduced to new waters suitable for the species or they are released in other bass habitats which are subjected to an intensive fishing pressure.

Bass harvesting operations were conducted in the following waters during the current year.

TABLE I

Bass Harvesting Operations in 1954

<u>NAME OF WATERS</u>	<u>DISTRICT</u>	<u>NO. OF BASS REMOVED</u>
Angle Lake	Parry Sound	1,560
Big Clear Lake	Frontenac	457
Bradley Lake	Hastings	739
Cat Lake	Parry Sound	401
Clement Lake	Haliburton	2,136
Island Lake	Hastings	2,682
Island Lake	Renfrew	940
Leach Lake	Parry Sound	784
Leggate Lake	Frontenac	345
Monk Lake	Haliburton	892
Mullet Lake	Hastings	463
O'Reilly Lake	Frontenac	1,256
Otisse (Bloom) Lake	Temiskaming	595
Pexton Lake	Cochrane	24
		<u>13,274</u>

The harvested bass were planted in,- Cochrane District - Poole Lake; Frontenac County - Buck Lake, Devil Lake, Sharbot Lake; Haliburton County - Coleman Lake, Dark Lake, Drag Lake, Elephant Lake, Farquart Lake, Grace Lake, Jimbeef (Beef) Lake, Lawries Lake, Long Lake, Loon Lake, McQue Lake, Otter Lake, Paradise Lake; Hastings County - Baptiste Lake, Bow Lake, Mississippi River, York River; Muskoka District - Armstrong (Duck) Lake, Bigelow Lake, Buck Lake, Devine Lake, Fox Lake, Heney Lake, Leonard Lake, Tookes Lake; Parry Sound District - Bear Lake, Blackstone Lake, Browns Lake, Cecebe Lake, Deer Lake, Eagle Lake, First Lake, Fowke Lake, French River, Haines Lake, Oastler Lake, Rainy Lake, Round Lake, Third Lake; Renfrew County - Blackfish Bay, Carson Lake, Madawaska River; Timiskaming District - Amikougami Lake, Barber (Larder) Lake, Firth (Spawning) Lake, Kenogami Lake, Mistinikon Lake, Montreal River.

Coarse Fish Removal

Fish populations are subject to periodic fluctuations due to many natural factors, for example, climatic and environmental conditions. Under normal conditions a balance is reached in a habitat and, apart from temporary periodic fluctuations, the species composition does not alter appreciably over the years. However, when such a population is subjected to intensive sport and/or commercial selective fishing and possibly other unnatural influences, for example, pollution and fluctuations in water levels, the population of the species affected is reduced appreciably. The result is that the unfished species, generally the coarse fish, increase in numbers to the detriment of the game fish species. Where such conditions are known to exist, an effort is made to restore the balance by removing the coarse fish. The resulting effect of such a program is not clearly established but data are presently being accumulated for subsequent evaluation as a management procedure.

TABLE II

Ling Removal Operations in 1954

<u>NAME OF WATERS</u>	<u>FOREST DISTRICT</u>	<u>NAME OF WATERS</u>	<u>FOREST DISTRICT</u>
Madawaska River	Pembroke	Pefferlaw River	Simcoe
Bass Lake	Rideau	Sutton River	Simcoe
Charleston Lake	Rideau	Talbot River	Simcoe
Jebbs Creek	Rideau	Trent Canal	Simcoe
Otter Lake	Rideau	Whitefish Creek	Simcoe
Pike Lake	Rideau	Black River	Quinte
Big Rideau Lake	Rideau	Crow Lake	Quinte
Atherley Narrows	Simcoe	First Depot Lake	Quinte
Jersey River	Simcoe	Fourteen Island Lake	Quinte
<u>Sea Lamprey Control</u>			

The Department of Lands and Forests continued its co-operative program with the Great Lakes Research Committee. This year the Committee undertook a preliminary survey of all the tributary streams on the north shore of Lake Superior, west of the Sault Ste. Marie District. Department personnel from the immediate and adjacent districts took part in the operation and the project was completed on schedule. In addition the Department continued with the netting program on nine tributary waters in the Lake Huron, Lake Ontario and North Channel areas; the waters involved and the results of these operations are described in Table III.

TABLE III

Sea Lamprey Catch in 1954

<u>NAME OF STREAM</u>	<u>LOCATION</u>	<u>NUMBER OF LAMPREYS CAPTURED</u>
Little Thessalon River	North Channel (Algoma District)	1,087
Big Thessalon River	North Channel (Algoma District)	610
Thessalon River (Ansonia)	North Channel (Algoma District)	935
Milford Haven Creek	North Channel St. Joseph's Island (Algoma District)	665
Root River	North Channel (Algoma District)	102
Silver Creek	North Channel (Algoma District)	66
Saugeen River	Lake Huron (Bruce County)	4,349
Saugeen River (Denny's Bridge)	Lake Huron (Bruce County)	4,519
Bronte Creek (12 Mile Creek)	Lake Ontario (Halton County)	1,229
		<u>13,562</u>

TABLE IV

Summary of Fish Distribution
(January 1 to December 31, 1954)

<u>SPECIES OF FISH</u>	<u>NUMBER DISTRIBUTED</u>
Bluegills	175
Charr, French Alpine	1,000
Charr, Pennsylvania	1,700
Herring	3,617,000
Largemouth Black Bass	999,614
Maskinonge	3,589,563
Ouananiche	1,700
Pickereel	233,000,684
Smallmouth Black Bass	1,285,854
Splake	19,390
Trout, Brown	277,950
Trout, Kamloops	143,450
Trout, Lake	3,020,700
Trout, Speckled	2,945,893
Whitefish	181,875,000
	<hr/>
	430,779,673
	<hr/>

TABLE V

Size Distribution of Fish Planted in 1954

Species	Eggs	Fry	Fingerling	Yearling	Adult	Total
Black Bass, Largemouth	--	720,000	279,495	--	119	999,614
Black Bass, Smallmouth	--	820,000	452,200	--	13,654	1,285,854
Bluegills	--	--	--	--	175	175
Charr, French Alpine	--	--	--	1,000	--	1,000
Charr, Pennsylvania	--	--	1,700	--	--	1,700
Herring	900,000	2,717,000	--	--	--	3,617,000
Maskinonge	--	3,550,000	39,563	--	--	3,589,563
Ouananiche	--	--	--	--	1,700	1,700
Pickereel	227,000,000	6,000,000	--	--	684	233,000,684
Splake	--	--	--	17,200	2,190	19,390
Trout, Brown	--	--	100,000	177,950	--	277,950
Trout, Kamloops	2,000	--	500	140,950	--	143,450
Trout, Lake	--	--	2,605,750	414,950	--	3,020,700
Trout, Speckled	720,000	--	165,850	2,055,748	4,295	2,945,893
Whitefish	42,665,000	139,210,000	--	--	--	181,875,000
TOTAL	271,287,000	153,017,000	3,645,058	2,807,798	22,817	430,779,673

TABLE VI

Fish Distribution from 1950 to 1954

SPECIES OF FISH	NUMBER OF FISH PLANTED				
	1950	1951	1952	1953	1954
Black Bass, Largemouth Fry	550,000	825,500	544,000	330,000	720,000
Fingerling	52,730	144,750	97,450	328,250	279,495
Yearling and Adult	372	601	962	1,419	119
Black Bass, Smallmouth Fry	1,505,500	935,000	357,500	720,000	820,000
Fingerling	364,200	402,250	384,965	623,220	452,200
Yearling and Adult	9,151	13,910	14,688	17,763	13,654
Bluegills Adults	--	--	--	--	175
Charr, French Alpine Yearling	--	--	--	--	1,000
Charr, Pennsylvania Fingerling	--	--	--	--	1,700
Herring Eggs	--	--	--	--	900,000
Fry	5,100,000	8,100,000	1,100,000	3,600,000	2,717,000
Maskinonge Fry	3,350,000	2,360,000	3,750,000	2,740,000	3,550,000
Fingerling	29,700	21,940	62,257	42,966	39,563
Adult	--	--	156	143	--
Ouananiche Yearling	400	--	24,250	--	--
Adult	35	--	--	--	1,700
Pickereel Eggs	--	--	--	--	227,000,000
Fry	160,200,000	234,610,000	176,285,000	270,975,000	6,000,000
Adult	--	--	--	2,245	684

Salmon, Atlantic Fingerling	--	--	72,000	--	--	--	--
Splake							
Fingerling	--	--	--	24,500	--	--	17,200
Yearling	--	--	--	--	--	--	2,190
Adult	--	--	--	--	--	--	--
Trout, Brown							
Fry	10,000	--	--	107,500	--	--	100,000
Fingerling	307,000	282,700	140,400	92,000	103,100		177,950
Yearling	85,475	54,900					
Trout, Kamloops							
Eggs	--	--	--	--	--	--	2,000 (1)
Fingerling	--	--	1,000	--	--	--	500
Yearling	52,000	34,600	73,350	107,800			140,950
Trout, Lake							
Fry	1,450,000	1,775,000	1,849,000	250,000			--
Fingerling	4,488,820	3,146,600	3,499,210	6,985,015			2,605,750
Yearling	54,960	133,677	230,775	171,765			414,950
Trout, Rainbow							
Fingerling	--	9,500	1,500	25,000			--
Yearling	--	--	--	1,190			--
Trout, Speckled							
Eggs	--	--	--	--	--	--	720,000
Fingerling	1,004,700	944,900	536,500	1,962,835			165,850
Yearling	3,140,960	3,087,350	2,720,755	3,250,910			2,055,748
Legal Size	8,060	12,230	19,020	13,960			4,295
Whitefish							
Eggs	--	--	--	--	--	--	42,665,000
Fry	235,200,000	121,185,000	200,400,000	186,700,000	139,210,000		
TOTAL	416,964,063	378,080,408	392,272,238	479,069,081	430,779,673		

N.B. Figures up to and including 1952 were compiled on a fiscal year basis. Those for 1953 and 1954 are based on a calendar year.

f.f. (1) Figures for 1954 include Rainbow trout.

(2) Figures for 1954 are included in the Kamloops trout plantings.

THE COMMERCIAL FISHING INDUSTRY

In 1954 the Ontario commercial fishermen harvested the largest catch of fish in the history of the industry, over forty seven and one-half million pounds. Although 1954 was the third consecutive year showing an increased catch, it was also the fourth consecutive year in which the average price per pound for all fish marketed decreased significantly. In 1951 the average price per pound was 22.7 cents; in 1952, 19.5 cents; in 1953, 15.7 cents; and in 1954, 14.7 cents. The actual return for 1954 was just over seven million dollars, only a few thousand dollars greater than the total for 1953, although there was a 6.3 percent increase in the 1954 catch.

Changes in composition of the catch, as well as lower prices contributed to the lowering of the average price. The decrease of three and one-third million pounds in the whitefish catch and of two million pounds in the blue pickerel catch was offset by an increase of three and one-half million pounds of perch and over four million pounds of white bass. Prices paid for white bass and perch were much below whitefish and blue pickerel prices.

The fishery continued to maintain a healthy attitude of increasing efficiency both in fishing techniques and in processing and marketing. The results of scientific research were carefully followed by the fisherman. A high degree of interest was evidenced in searching for new techniques and in a very definite effort to improve the quality of the product. Better icing, packing and handling methods were adopted generally by many fishermen. There was an increase in facilities for quick freezing of consumer-sized packages of fillets and dressed fish. An increase of high quality quick-frozen fish was noted in the Ontario markets, which has not only increased demand for the product but has provided new home markets for these fish in Canadian retail stores. Increased co-operative effort in the fishery was marked by a continuation of the trend from the fisherman marketing his own catch to large scale collective marketing.

Nylon continued to be the most popular textile fibre for gill nets and is being used in increasing amounts for other types of gear. The use of newer or less expensive netting materials for the making of nets received the

interest of the fishery.

In Lake Erie conversion to trap nets from pound nets was continued and there was an increase from ten to fifteen in the maximum number of trap nets which were permitted under one licence.

In 1954 the Department announced a reduction of fees for the pound net and trap net fishery in Ontario. In Lake Erie the licence fee per net was reduced from \$40.00 to \$30.00 and the remainder of the Province from \$50.00 to \$40.00 per net. The adjustment in fees came as a relief to the fishermen who were faced by rising costs of materials and labour and by lower values per pound for their fish.

In Lake Erie, record catches of perch (7,248,641 pounds) and white bass (6,152,850 pounds) over-supplied the market and resulted in reduced returns to the fisherman for his efforts.

A reduction of two-thirds in whitefish catch caused considerable hardship for those fishermen located in areas where whitefish is the main or only fish usually available in quantity. Continuing high production of blue and yellow pickerel raised the total Lake Erie catch to 28,912,056 pounds, and offset the unfavourable effect of the lower prices received for the perch and white bass.

Whitefish production in the Georgian Bay dropped from the 1953 level of six million pounds to 3,692,025 pounds, and marked the end of the phenomenal increase in production which is believed to have been based largely upon a single year class of the fish.

Yellow pickerel landings were up considerably, in Lake Erie 28% to 2,925,004 pounds and in Lake Ontario 52% to 113,604 pounds. Lake Trout taken in the Province dropped to 1,561,922 pounds with Lake Superior production down 8% to 1,266,237 pounds and northern inland waters down to 120,093 pounds and Georgian Bay catch decreased fifty percent to 153,900 pounds.

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES
IN THE PROVINCE OF ONTARIO, BY LAKE, IN POUNDS

LAKE	1953	1954	INCREASE	DECREASE
Ontario	2,059,489	1,914,153		145,336
Erie	23,389,319	28,912,056	5,522,737	
St. Clair	983,332	1,020,590	37,258	
Huron	1,395,636	1,463,394	67,758	
Georgian Bay	6,876,311	4,291,881		2,584,430
North Channel	457,751	394,626		63,125
Superior	2,770,514	2,890,194	119,680	
Northern Inland	6,079,570	6,080,193	623	
Southern Inland	826,650	711,816		114,834
TOTAL	<u>44,838,572</u>	<u>47,678,903</u>	<u>5,748,056</u>	<u>2,907,725</u>
NET INCREASE			2,840,331	

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES

IN THE PROVINCE OF ONTARIO, BY SPECIES, IN POUNDS

SPECIES	1953	1954	INCREASE	DECREASE
Bullheads	865,179	836,643		28,536
Carp	1,383,564	1,427,787	44,223	
Catfish	294,755	331,787	37,032	
Caviar	2,335	2,144		191
Dogfish; Alewives & Gar Pike	82,868	100,568	17,700	
Eels	59,547	80,115	20,568	
Gold Eyes	33,774	87,076	53,302	
Herring	1,149,315	1,374,917	225,602	
Ling	457,664	426,228		31,436
Menominee	11,015	12,703	1,688	
Perch	4,628,588	8,202,567	3,573,979	
Pickereel, Blue	10,399,422	8,209,830		2,189,592
Pickereel, Yellow	4,649,590	5,195,933	546,343	
Pike	964,471	1,148,116	183,645	
Rock Bass; Crappies	84,824	65,871		18,953
Saugers	249,716	212,399		37,317
Sheepshead	848,530	853,494	4,964	
Smelt	1,325,883	1,549,923	224,040	
Sturgeon	193,487	171,843		21,644
Suckers	1,567,602	1,484,694		82,908
Sunfish	469,123	376,426		92,697
Trout, Lake	1,862,044	1,561,922		300,122
Tullibee	844,824	920,042	75,218	
White Bass	2,196,536	6,202,235	4,005,699	
Whitefish	10,213,916	6,843,640		3,370,276
TOTAL	<u>44,838,572</u>	<u>47,678,903</u>	<u>9,014,003</u>	<u>6,173,672</u>
NET INCREASE			2,840,331	

COMPARATIVE STATEMENT OF THE
NUMBER OF COMMERCIAL FISHING LICENCES ISSUED

TYPE OF LICENCE	1953	1954	INCREASE	DECREASE
Gill net	1,098	1,045		53
Pound and Trap nets	184	185	1	
Hoop nets	287	293	6	
Coarse Fish Seines	170	168		2
Baited Hooks	160	202	42	
Dip nets	31	32	1	
Trolling	30	26		4
Trammel net	1	1		
Minnow Seines, Dip nets and Traps for taking minnows for sale to anglers.	1,137	1,248	111	
TOTAL	3,098	3,200	161	59
NET INCREASE			102	

EQUIPMENT

		NORTHERN IN- LAND WATERS	LAKE SUPERIOR	NORTH CHANNEL	LAKE HURON	GEORGIAN BAY	LAKE ST. CLAIR	LAKE ERIE	LAKE ONTARIO	SOUTHERN IN- LAND WATERS	TOTALS
NUMBER OF MEN		911	289	77	140	375	71	981	587	226	3,657
FISHING BOATS 40 feet and over	No. Tons Value	14 128 \$93,900	17 381 202,300	4 91 52,000	20 254 172,800	54 851 624,218	99 1,870 1,345,100	6 41 18,000			214 3,616 \$2,508,318
20 to 39 feet	No. Value	102 \$114,573	81 159,200	19 37,700	24 67,400	54 155,250	17 25,950	128 366,575	87 91,635	4 1,350	516 \$1,019,633
Under 20 feet	No. Value	287 \$71,835	49 19,415	22 5,465	6 1,000	37 6,020	35 11,595	95 18,625	258 57,101	102 11,400	891 \$202,456
FISHING GEAR											
Gill nets	Yards Value	685,550 \$169,153	1,364,399 345,022	223,070 61,560	494,691 135,357	1,545,600 440,315	3,970,725 1,092,963	960,051 187,680		3,500 2,600	9,247,586 \$2,434,650
Pound nets	No. Value	46 \$33,438	27 25,500	47 24,100	5 3,800	98 169,100	263 64,850	392 254,780	938 58,295	459 29,555	878 \$575,568
Trap nets	No. Value	6 \$1,000		2 300	113 114,600			588 399,750			709 \$515,650
Hoop nets	No. Value	94 \$6,370				41 1,375		46 4,925			1,578 \$100,520
Seine nets	No. Yards Value					2 200 \$240	16 3,900 4,950	39 9,119 18,155	29 2,090 3,070	30 2,970 5,433	116 18,279 \$31,848
Night lines	Hooks Value	7,200 \$1,287			300 100	2,100 585	14,100 1,755	6,500 1,613	16,250 1,471	4,250 540	50,700 \$7,351
Dip and Roll nets	No. Value	1 5						4 35	4 41	17 76	26 \$157
Trolling lines	No. Value		2 \$50						37 412		39 \$462
Tremmel nets	No. Value					1 \$255					1 \$255
SHORE INSTALLATIONS											
Freezers and Ice houses	No. Value	197 \$85,527	59 42,855	22 17,986	22 46,250	59 103,650	11 8,550	73 355,900	30 9,900	9 4,810	482 \$675,428
Piers and Wharves	No. Value	153 \$42,125	78 28,840	15 8,650	9 6,020	59 65,225	10 5,800	100 96,575	27 4,780	5 960	456 \$258,975
Net sheds	No. Value	121 \$47,983	109 63,705	22 23,500	35 40,730	72 116,350	21 28,950	201 459,451	182 60,190	15 4,050	778 \$844,909
TOTAL VALUE		\$667,196	886,887	231,261	588,057	1,682,583	152,400	4,414,447	492,575	60,774	\$9,176,180

STATISTICS OF THE FISHING INDUSTRY IN THE PUBLIC WATERS OF ONTARIO, FOR THE YEAR ENDING DECEMBER 31, 1954

QUANTITIES OF FISH TAKEN
(in pounds)

	NORTHERN IN- LAND WATERS	LAKE SUPERIOR	NORTH CHANNEL	LAKE HURON	GEORGIAN BAY	LAKE ST. CLAIR	LAKE ERIE	LAKE ONTARIO	SOUTHERN IN- LAND WATERS	TOTAL	VALUE
BLUE PICKEREL	87,408		2,300		731	15,498	8,150,937	58,893		8,209,830	\$1,231,474.50
BULLHEADS	325		5,703		96,252	522,788	194,812	344,132	191,762	836,643	109,881.56
CARP	6	296		39,693	1,076	74,085	263,592	308,989	211,941	1,427,787	77,860.48
CATFISH	242,710	90,872		425,306	151,341		172,175	31,940	12,516	331,787	58,782.80
CHUB OF TULLIEBEE	4								2,399	80,115	8,012.18
GOLD EYES	87,076									87,076	17,415.20
HERRING	44,782	920,067	4,022	43,535	11,513		280,845	70,153		1,374,917	145,822.98
LAKE TROUT	120,093	1,266,237	14,256	204	153,900		13	7,219		1,561,922	514,684.22
LING	386,452	9,657	9,810		4,358	345	13,625		1,981	426,228	1,949.51
NORTH'N PIKE	1,008,450	5,023	68,735	467	18,424	18,599	2,736	23,119	2,563	1,148,116	91,044.35
PERCH	8,950	3,455	5,143	328,722	173	23,438	7,748,641	80,425	3,620	8,202,567	651,586.06
MEMONINEE	679,233	5,643	1,475	1,763	3,417	137,487	219,911	68,744	102,931	1,484,694	34,341.98
SUCKERS	8,583	48,645	104,368	77,421	45,954	16,580	15,708	18,337	6,499	65,871	6,882.06
ROCK BASS & CRAPPIES	36,631	72,397	44	2,120	25	14,203	87,004			212,399	26,911.96
SAUGERS	37,030			5,407		35,306	773,245	710	1,796	853,494	16,944.84
SHEEPSHEAD	5,000	100	7,137	301	200		1,265,584	264,601	7,000	1,549,923	91,769.52
STURGEON	79,790	4,643	31,047	7,078	1,582	10,551	6,856	9,925	20,371	171,843	113,778.55
SUNFISH	3,628			50	3,287	35,374	29,743	172,533	135,439	376,426	30,781.04
WHITE BASS	1,673,795	328,254	94,776	10,508	3,692,025	24,665	6,152,850	8,085	2,499	6,202,235	372,820.35
WHITEFISH	1,567,580	134,905	45,381	231,352	107,172	70,935	556,281	227,599		6,843,640	2,289,960.43
YELLOW PICKEREL	816		341	309	31	294	2,925,004	113,604	266	2,144	4,564.20
CAVIAR	1,851			420		20,442	52,371	17,251	8,233	100,568	2,498.05
DOG FISH, GAR & ALEWIVES	6,080,193	2,890,194	394,626	1,463,394	4,291,881	1,020,590	28,912,056	1,914,153	711,816	47,678,903	

WATER POLLUTION CONTROL

The study of water pollution and its relationship to fish and wildlife has continued to be a function of the Department in cooperation with the Department of Health and other agencies concerned with water uses.

The need for pollution control has increased with the continuing population growth, since new pollution problems continue to arise as industrial and urban expansion goes on, while at the same time the pressure on fish and wildlife resources increases. This need is revealed, too, in other uses of water, and has led to active coordination of both administrative and field efforts through the successful functioning of the Pollution Control Board and the resultant inter-departmental liaison.

It has been possible during the past year to concentrate on problems which are primarily the responsibility of the Department, while other problems with Public Health and other implications, are studied by the Sanitary Engineering Division of the Department of Health. The objectives for pollution control serve all interests regardless of which agency undertakes to carry out the necessary study.

While the sources of pollution vary as widely as do manufacturing processes, much of the effort this year was confined to a few industries. The study of the disposal of pulp and paper and mining wastes was the most important undertaking in Northern Ontario, while canning, metal-working and gravel washing were studied at length in Southern Ontario. Cannery wastes continue to present the most widely distributed and difficult problems, although gravel washing operations continue to expand and cause concern.

Forty-one investigations were made through the year, varying from detailed studies to routine examinations and consultations. Many studies were necessarily continuous, since waste treatment and control can only be feasibly undertaken as an integral part of the manufacturing process.

The active participation and the advice of field personnel of the Forestry Districts throughout the Province formed the basis, in most cases, for commencing and carrying out the field studies. As in previous years, the attitude toward those industries which create pollution problems was to

promote voluntary control measures, rather than to enforce existing legislation. This approach has been justified to date although may require modification as the water-use problems become intensified with the continuing industrial and urban expansion in the Province.

Pollution Investigations

1954 - 55

<u>Type of Industry</u>			<u>Number of Investigations</u>
Mining	-	-	12
Pulp and Paper	-	-	5
Canning	-	-	3
Gravel Washing	-	-	3
Metal-working	-	-	3
Oil	-	-	4
Chemical Processing	-	-	1
Pollution Control Board Hearings	-	-	2
Algae	-	-	3
General	-	-	<u>5</u>
			<u>41</u>

ENFORCEMENT

It is the primary responsibility of this section to see that the provisions of the following legislation and regulations are complied with, viz: The Game and Fisheries Act and the Regulations adopted thereunder, the Ontario Fishery Regulations promulgated in accordance with The Fisheries Act (Canada), and The Migratory Birds Convention Act and Regulations, also a federal enactment.

A field staff of some 190 Conservation Officers are placed at strategic points throughout the province to protect fish and wildlife against violations; assist in many phases of conservation and management work and at all times be good public relations officers. The officer's task is not always a pleasant one and he is frequently required to spend many dreary hours in soaking rain and plodding through bush deep in snow. Most people consider the officers get paid for a job that they consider fun or recreation. The dividing line between work and pleasure is hard to define, but any job done day after day becomes work, though it still may be enjoyable. For all this, the sportsmen will find the officer of wonderful assistance in the field and the violator will find him hard but just.

The following is a synopsis of three average cases within a week in different parts of the province brought to satisfactory conclusion by our Conservation Officers.

(a) Two Conservation Officers were making a routine check on anglers' catches around Lake Nipissing. They came across 7 men packing their car to return home. Hidden under a false floor of their station wagon were metal trays containing 489 iced pickerel and 72 pike. The officers seized the fish, car, 4 tackle boxes and 2 outboard motors. Each man was convicted and paid a fine of \$50.00 and costs. Their fishing equipment and outboard motors were confiscated and the car released upon payment of a \$400.00 assessment.

(b) A Conservation Officer and an O.P.P. constable on patrol on Highway 65 were startled one day to see a car racing along with men on each front fender and another on the running board. They all had loaded

weapons and were shooting at any animal or bird they saw - without regard for the public or property. All were convicted and fined, and their weapons were confiscated for this display of unsportsmanlike conduct.

(c) Knowing of illegal sale of lake trout in the Lake Simcoe area, an officer was making continuous round the clock checks to obtain definite information. With a warrant he searched a fishmonger's house and seized 60 lake trout. Calling in other officers, they spread out and actually caught during the night two men docking with 93 lake trout weighing 800 lbs., and 400 yds. of gill netting. All three were convicted and fined \$600.00 each.

SEIZURES

During the year there was a total of 3,005 cases in which equipment was seized by reason of the fact that the articles were being used in various ways responsible for infractions of the legislation and regulations. Following are details of the officers responsible for these seizures, -

Conservation Officers	2,397 cases
Provincial Police Constables	10 "

Joint Action:

Conservation Officers and O.P.P.	63	
Conservation Officers and Deputy Game Wardens	528	
Conservation Officers and R.C.M.P.	7	<u>598</u> "
		3,005 "

In 125 of these cases the seizures were made from persons unknown, mainly involving traps and fishing equipment which had been set and left in an unlawful manner. It was therefore impossible for the officers to develop definite evidence regarding the ownership of these articles and they were confiscated.

The articles seized in these 3,005 cases ranged from a costly aeroplane to a pair of scissors. Listed below are the most numerous seized articles,-

Angling equipment	in	755	cases
Fish		435	"
Game (animals and birds)		205	"
Nets and fishing gear		182	"
Firearms		1,498	pieces
Traps and snares		335	"
Pelts and hides		293	"
Lights		101	"
Spears		82	"
Tackle boxes		52	"
Motor vehicles		34	"
Watercraft		33	"
Ferrets (live)		23	"
Outboard motors		19	"
Aircraft		2	"
Miscellaneous articles			numerous pieces

More details concerning some of these seizures are enumerated below:

Firearms

Shotguns	664
Small-bore rifles	574
Big-bore rifles	244
Combination	10
Air rifles	4
Pistols	2

Pelts and Hides

Squirrel	104
Muskrat	100
Beaver	57
Weasel	16
Mink	4
Lynx	3
Wolf	3
Fisher	3
Fox	2
Bear	1

Miscellaneous

These articles include hunting knives, haversacks, landing nets, dogs, creels, minnow pails, snaggers, cooler, fish stringers, gas cans, gaff, sleeping bag, decoys, axes, suitcase, ice chisels, turtle traps, minnow traps, dynamite, anchor, parka, scissors, bow and arrow, waders, scale, stove, steel barrels, live bear and a live eagle.

PROSECUTIONS

The information contained in the following tables emphasize one phase of enforcement and the necessity for the maintenance of a capable and efficient staff to perform these duties.

INFORMATIONS LAID

By Whom	Seizures	Investigations	Total
Conservation Officers	3,050	224	3,274
O. P. P. Constables	10		10
	3,060	224	3,284

RESULT OF PROSECUTIONS

By Whom	Convictions	Dismissed	Withdrawn	Total
Conservation Officers	3,092	102	80	3,274
O. P. P. Constables	10			10
	3,102	102	80	3,284

It is noted that our officers and O.P.P. Constables obtained 3,102 convictions out of 3,284 informations laid, or 94%. Dismissals were due, mainly to insufficient evidence and withdrawals were made, principally because they were the second of two charges laid against the respective violators, to assure the registration of a conviction and the imposition of an adequate penalty.

While a large percentage of these cases was for infractions of a minor nature, there were many deliberate and flagrant violations in which severe penalties were imposed and confiscation of valuable articles was subsequently authorized in accordance with Section 76 (1) of the Game and Fisheries Act. Violations like that are serious and some of them are:

- (a) Jacklighting fish, deer, moose, game, etc.
- (b) Hunting, trapping or fishing in Preserves and Parks
- (c) Illegal netting of fish
- (d) Transference of a licence
- (e) Obstructing an officer
- (f) Illegal possession of fur
- (g) Shooting swimming deer or moose
- (h) Killing deer or moose in closed season
- (i) Bartering venison or moose meat

GENERAL

Under the provisions of Section 76 (1) of The Game and Fisheries Act, articles are seized for various infractions, and upon conviction, become the property of the Crown, and are sold by the Department. Where infractions of a minor nature are involved the persons concerned, following disposition of the informations which were laid, have been provided with an opportunity to redeem the articles seized from them on payment of a specified fee assessed by the Department for the return of such articles. This arrangement applies principally to firearms and fishing tackle.

However, there is a percentage of offences in which the circumstances are sufficiently serious to warrant the definite confiscation to the Crown of the seized articles. These confiscated articles are disposed of by the Department at annual public sales, fishing tackle and miscellaneous articles in the spring and firearms in the fall, and which sales during the period under review were conducted in the respective areas in which the offences which resulted in the seizures had occurred.

Two sales of confiscated articles were held during the year under review, the fishing tackle and miscellaneous articles in the spring, and the gun sale in the fall. The receipts obtained from the 1954 tackle sale was \$2,144.40 and the gun sale \$7,094.75.

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SECTION NO. 4

DIVISION of FOREST PROTECTION

DIVISION OF FOREST PROTECTION

The 1955 fire season was considerably below average due to a rather late spring and the absence of any prolonged periods of high hazard.

A total of 881 fires burned an area of 54,693 acres consisting of 25,289 acres of mature growth, 5,043 acres of young growth and the balance of recent cut-over, old burn and non-forested land.

Compared with the preceding year the number of fires was less by 639 and was less than the average of the preceding five years by 386.

Eighty-eight per cent of the fires were confined to an area of less than ten acres each.

Seven fires which burned in logging slash and dry grass accounted for 85 per cent of the burned area, occurring in late May and early June.

Lightning led in fire cause, being the origin of 252 fires or 28 per cent and burned 62 per cent of the total area. Campers led the list of human agencies with 221 fires and together with smokers totalled 368, accounting for 31 per cent of the area burned.

The largest fire of the season occurred in pulpwood slash in the White River district burning 14,811 acres or 25 per cent of the total area burned. This occurrence again emphasizes the difficulties of fire control in large unbroken areas of logging slash.

Fire Danger Conditions

The comparatively late spring break-up was followed during late May and early June by a brief period of high hazard centering in the White River, Kapuskasing, Gogama, Cochrane and North Bay districts. It was during this period that the above-mentioned seven slash fires occurred.

During the latter part of June and into July, precipitation dropped considerably below normal. As a result, 313 fires occurred during the month of July, all of which were held to an average of 2.7 acres per fire.

From early August throughout the balance of the season, normal conditions of fire danger prevailed.

Forest Fire Prevention

Publicity & Education

The continuous forest fire prevention programmes being carried on throughout the districts are of great value. Direct contact with the travelling public through the employment of check points and control gates has proven most effective. In this work the Forest Travel Permit plays a very important part and for this reason considerably more importance was placed upon this means of fire prevention, particularly in the Western Region.

Daily forest fire press releases were given prominence in the press, radio and television. To these agencies, we owe a debt of gratitude for a fine presentation of forest fire information to the public in accordance with actual daily conditions.

For the first time, television stations took cameras and sound equipment to the fire areas. Such on-the-scene recorded fire fighting action provides very effective fire prevention material.

Conventional aircraft and helicopters were used extensively on fire prevention work in settlements, tourist, camping and blueberry areas, difficult to reach by other means. The aerial loud speaker for transmitting messages from the aircraft to people on the ground was employed to good advantage.

During July, two courses of instruction in fire fighting organization and techniques were given, one in the East and the other in the Westerly part of the Province. Sponsored by the Forest Industry and the Department, some 153 men representing key protection personnel were given instruction. Since employees of woods operators are our best fire fighters, these men, further instructed by the supervisors attending the courses became an extremely important fire protection ally.

District meetings with summer operators including forest industry tourist operators, railways and others, held just prior to the fire season, provides a valuable exchange of views and a statement of fire protection plans for the coming season. This has become an annual procedure of considerable merit.

Spring meetings with bordering forest protectionists from Manitoba, Quebec and Minnesota are held annually and serve to iron out many problems encountered at the border, including initial action on fires, payment of fire fighters, compensation, communication and detection facilities and other items contributing materially to mutual aid.

Forest Fire Suppression

Through a co-operative arrangement with the Department of Reform Institutions, inmates of the Burwash Industrial Farm were made available for fire fighting. A group of fifty men were given instruction in fire fighting procedure. Under guards furnished by the Industrial Farm, the prisoners were employed in crews of ten men as required. They were permitted to travel by any means other than aircraft and to be employed within a radius of fifty miles of the Institution. A token payment of one dollar per day while on fire fighting duty was permitted. This experiment proved highly successful and it is hoped that the arrangement may be continued and expanded in succeeding years.

Two helicopters were employed on forest protection work throughout the season. This type of aircraft serves a very useful purpose for getting to otherwise difficult fire locations with men and equipment in the shortest possible time. Helicopters, employed as a supplement to the Department's fleet of Beaver and Otter aircraft, have become an essential fire protection item.

The principle of maintaining the fire protection organization completely flexible on a province-wide basis, as a means of complete internal mutual aid in personnel and materials, was continued.

The procedure of carrying a small equipped fire fighting force in air patrol during periods of high hazard and following lightning storms has been found so effective as to become standard practice.

Aerial bombing of fires with paper containers holding three gallons of water was further perfected. A new type of parachute for cargo dropping was developed and under test found to be satisfactory. Various items of new equipment including a new forest fire pump showing considerable promise were tested.

Every effort was made to keep abreast of the latest developments in forest fire protection both in Canada and elsewhere in order that each new item might be fully assessed.

Radio Communications

The Department's Radio Communications System totalling 116 ground radio stations and associated equipment handled, during the year 1954, a total of 57,972 messages totalling a word count of 1,482,766. This was a decrease of 1% over 1953 totals.

Province-wide operation of the system is provided over six regionally assigned frequencies, 3309, 4460, 4520, 4535, 4580 and 4880 kilocycles. For long distance communications to the Western, Midwestern, and Northern regions 5410 and 9160 Kilocycles are used also with still another frequency 4775 kilocycles being reserved for, and used entirely by, the forty-three Departmental aircraft.

To provide improved and more efficient internal district communications, the System will gradually be changed over to 46 Megacycle V.H.F. equipment and a start was made this year when Parry Sound and Sudbury districts were converted.

The following radio equipment was used during 1954:

Tower Radio Sets	314
Mobile Radio Stations	27
Marine Radio Stations	10
Portable Ground Sets ($\frac{1}{2}$ watt)	150
Portable Ground Sets ($2\frac{1}{2}$ watts)	111
30 Watt Ground Radio Stations	106
75 Watt Ground Radio Stations	2
100 Watt Ground Radio Stations	2
150 Watt Ground Radio Stations	7
300 Watt Ground Radio Stations	2
500 Watt Ground Radio Stations	8
Aircraft Radio Installations	43
Aircraft Ground Hailer Units	19

Forest Insect and Disease Protection

Close observation of forest insect and disease conditions throughout the Province formed an important part of this Division's activities.

The work of several Divisions is directly affected by insect and disease activity, particularly that of Timber Management and Reforestation. Consequently, most control programmes are co-operative in nature and require the active participation of field staffs of all Divisions. Programmes directed toward control of white pine blister rust in the Lindsay and Tweed districts and the European pine sawfly in the Lake Erie and Lake Huron districts were of this type.

White pine blister rust control is effected by the removal of ribes species, the alternate host plant of the rust. The work is carried on by groups of men systematically covering the area, uprooting the ribes plants by hand or using a type of grub hoe. Current interest in reclaiming white pine lands along with an expanding white pine planting programme has greatly enhanced the importance of the Tweed and Lindsay projects as no previous guide to costs to be expected under Ontario conditions existed.

The effort to control the European pine sawfly, a serious pest of Scotch and Red pine in the Lake Erie and Lake Huron districts, using a virus disease which is introduced to the insect population by both ground and aerial spraying was continued. It is hoped and expected that further spread of this insect will thus be prevented.

Forest Insect and Disease Protection (cont'd)

In addition, research programmes carried on by the Division of Forest Biology, Dominion Department of Agriculture, received our constant attention. Of particular and immediate concern are the chemical control experiments, concerned with the European pine shoot moth, carried on at Northumberland County Forest in the Lindsay district and the research projects concerned with the spruce budworm carried on at field stations in the Port Arthur and Kenora districts.

The discovery of the pine root collar weevil in the Lake Simcoe district was of particular interest since no previous record of this insect's presence in Ontario is recorded. Detailed biological studies supplemented by a chemical control project of an experimental nature were immediately initiated and will continue until a satisfactory solution is found.

The field staff of this Department continued to contribute to the Forest Insect and Disease Survey, a project of the Division of Forest Biology (Canada).

The introduction of more intensive management practices throughout the Province has emphasized the increasing importance of the biological phase of forest protection activities.

Number of Forest Fires
and Area Burned Over by Months

1950-1954

Month	1954 Fires - Acres	1953 Fires - Acres	1952 Fires - Acres	1951 Fires - Acres	1950 Fires - Acres
March	"	1	"	"	"
April	37	119	208	25	17
May	269	373	283	472	457
June	101	104	163	102	105
July	313	148	129	176	91
August	111	453	111	83	171
September	29	107	55	30	91
October	15	121	115	16	50
November	6	94	31	"	3
TOTALS	881	1,520	1,095	904	985
	54,693	58,809	12,421	101,243	36,780

Number of Forest Fires and Area Burned Over
By Causes

1950-1954

Causes	1954		1953		1952		1951		1950	
	Fires -	Acres	Fires -	Acres	Fires -	Acres	Fires -	Acres	Fires -	Acres
Settlers	42	536	92	12,479	112	1,266	74	595	107	3,083
Campers	221	3,006	388	17,329	315	1,995	191	1,546	256	11,261
Railways	82	915	188	1,002	131	487	139	934	99	715
Lightning	252	34,232	357	13,811	130	2,546	151	84,027	93	383
Logging Operations	13	114	24	810	31	969	38	9,051	29	2,817
Mining Operations	3	13	2	1	5	19	12	9	3	120
Smokers	147	14,255	279	9,916	214	1,862	173	4,106	258	4,178
Road Construction	11	419	13	728	26	67	28	289	47	12,250
Incendiary	25	40	19	1,458	13	139	16	357	16	492
Prospectors	2	202	1	3	-	-	-	-	1	10
Miscellaneous	74	717	143	1,202	108	3,063	74	313	68	1,426
Unknown	9	244	14	70	10	8	8	16	8	45
TOTALS	881	54,693	1,520	58,809	1,095	12,421	904	101,243	985	36,780

CLASSIFICATION OF FOREST FIRES

By Size - 1954

Size	1954 No.	1953 No.	1952 No.	1951 No.	1950 No.	1949 No.	1948 No.
$\frac{1}{4}$ Acre and under	354	500	391	329	260	574	571
Over $\frac{1}{4}$ to 5 acres	392	719	516	383	426	811	894
Over 5 to 10 acres	36	102	65	45	92	122	155
Over 10 to 100 acres	81	146	103	115	155	242	285
Over 100 to 500 acres	9	33	16	21	43	61	74
Over 500 to 1,000 acres	2	7	3	5	3	16	24
Over 1,000 acres to 10,000	5	13	1	4	6	7	24
Over 10,000 acres	2	-	-	2	-	1	9
TOTALS	881	1,520	1,095	904	985	1,834	2,036

CLASSIFICATION OF LAND BURNED OVER

By Ownership - 1954

Classification	1954	1953	1952
Crown Land - Acres	36,115	44,519	7,264
Private Lands - Acres	18,578	14,290	5,157
Number of Fires	54,693	1,520	1,095
Total Area in Acres	881	58,809	12,421

CLASSIFICATION OF FOREST AREA BURNED OVER - 1954

By Forest Type

Year	No. of Fires	Mature Growth		Young Growth		Reproduction under 3.5" D.B.H.				Logging Clear Cut	Burn Repeating	Plantation Land	Total Acres				
		Conif-erous wood	Mixed wood	Conif-erous wood	Mixed wood	Conif-erous wood	Hard-wood	Mixed wood	Blow down					Insect Killed			
1954	881	9,780	5,666	9,843	2,093	235	1,709	381	132	493	133	-	18,217	936	84	4,991	54,693
1953	1,520	2,825	3,596	6,016	4,156	2,838	6,934	851	4,373	3,856	3	1	7,488	6,464	277	9,131	58,809
1952	1,095	832	43	1,344	392	225	903	427	423	193	81	10	2,757	1,124	9	3,658	101,243
1951	904	6,875	242	5,838	2,716	1,186	6,506	1,402	1,007	4,175	64	35	10,969	54,721	13	5,494	36,780

Year	No. of Fires	Mature Growth		Intermediate Growth		Young Growth		Slash not re-stocking	Old Burn not re-stocking	Muskeg	Barren Grass	Total Acres				
		Conif-erous wood	Mixed-erous wood	Conif-erous wood	Mixed-erous wood	Conif-erous wood	Mixed-erous wood									
1949	1,834	2,949	440	138	14,374	619	5,244	3,276	6,101	11,467	3,394	2,974	3,192	3,801	60,065	
1948	2,036	61,657	539,426	1,319	34,335	102,132	2,744	9,576	61,160	33,059	73,758	15,257	62,223	8,407	12,336	1,017,389

MEANS OF FIRE DETECTION - 1954

	Towers	Rangers	Public	Aircraft	Total Fires
1954 Totals	353	46	356	126	881
1953 Totals	528	122	654	216	1,520
1952 Totals	344	82	530	139	1,095

STATEMENT OF FIRE PERMITS ISSUED - 1954

Number of Permits

	1954	1953	1952	1951	1950	1949	1948
	12,315	14,189	11,764	9,647	9,357	11,546	9,237

STATEMENT OF TRAVEL PERMITS ISSUED - 1954

	1954	1953	1952	1951	1950	1949	1948
Permits	113,971	146,481	124,193	114,998	86,975	90,206	51,187
Persons	408,018	506,703	455,979	422,938	323,870	256,320	146,185

STATEMENT OF WORK PERMITS ISSUED 1954-55

	Mining Operations		Woods Operations		Miscellaneous Operations		Totals	
	No. of Permits	Men Engaged	No. of Permits	Men Engaged	No. of Permits	Men Engaged	No. of Permits	Men Engaged
1954-55	1,011	6,049	2,145	58,798	627	9,011	3,783	73,858
1953-54	642	4,170	2,342	35,025	601	10,192	3,585	49,387
1952-53	688	3,616	2,711	42,185	572	10,081	3,971	55,882
1951-52	696	3,279	2,922	52,453	512	10,030	4,130	65,762
1950-51	736	3,736	2,790	48,754	227	5,091	3,753	57,581
1949-50	696	2,984	2,220	33,266	252	11,215	3,168	47,465
1948-49	738	3,525	2,024	41,649	268	6,562	3,030	51,736
1947-48	1,156	6,506	2,083	48,059	252	6,575	3,491	61,140
1946-47	1,532	8,737	1,871	54,217	93	4,392	3,496	67,346

TOTAL IMPROVEMENTS COMPLETED TO MARCH 31st, 1955

Cabins	489
Storehouses	144
Boathouses	82
Store and Boat Houses	24
Bunkhouses	65
Offices	61
Garage and Carhouses	182
Other Buildings	391
Hose Towers	30
Wooden Towers	19
Steel Towers	1,280
Telephone Lines (Miles)	2,810.23

REPORT OF MAJOR EQUIPMENT AS OF MARCH 31, 1955

DISTRICTS AND REGIONS	PORT-POWER PUMPS	PORT-HAND PUMPS	FIRE HOSE IN FEET	CANDES	BOATS IN BOARD	BOATS OUTBOARD	OUTBOARD MOTORS	TRUCKS AND AUTOS	TRAILERS	TRACTORS	TENTS	EIDER-DOWNS	BLANKETS IN PAIRS	SNOW-MOBILES	RAILWAY MOTOR CARS	BINOCULARS
DISTRICTS																
CHAPLEAU	36	215	82,050	60	-	10	27	17	1	2	86	26	570	-	-	15
COCHRANE	54	609	162,400	53	-	13	30	32	2	2	65	75	551	1	8	30
FORT FRANCES	38	118	162,250	54	2	14	27	15	2	2	52	69	559	-	1	15
GERALDTON	107	528	242,500	64	1	4	35	28	5	1	160	56	1056	1	5	21
GOGAMA	31	125	56,700	49	3	6	14	12	1	2	56	33	519	-	6	17
KAPUSKASING	42	408	101,200	59	-	4	21	25	-	-	07	60	639	2	0	32
KENORA	69	207	201,800	66	7	22	56	30	5	1	109	60	946	-	1	27
LAKE ERIE	5	49	6,432	2	5	8	0	30	0	6	-	6	4	-	-	24
LAKE HURON	6	116	10,700	2	-	7	7	30	14	6	3	0	-	-	-	21
LAKE SIMCOE	11	152	28,700	3	1	15	15	46	12	14	16	0	100	1	-	24
LINDSAY	21	178	39,650	24	-	30	29	42	9	10	31	29	310	-	-	25
NORTH BAY	78	174	97,300	72	-	29	69	34	2	3	123	60	651	-	-	31
PARRY SOUND	31	169	79,500	53	4	33	44	34	8	3	54	45	644	-	-	34
PEMBROKE	40	287	78,500	113	7	38	53	43	4	12	98	95	1321	-	5	34
PORT ARTHUR	96	372	242,400	60	2	20	35	30	5	4	149	57	1266	-	-	28
RIDEAU	10	76	20,950	1	1	15	15	21	3	7	2	1	-	-	-	0
SAULT STE. MARIE	50	333	124,540	57	1	10	27	41	2	4	113	57	860	-	3	25
SIoux LOOKOUT	99	431	319,000	66	3	9	50	24	3	1	151	59	1136	2	3	23
SUDBURY	50	160	128,150	84	7	21	41	44	3	2	150	46	1403	-	2	36
SWASTIKA	43	334	107,900	49	-	10	20	27	3	3	65	67	520	-	1	23
TWEED	18	291	36,000	12	1	52	39	29	10	-	30	52	75	-	1	26
WHITE RIVER	40	228	95,500	58	1	3	16	10	1	-	91	41	745	-	2	18
REGIONS																
CENTRAL REGION	27	294	93,900	-	-	1	1	-	-	1	40	1	241	-	-	-
SOUTH CENTRAL REG.	28	187	16,700	-	-	-	1	-	-	1	46	2	973	-	-	2
MID-WESTERN REGION	11	162	62,000	2	-	-	-	-	-	1	3	-	60	-	-	-
WESTERN REGION	20	-	59,000	-	-	-	-	-	-	1	6	2	-	-	-	-
NORTHERN REGION	9	97	28,000	-	-	-	-	-	-	-	12	-	300	-	-	-
SOUTH EASTERN REG.	2	24	7,100	1	-	-	2	-	-	-	4	1	30	-	-	1
MISCELLANEOUS																
FST. RANGER SCHOOL	11	38	14,900	19	-	4	3	3	-	1	6	2	485	-	-	3
AIR SERVICE	-	-	-	10	8	13	30	6	-	2	2	95	210	-	-	-
HEAD OFFICE	14	-	-	21	1	19	37	46	4	9	171	244	-	-	-	44
TOTALS	1,097	6,362	2,713,722	1,114	55	410	752	715	107	101	1,997	1,365	16,334	7	45	573

F I R E D A M A G E

(Loss of standing timber calculated)

Districts	CROWN Timber Damage Cu. Ft.	\$	Protection Charges	PRIVATE Timber Damage Cu. Ft.	\$
Sioux Lookout	98,110	981.10	408.38	8,500	85.00
Kenora	23,665	236.65	74.35	6,335	63.35
Fort Frances	6,104	61.04	15.30	-	-
Port Arthur	74,252	742.52	1,428.67	60	.60
Geraldton	-	-	-	14,200	142.00
Kapuskasing	4,964,000	49,640.00	36,305.85	-	-
Cochrane	4,750	47.50	8,606.42	-	-
White River	14,332,830	143,328.30	84,154.63	3,680	36.80
Swastika	8,000	80.00	317.59	-	-
Sault Ste. Marie	41,263	412.63	350.02	16,074	160.74
Gogama	4,969,160	49,691.60	20,792.50	500	5.00
Chapleau	24,185	241.85	86.22	-	-
Sudbury	21,500	215.00	225.70	27,955	279.55
North Bay	234,610	2,346.10	3,333.20	2,398	23.98
Parry Sound	10,783	107.83	112.93	574	5.74
Pembroke	5,637	56.37	49.22	512	5.12
Tweed	5,873	58.73	88.77	1,607	16.07
Lindsay	188	1.88	11.80	792	7.92
Lake Simcoe	-	-	-	600	6.00
1954 Totals	24,824,910	248,249.10	156,361.55	83,787	837.87
1953 Totals	27,933,971	279,339.71	87,811.27	1,688,003	16,880.03
1952 Totals	1,401,306	14,013.06	9,169.33	576,888	5,768.88

TABLE - 1954

on Value of Crown Dues only)

Protection Charges	TOTAL Timber Damage Cu. Ft.	\$	Protection Charges	\$ Total Damage	Private Property Damage
48.00	106,610	1,066.10	456.38	1,522.48	-
37.40	30,000	300.00	111.75	411.75	-
-	6,104	61.04	15.30	76.34	-
8.04	74,312	743.12	1,436.71	2,179.83	1,200.00
74.09	14,200	142.00	74.09	216.09	-
-	4,964,000	49,640.00	36,305.85	85,945.85	223.25
-	4,750	47.50	8,606.42	8,653.92	8,210.00
32.82	14,336,510	143,365.10	84,187.45	227,552.55	-
20.32	8,000	80.00	337.91	417.91	-
61.40	57,337	573.37	411.42	984.79	-
-	4,969,660	49,696.10	20,792.50	70,489.10	1.00
-	24,185	241.85	86.22	328.07	-
332.00	49,455	494.55	557.70	1,052.25	750.00
117.40	237,008	2,370.08	3,450.60	5,820.68	881.20
33.94	11,357	113.57	146.87	260.44	2,130.00
-	6,149	61.49	49.22	110.71	-
10.88	7,480	74.80	99.65	174.45	325.00
5.63	980	9.80	17.43	27.23	2,000.00
10.76	600	6.00	10.76	16.76	-
792.68	24,908,697	249,086.97	157,154.23	406,241.20	15,650.45
9,842.62	29,621,974	296,219.74	97,653.89	393,873.63	81,777.73
552.75	1,978,194	19,781.94	9,722.08	29,504.02	31,347.25

F I R E F I G H T I N G R E S O U R C E S

(Other than Lands & Forests as of August 1st, 1954)

Including Railway, Logging, and Commercial Aircraft Companies, also Organized Municipalities and other Industrial Companies operating in Forested Areas

District	Railway Tank Cars	Motor Pumps	Hose Ft.	Hand Pumps	Axes	Shovels	Bulldozers Tractors	Camping Equipment		Transportation				
								Sheltering No. of Men	Cookery No. of Men	Aircraft	Boats	Canoes	Trucks	R.M. Cars
Sioux Lookout	1	75	167,100	1,071	929	1,643	58	2,665	2,545	3	85	30	151	-
Kenora	-	50	31,200	276	555	290	20	870	830	6	2	11	56	-
Fort Frances	-	20	28,800	145	312	310	119	850	940	3	3	15	90	-
Port Arthur	-	55	133,200	990	280	594	17	300	300	4	-	2	201	3
Geraldton	3	50	107,200	764	575	576	75	-	-	1	14	-	179	-
Kapuskasing	3	93	199,600	1,508	1,070	1,001	62	1,173	1,173	-	19	3	22	3
White River	-	40	70,000	718	860	790	35	1,500	1,500	-	30	-	60	-
Cochrane	2	50	98,900	1,048	1,235	1,030	59	2,813	2,801	2	41	-	75	-
Swastika	6	41	49,250	302	206	518	28	819	1,121	1	15	1	106	-
Sault Ste. Marie	-	32	42,650	283	531	478	37	1,185	1,243	8	68	50	79	-
Chapleau	-	28	46,300	320	365	442	26	1,065	1,065	7	20	9	77	12
Gogama	-	18	42,700	293	410	331	20	848	848	-	13	14	50	-
Sudbury	1	21	42,700	282	363	476	11	600	595	3	29	23	41	-
North Bay	1	49	29,810	313	913	854	32	120	142	5	559	280	174	-
Parry Sound	2	53	58,450	107	841	451	57	909	934	9	135	21	181	-
Pembroke	-	25	15,100	172	698	440	34	1,011	1,046	-	52	337	115	-
Lindsay	-	27	12,300	188	356	421	8	635	635	-	-	-	44	-
Tweed	-	24	8,825	72	386	360	18	375	361	1	36	10	81	-
TOTALS	19	751	1,033,685	8,852	10,885	11,005	716	17,738	18,079	53	1,121	806	1,782	18

SECTION NO. 5

DIVISION of LANDS

D I V I S I O N O F L A N D S

The Public Lands Regulations, which became effective in May 1953, continued without change during the year under review. However certain amendments which would appear to be necessary and desirable to permit further improvement in land administration are contemplated and will be fully considered for approval during the next fiscal year.

There were no amendments to The Public Lands Act.

The policy of setting aside areas of Crown land on lakes and rivers for public use was constantly kept in mind and further areas have been withdrawn from disposition. This phase of the administration is considered of paramount importance.

The number of patents issued for agricultural land in sale townships was considerably fewer than the number issued during the previous year, while sales and cancellations were slightly higher.

In Free Grant townships there were fewer locations, cancellations and patents than last year.

The number of sales of land for summer resort use was somewhat less than last year but there was a corresponding increase in the number of patents issued.

Special Use sales remained at about the same level as in the previous period and were considerably less than in former years. This is due to a policy which provides for more complete checking of applications, with the result that many more are declined than was formerly the case. The number of patents issued this year was higher than last year.

Both sales and patents of Townsite Lots decreased in number this year, largely because as pointed out in the last report no new surveys of Crown land into subdivisions of this nature has been made for many years and the lands remaining in the Crown are constantly being alienated to private ownership.

There was a slight increase in the number of Land Use Permits issued, which are largely renewals. The number of Leases and Licences of Occupation issued decreased.

Transactions completed under the Ontario-Dominion Provincial Agreement (Section 35 The Veterans Land Act, Canada) decreased in number with respect to agricultural land, and there were no applications for small holdings concluded.

It is worthy of note that during periods of favourable national economy more land is acquired for recreational use and less for farming purposes.

PATENTS OFFICE (Lands Division)

Statement of Patents, etc. issued during the year ending March 31st, 1955

Public Land Patents	1667	
Free Grant Patents	87	
Patents & Transfers (Town Lots)	70	
Miscellaneous Documents	163	
Release of Pine	<u>1</u>	1988
Crown Leases	3	
Algonquin Park Leases	7	
Rondeau Park Leases	1	
Temagami Leases		
Water Power Leases	3	
Lake Superior Provincial Park Leases	<u> </u>	14
Licenses of Occupation	58	
Licenses of Occupation (Rondeau)	1	
Licenses of Occupation (Algonquin)		
Licenses of Occupation (Temagami)	<u> </u>	59
Licenses of Occupation Cancelled	48	
Crown Leases Cancelled	60	

AGRICULTURAL LAND

the fiscal year ending March 31st, 1955

Administrative District	District Forester	Sales		Cancellations		Assignments		Patents	
		No.	Acres	No.	Acres	No.	Acres	No.	Acres
Chapleau	D. Wilson	35	2834.010	26	2377.04	15	1255.40	22	2046.167
Cochrane	F. L. Hall	6	460.50	6	834.50	1	89.	10	1247.25
Fort Frances	W. T. Foster							1	52.7
Geraldton	J. M. Taylor								
Gogama	R. B. Dickson	16	1416.665	39	3367.615	5	384.93	21	2246.249
Kapuskasung	F. E. Sider	9	663.513	7	1000.85	7	1031.00	8	1092.721
Kenora	I. Ringham								
Lake Erie	A. B. Wheatley								
Lake Huron	I. C. Marritt								100.00
Lake Simcoe	A. W. Leman								89.00
Lindsay	W. A. G. Thurston	1	94.00	4	468.50	1	59.00	2	153.00
North Bay	R. L. Snow	8	959.00	3	473.55	1	160.00	14	2004.740
Ferry Sound	W. E. Gimby	3	300.00	4	314.00	3	299.00	2	200.00
Pembroke	D. N. Omand	2	108.00	2	196.00	2		2	236.059
Port Arthur	R. Hyslop	39	5168.00	20	2777.13	2	163.50	27	3879.256
Sault Ste Marie	A. J. Herridge	1	164.00	5	798.00			4	510.10
Sioux Lookout	H. Middleton								
Sudbury	J. M. Whalen	11	981.25	22	2601.43	2	298.54	38	4133.64
Swastika (Actg.)	S. L. Sleeman	24	1952.625	20	1905.50	3	241.50	32	2911.222
Tweed	J. Ruxton	3	131.07	1	100.00	2	150.00	3	363.55
White River	R. H. Hamby								
		158	15232.633	159	17214.115	42	4131.870	188	21265.654

Swastika, University Cancellations

158	15232.633	161	17377.615	42	4131.870	188	21265.654
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SUMMER RESORT SALES

the fiscal year ending March 31st, 1955

Administrative District	District Forester	No.	Sales Acres	No.	Cancellations Acres	No.	Assignments Acres	No.	Patents Acres
Chapleau	D. Wilson	6	10.10					4	5.63
Cochrane	F.L. Hall	16	8.968	2	1.46	1	0.50	38	25.73
Fort Frances	W.T. Foster	19	41.67	1	1.99	2	3.96	22	34.64
Geraldton	J.M. Taylor	12	24.11	2	7.25			10	22.496
Gogama	R.B. Dickson	1	1.43						
Kapuskasing	F.E. Sider	1	0.271	1	0.48			5	4.117
Kenora	L. Ringham	77	117.352	6	17.22	4	5.78	86	154.177
Lake Erie	A.B. Wheatley								
Lake Huron	I.C. Merritt								
Lake Simcoe	A.W. Leman	124	118.624	3	4.17	1	0.443	181	226.435
Lindsay	W.A.G. Thurston	162	202.576	11	17.558			215	312.039
North Bay	R.L. Snow	82	133.743	11	25.23	4	3.88	137	219.847
Parry Sound	W.E. Gimby	208	305.8766	20	35.93	3	4.59	200	462.404
Pembroke	D.N. Omand	37	57.277	5	7.416			24	34.384
Port Arthur	R. Hyslop	52	76.236	3	7.95	2	4.38	68	92.38
Sault Ste Marie	A.J. Herridge	72	121.787	5	7.53	1	1.47	59	102.767
Sioux Lookout	H. Middleton	13	31.078			1	1.10	31	71.360
Sudbury	J.M. Whalen	283	481.541	8	17.919	6	9.97	292	529.255
Swastika (Actg.)	S.L. Sleeman	28	24.677					41	38.08
Tweed	J. Ruxton	78	105.421	4	11.19	3	6.687	55	82.049
White River	R.H. Hembly	7	8.84	2	3.05			11	20.70
Totals		1278	1871.5776	84	166.343	28	42.760	1479	2438.490

CITIES, TOWNS and TOWNPLOTS

the fiscal year ending March 31st, 1955

Administrative District	District Forester	Sales		Cancellations		Assignments		Patents	
		No.	Acres	No.	Acres	No.	Acres	No.	Acres
Chapleau	D. Wilson	2	0.60	1	0.3			6	3.15
Cochrane	F.L.Hall	2	0.27					1	0.10
Fort Frances	W.T.Foster								
Geraldton	J.M.Taylor	11	3.139	1	0.17	4	1.26	11	2.164
Gogama	R.B.Dickson	2	0.34					6	0.87
Kapuskasing	F.E.Sider	11	2.186	3	2.068	2	0.44	10	2.338
Kenora	L.Ringham	3	0.39			1	0.08	3	2.166
Lake Erie	A.B.Wheatley							2	3.511
Lake Huron	I.C.Marritt			1	1.94			1	1.00
Lake Simcoe	A.W.Leman	1	2.00					1	2.00
Lindsay	W.A.G.Thurston	2	1.00					1	0.50
North Bay	R.L.Snow								
Parry Sound	W.E.Gimby								
Pembroke	D.N.Omand	1	0.217					1	0.217
Port Arthur	R.Hyslop	10	2.228	1	0.163			4	2.70
Sault Ste Marie	A.J.Herridge								
Sioux Lookout	H.Middleton	4	0.61	4	0.63	1	0.08	6	0.76
Sudbury	J.M.Whalen	9	2.321			1	0.19	11	4.595
Swastika (Actg.)	S.L.Sleeman	2	0.110			2	0.34	6	0.580
Tweed River	J.Ruxton								
White River	R.H.Hambly								
Totals		60	15.411	11	5.271	11	2.39	70	26.651

FREE GRANT LAND (including soldiers)
the fiscal year ending March 31st, 1955

Administrative District	District Forester	Locations		Cancellations		Assignments		Patents	
		No.	Acres	No.	Acres	No.	Acres	No.	Acres
Chapleau	D. Wilson								
Cochrane	F. L. Hall			3	313.33			4	464.00
Fort Frances	W. T. Foster			3	435.00			5	821.50
Geraldton	J. M. Taylor								
Gogama	R. B. Dickson								
Kapuskasung	F. E. Sider	1	75.00	1	76.00				
Kenora	L. Ringham	1	135.00	15	2113.50	1	123.50	18	2692.268
Lake Erie	A. B. Wheatley								
Lake Huron	I. C. Marritt								
Lake Simcoe	A. W. Leman								
Lindsay	W. A. G. Thurston			5	607.00				
North Bay	R. L. Snow			34	3124.00				
Parry Sound	W. E. Gimby	1	62.00	6	613.25			3	284.62
Pembroke	D. N. Omand			112	14631.00	4	600.00	19	2394.00
Port Arthur	R. Hyslop	8	978.66	1	100.00			4	329.614
Sault Ste Marie	A. J. Herridge			3	473.00			24	3206.376
Sioux Lookout	H. Middleton			2	329.00			1	162.00
Sudbury	J. M. Whalen			8	1198.75			1	73.372
Swastika (Actg.)	S. L. Sleeman	4	479.13	5	472.75				
Tweed	J. Ruxton	2	93.50	11	1268.44	2	282.00	8	872.00
White River	R. H. Hambly								
Totals		17	1823.29	209	25755.02	7	1005.50	87	11299.750

LAND FOR SPECIAL USE

the fiscal year ending March 31st, 1955

Administrative District	District Forester	Sales		Cancellations		Assignments		Patents	
		No.	Acres	No.	Acres	No.	Acres	No.	Acres
Chapleau	D. Wilson								
Cochrane	F. L. Hall	6	165.43					4	107.90
Fort Frances	W. T. Foster	1	0.50					3	4.26
Geraldton	J. M. Taylor	2	9.87					1	9.07
Gogama	R. B. Dickson								
Kapuskasung	F. E. Sider	2	75.43					3	6.56
Kenora	L. Ringham	14	308.835	3	85.58			18	332.172
Lake Erie	A. B. Wheatley	5	4.7185					5	4.7185
Lake Huron	I. C. Marritt	4	272.14					8	424.925
Lake Simcoe	A. W. Leman	6	65.497					5	2.582
Lindsay	W. A. G. Thurston	3	3.546	1	0.50			7	629.966
North Bay	R. L. Snow	16	65.03	1	1.06		21.45	11	37.25
Parry Sound	W. E. Gimby	16	11.44					17	17.006
Pembroke	D. N. Omand	6	203.852	1	100.00		0.321	12	471.634
Port Arthur	R. Hyslop	10	504.97	1	9.12			7	208.290
Sault Ste Marie	A. J. Herridge	8	15.399					11	183.097
Sioux Lookout	H. Middleton	4	2.227					9	34.058
Sudbury	J. M. Whelen	19	347.212	1	100.00		90.00	27	719.564
Swastika (Actg.)	S. L. Sleeman	6	555.93	2	105.00			2	38.00
Tweed	J. Ruxton	12	1400.43	1	75.00			10	1,024.64
White River	R. H. Hambly	3	733.39	1	138.00			3	733.39
Totals		143	4745.9465	12	614.26	3	111.771	163	4,989.0825

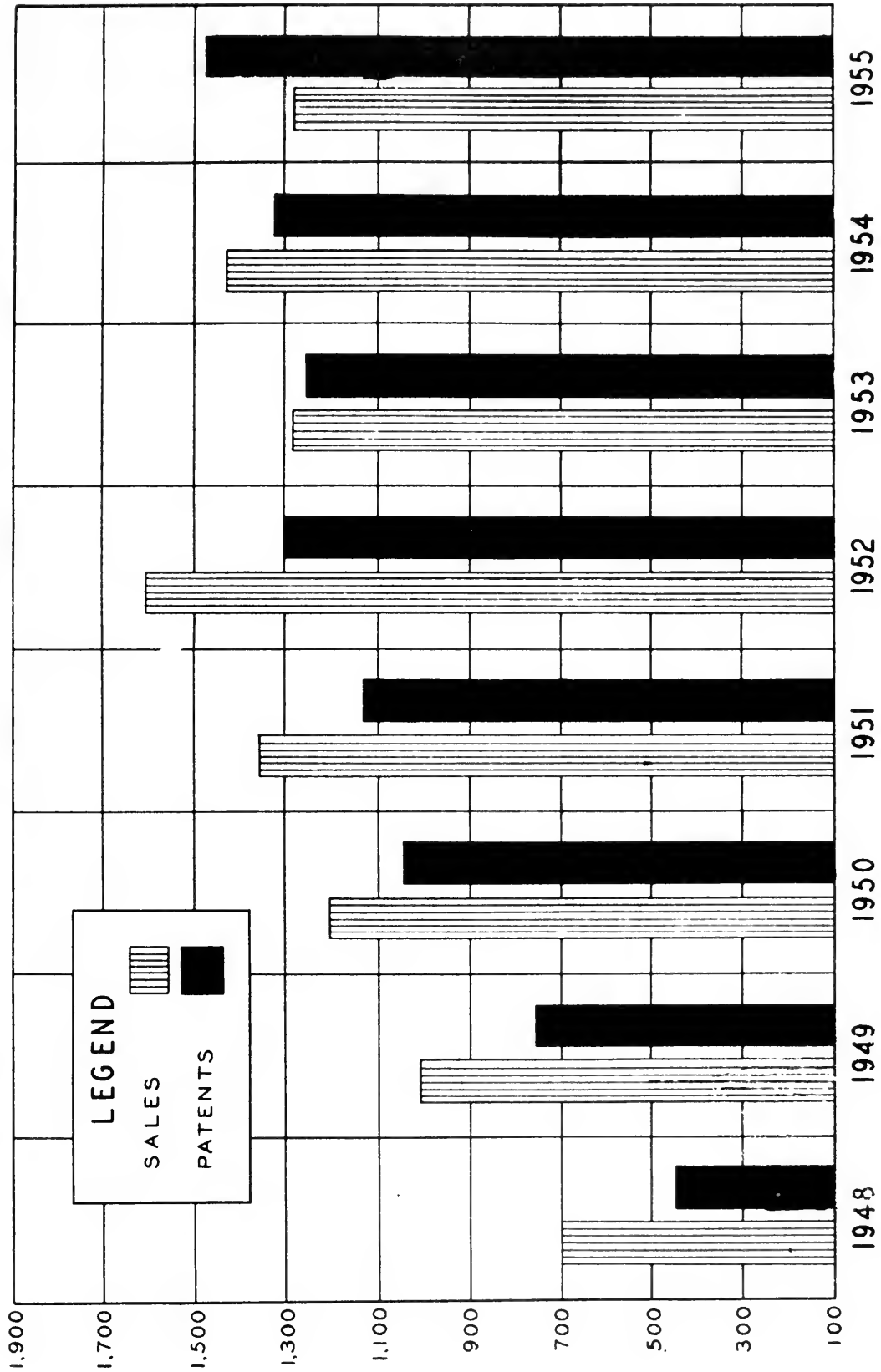
LAND USE PERMITS ISSUED FROM APRIL 1st, 1954 TO MARCH 31st, 1955.

ADMINISTRATIVE DISTRICT	HUNT CAMP	TRAPPER'S CAMP	RESIDENCE	AGRICULTURAL	MARSH HAY	MILL SITE	SUGAR BUSH	BOAT HOUSE	MISCELLANEOUS	DEPARTMENTAL HOUSES								
No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.								
ALGONQUIN PARK	106	109.75	3	2.50		7	72.00	34	10.70	191	875.58	124						
CHAPLEAU	5	5.00	25	20.84		11	87.00		37		1136.26	55						
COCHRANE	12	9.65	1	1.00	2	20.00	48.00	2	2.00	54	789.75	37						
FORT FRANCES	4	3.25				3	15.00			24	269.27	36						
GERALDTON	3	2.50	33	20.71		3	11.00		12		540.00	66						
GOGAMA	1	1.00	18	82.42		2	35.00		6		176.60	108						
KAPUSKASING	1	1.00	9	11.41	2	12.00	166.00	3	.50	40	1609.30	185						
KENORA	8	5.40	4	2.20	1	25.00	47.00	2	3.74	50	991.13	47						
LAKE ERIE												158						
LAKE HURON												101						
LAKE SIMCOE	1	1.00	1	.50	1	100.00		8	.80			216						
LINDSAY	92	92.00	5	14.25		1	7.66	3	.52	2	270.00	123						
NORTH BAY	132	131.55	2	2.00	3	259.00	389.82	15	7.30	38	1308.25	121						
PARRY SOUND	266	266.25	1	1.00	26	50.75	95.00	3	4.15	28	445.50	109						
PORT ARTHUR	8	9.08	12	33.00	1	480.00	80.77	35		26	416.29	103						
RIDEAU												6						
SAULT STE MARIE	26	26.80	1	1.00	11	84.00	35.00	4		22	183.00	91						
ST LOUIS LOOKOUT	8	10.00	6	6.02	17	28.50	98.00	12	9.00	77	1125.77	124						
SUBSBURY	183	187.00	1	1.00	28	123.00	60.00	1	17.65	46	2124.00	74						
SWASTIKA	6	5.53	4	82.50	4	135.00	84.50	3	1.50	15	527.00	30						
TWEEED	280	284.50	12	76.98	4	184.00	38.00	2	.75	8	98.36	5						
WHITE RIVER	10	9.25	13	11.24	1	12.00	11.00	3		7	108.69	127						
TOTALS	1220	975.38	29	25.16	246	649.02	1661.11	10	283.00	180	1380.75	9	100.17	102	58.61	683	12994.75	2046

TOTAL NUMBER OF PERMITS 4559

TOTAL NUMBER OF ACRES 18127.95

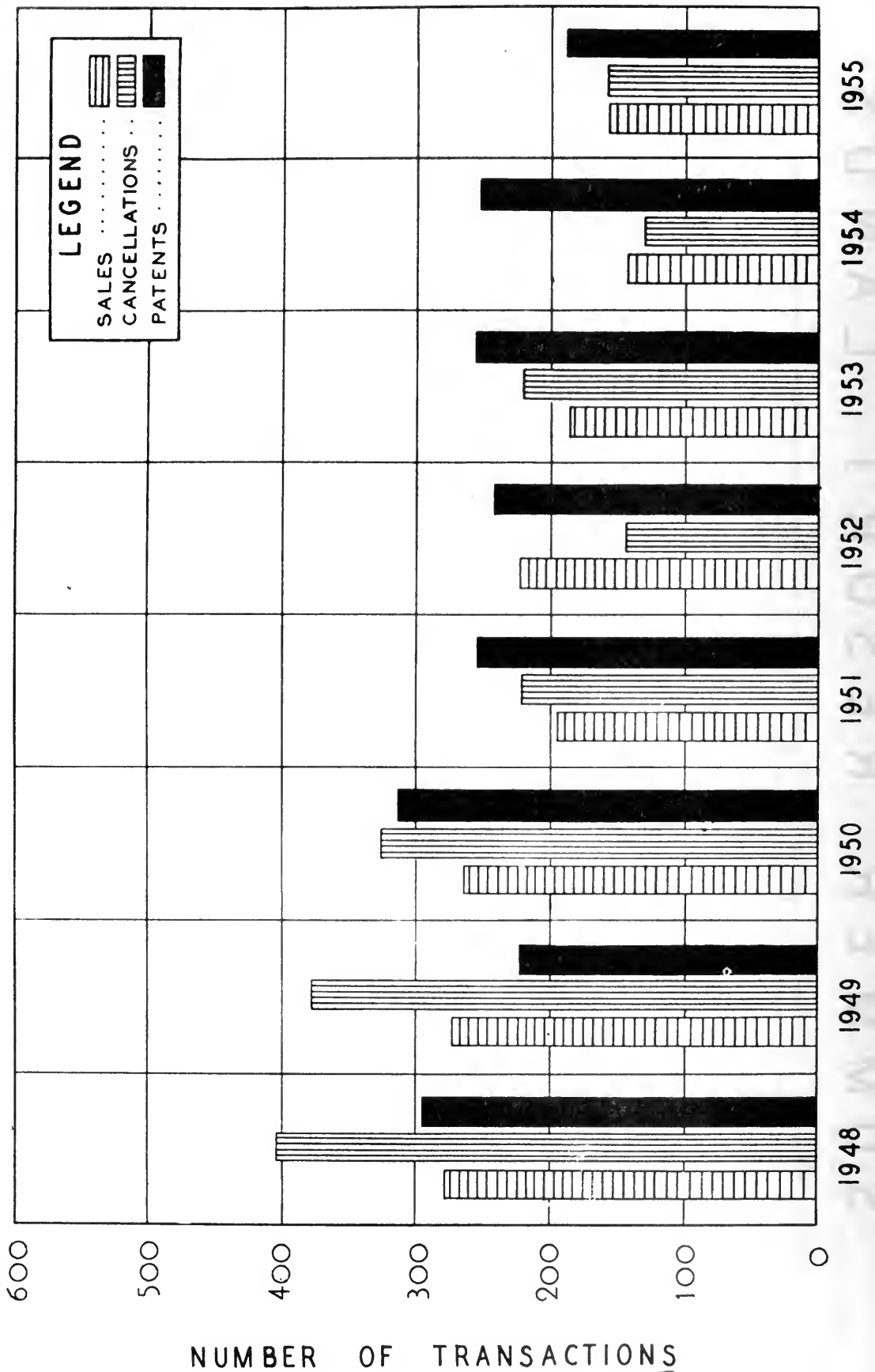
SUMMER RESORT LANDS



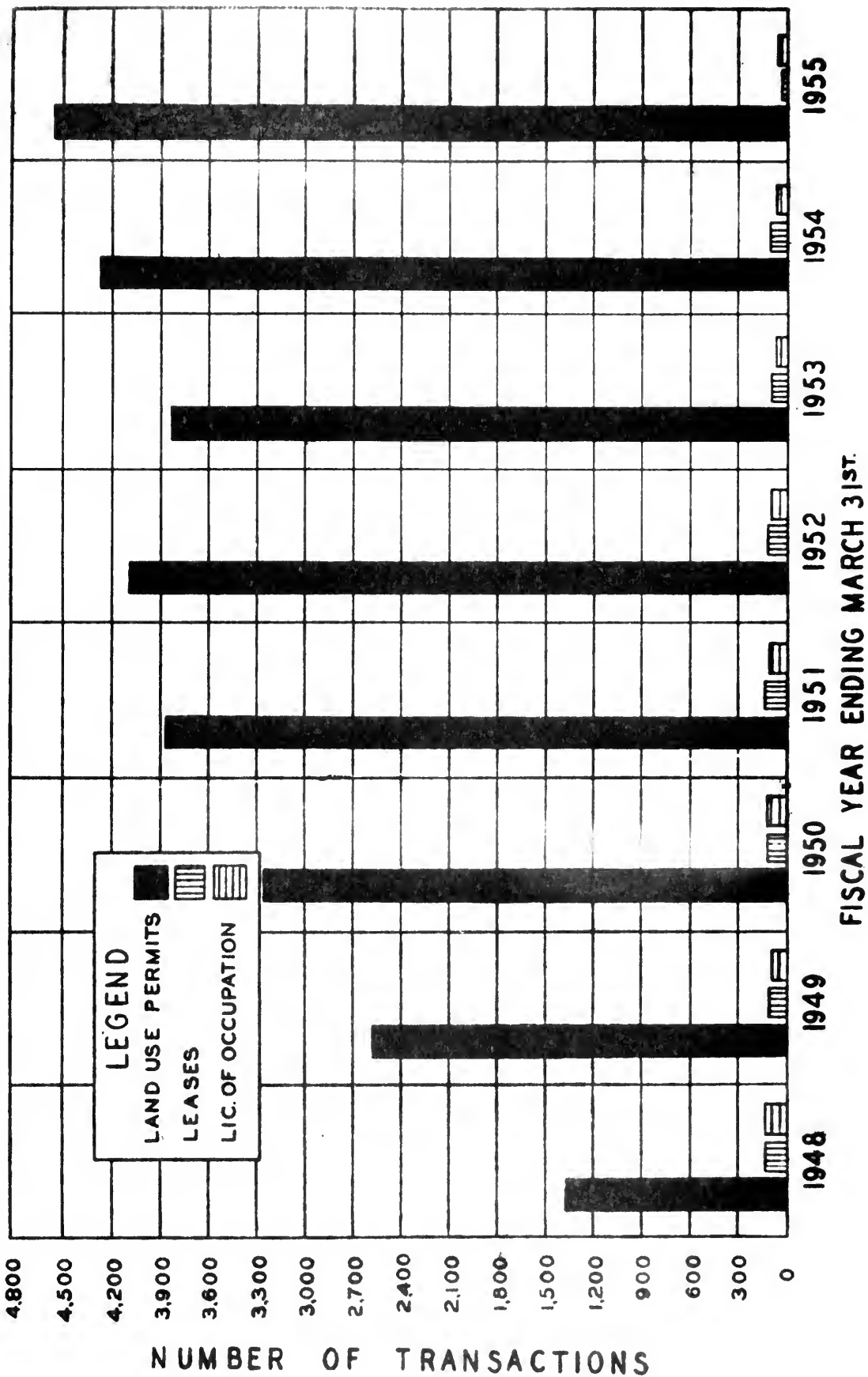
NUMBER OF TRANSACTIONS

FISCAL YEAR ENDING MARCH 31ST.

AGRICULTURAL LANDS IN SALE TOWNSHIPS

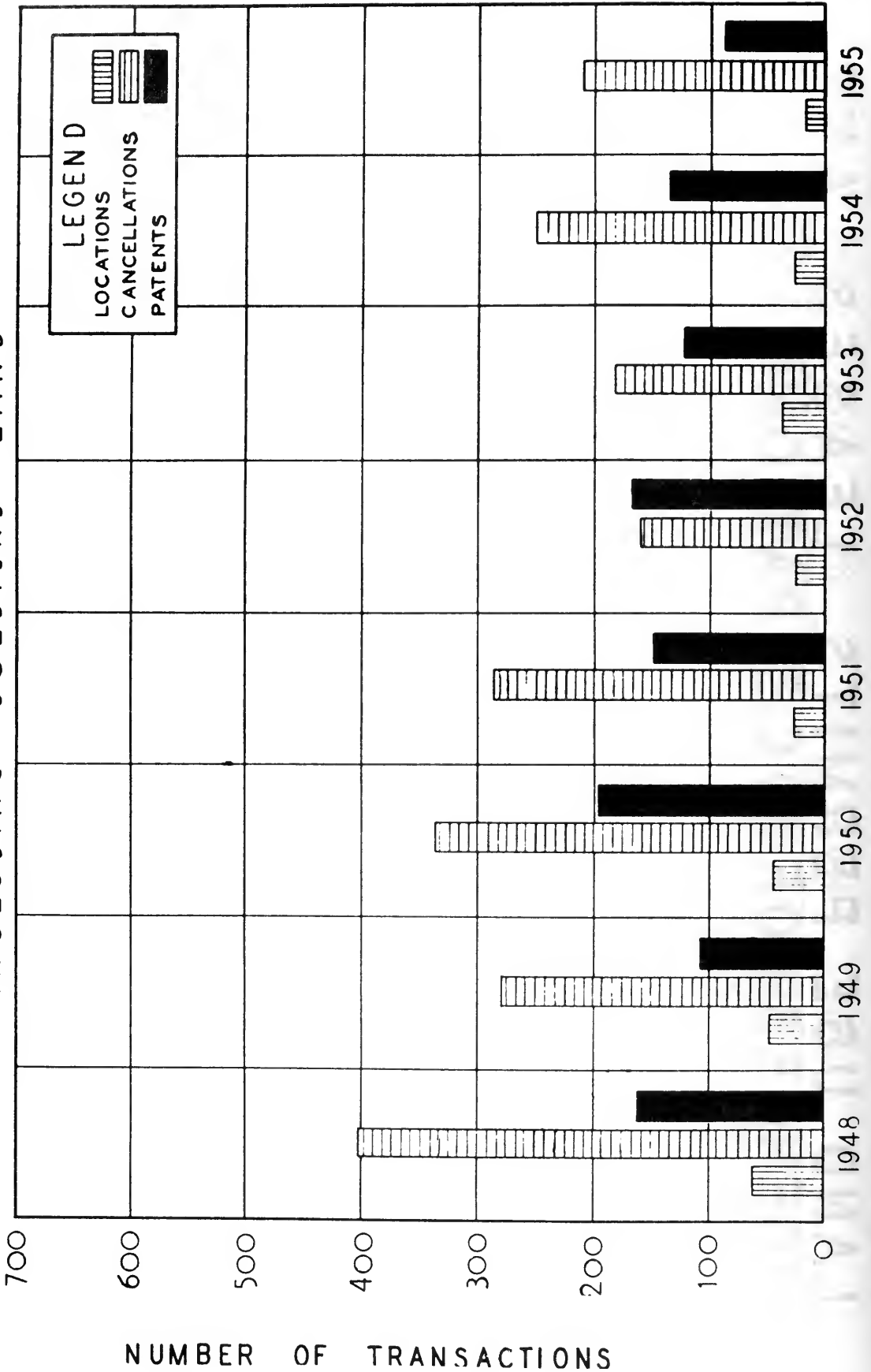


LAND USE PERMITS, LEASES AND LICENCES OF OCCUPATION ISSUED



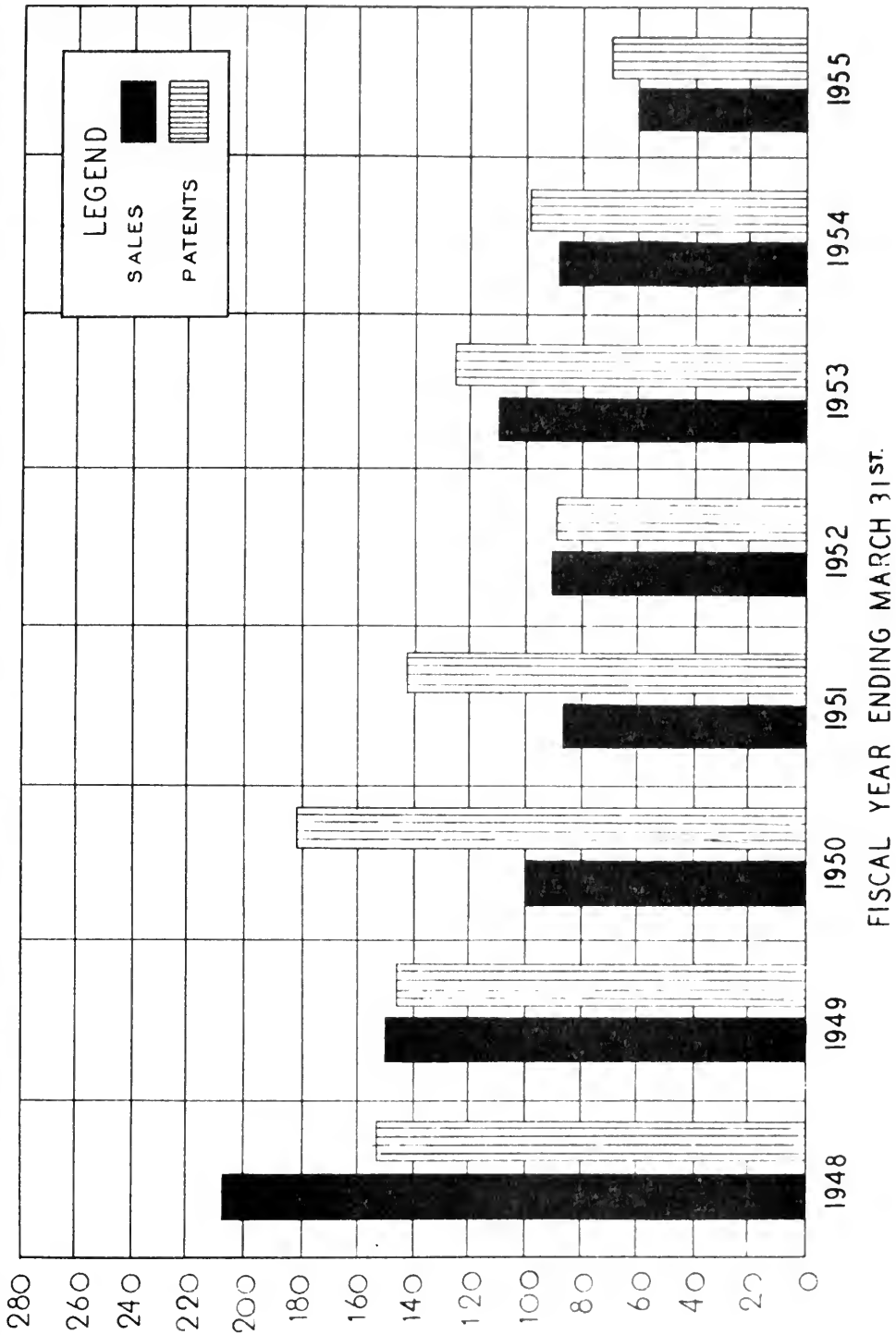
AGRICULTURAL LANDS IN FREE GRANT TOWNSHIPS

INCLUDING SOLDIERS' LAND



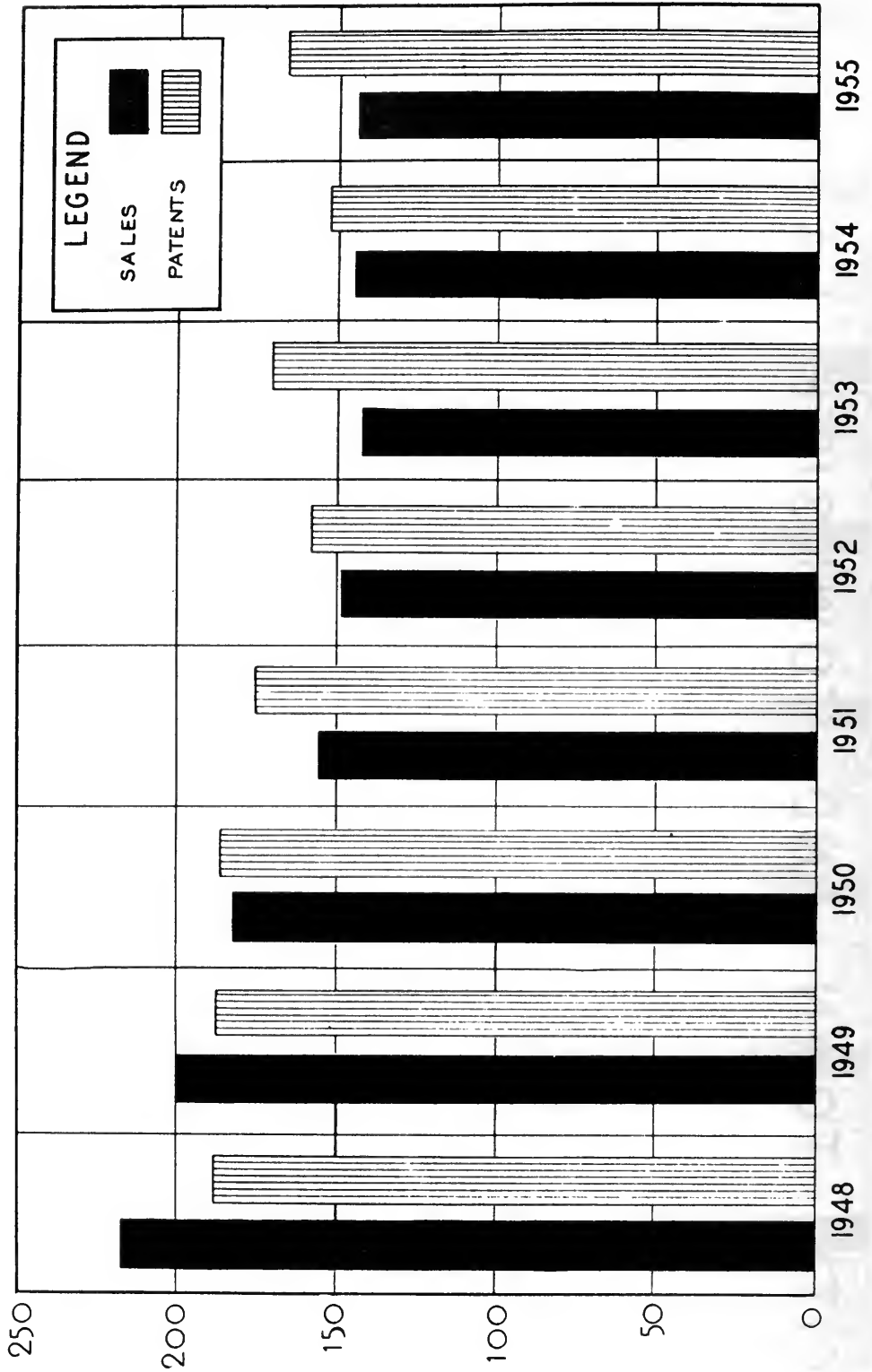
FISCAL YEAR ENDING MARCH 31ST.

CITY TOWN AND TOWNSITE LANDS



NUMBER OF TRANSACTIONS

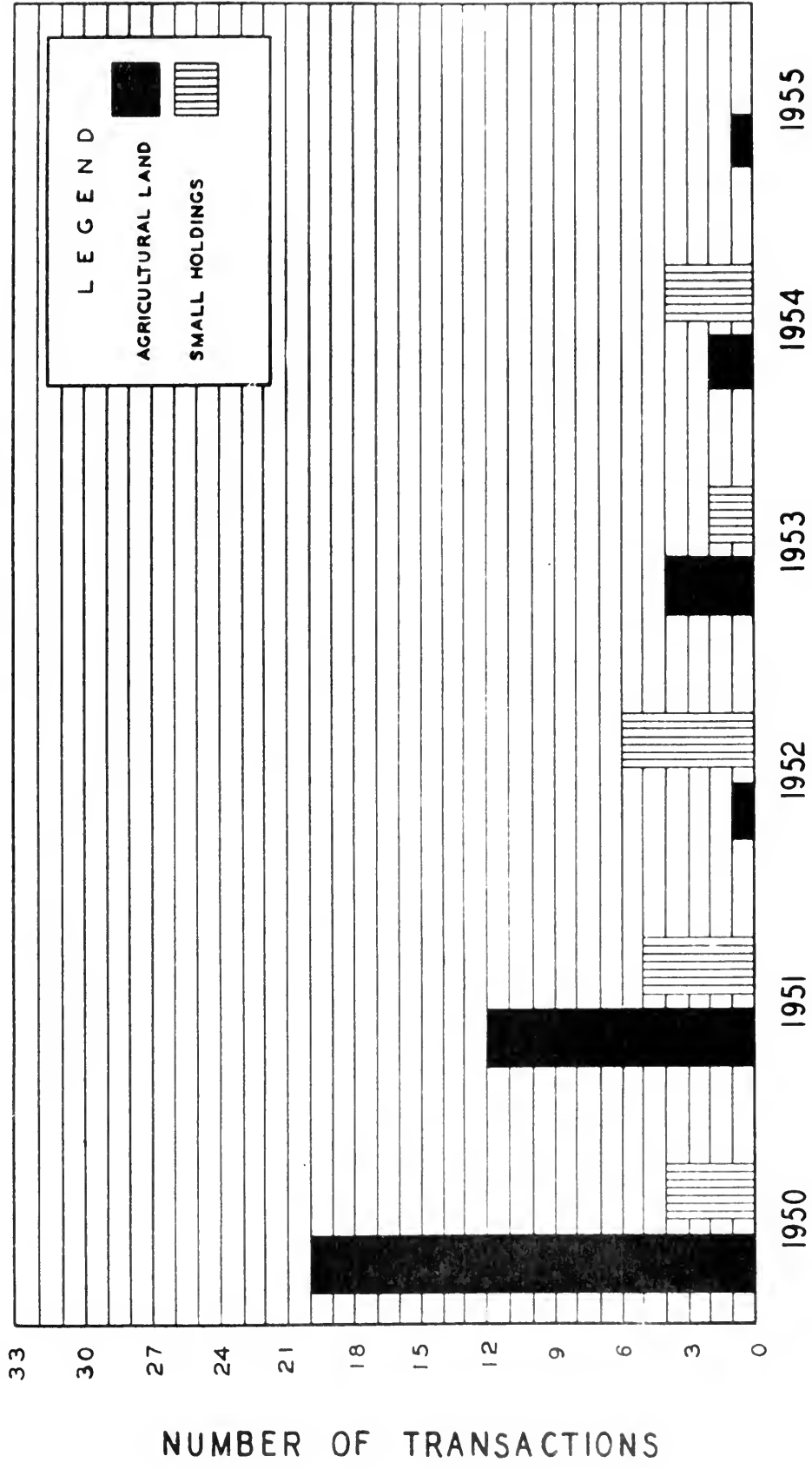
LANDS FOR SPECIAL USE



FISCAL YEAR ENDING MARCH 31ST.

NUMBER OF TRANSACTIONS

T R A N S A C T I O N S U N D E R
THE ONTARIO DOMINION - PROVINCIAL AGREEMENT
 SECTION 35 OF THE VETERANS LAND ACT



FISCAL YEAR ENDING MARCH 31ST.

ВЕРИТЕЛИ И ПРАВИТЕЛИ
ВЕРИТЕЛИ И ПРАВИТЕЛИ

DIVISION of LAW

DIVISION OF LAW

GENERAL

The office of the Departmental Solicitor was re-established as the Division of Law on March 1, 1955. There is no consequent change in function, which is basically that of rendering legal service to the other Head Office Divisions and the field organization in connection with the administration of the affairs of the Department.

LEGISLATION

At the Session of the Legislature which opened on February 8, 1955, The Fish Inspection Act, 1955 was enacted. Amendments to several of the Statutes administered by the Department of Lands and Forests, and amendments to The Mining Act and The Highway Traffic Act of direct concern to the Department, were passed. The Provincial Parks Act, 1954 came into force by proclamation on December 1, 1954, and the drafting of regulations under that Act was commenced. The Ontario-Manitoba Boundary Line Act, 1953 came into force by Proclamation on June 1, 1954.

Notes on Legislation

The Fish Inspection Act, 1955 - In 1949 the Parliament of Canada passed an Act regulating the storing, processing, and marketing, of fish intended for interprovincial and foreign trade. The Ontario Act provides the same type of control over the storing, processing, and marketing, of fish within the Province. Because of constitutional limitations, both Acts are required to cover all aspects of the subject, and for this reason other provinces have also passed similar legislation.

The Forest Fires Prevention Act - The name "travel permit area" was changed to "forest travel permit area", and the name of the permit was changed from "travel permit" to "forest travel permit" as being more truly descriptive and to make it clear that these permits do not affect highway travel in any way.

The Game and Fisheries Act - Legislation was enacted enabling regulations to be made designed to promote good game management on Crown lands designated for the purpose by limiting and regulating the number of hunters that may hunt at any time and the hours during which hunting may be carried on. Regulations may also be made designed to control the propagation and sale of pheasants and other named game birds by a system of licensing and the use of seals or other means of identification. Other minor amendments were effected to bring the legislation into line with administrative practices.

The Highway Traffic Act - A lower rate of speed for motor vehicles driven in any provincial park may be prescribed by regulation.

The Lakes and Rivers Improvement Act - Permissive legislation was enacted providing for remedial measures to be taken in connection with trees and other matter deposited in a lake or river or on the shore or bank thereof, having regard to the natural beauty of the lake or river.

The Mining Act - Section 103 was re-enacted, and in addition to the reservation to the Crown of all timber and trees in every patent or lease of Crown lands issued under the Act, and the right to cut and remove any timber or trees thereon, there is the further reservation of the right to enter upon such lands to carry on forestry.

The Provincial Land Tax Act - There were minor amendments by which the last day for sending out tax bills is extended from December 1st to January 15th, and more time is given to publish in the Ontario Gazette the list of persons to whom notice of forfeiture has been sent. Relief is also provided in cases where land that is under the Act becomes part of an organized municipality.

The Public Lands Act - A procedural action was enacted whereby letters patent may be issued in the name of a person who is dead. This section is designed to clarify the intent of section 22 of The Public Lands Act that where letters patent for land is issued in lieu of a patent containing an error it is issued in the name of the original patentee, whether living or dead. It is designed also to expedite the issue of letters patent which would otherwise be delayed pending the appointment of an administrator or executor for the estate of a deceased person.

REGULATIONS

The following regulations were approved and filed during the fiscal year April 1, 1954, to March 31, 1955:

The Forest Fires Prevention Act	Subject-matter
O.Reg. 168/54 - amending O.Reg. 96/53.	General regulations.
 The Game and Fisheries Act	
Permanent Regulations	
O.Reg. 62/54 - amending C.R.O. 404	Waters set apart.
O.Reg. 127/54 - amending C.R.O. 123	Crown Game Preserves.
O.Reg. 161/54 - amending C.R.O. 123	Crown Game Preserves.
O.Reg. 165/54 - amending C.R.O. 129	Royalties.
O.Reg. 169/54 - amending C.R.O. 123	Crown Game Preserves.
O.Reg. 221/54 - amending C.R.O. 123	Crown Game Preserves.
O.Reg. 222/54 - amending C.R.O. 404	Waters set apart.
O.Reg. 223/54 - amending O.Reg. 80/51	Waters set apart.
O.Reg. 1/55 - amending C.R.O. 127	Township licences.

Temporary Regulations

O.Reg. 94/54 - Open season for Deer, 1954.

O.Reg. 125/54 - Open season for Moose, 1954.

O.Reg. 140/54 - Open season for Fur-bearing Animals.

O.Reg. 143/54 - Open season for Game Birds.

O.Reg. 213/54 - amending O.Reg. 140/54.

The Lakes and Rivers Improvement Act

O.Reg. 192/54 - "Chenau Development" and "Cave and Fourneau Development."

The Provincial Land Tax Act

O.Reg. 126/54 - Exemption from taxes.

The numerous regulations made under The Game and Fisheries Act, and amendments to these regulations, during the course of a year indicate the need for a consolidation of the permanent regulations annually and the publication annually of an office consolidation of the regulations which can be made available for public distribution.

SECTION NO. 7

DIVISION of OPERATION and PERSONNEL

DIVISION OF OPERATION AND PERSONNEL

PERSONNEL MANAGEMENT SECTION

The following table indicates the total number of employees on the staff for each month of the fiscal year.

1954	<u>Head Office</u>				<u>Field</u>				<u>Grand Total</u>	<u>Extra Fire Fighters</u>
	<u>Perm.</u>	<u>Temp.</u>	<u>Cas.</u>	<u>Total</u>	<u>Perm.</u>	<u>Temp.</u>	<u>Cas.</u>	<u>Total</u>		
Apr.	323	125	9	457	1208	67	1498	2773	3230	2819
May	334	119	62	515	1213	73	2039	3325	3840	1459
June	337	121	87	545	1226	66	1919	3211	3756	2521
July	329	109	92	530	1234	72	1835	3141	3671	984
Aug.	358	94	82	534	1235	73	1728	3036	2570	773
Sep.	371	82	58	511	1239	137	1637	3013	3524	126
Oct.	378	79	11	468	1234	72	1500	2806	3274	78
Nov.	377	76	16	469	1239	96	949	2284	2753	9
Dec.	374	78	13	465	1245	58	842	2145	2610	--
<u>1955</u>										
Jan.	369	79	10	458	1248	58	847	2153	2611	8
Feb.	374	86	13	473	1251	63	743	2057	2530	8
Mar.	369	81	12	462	1249	61	715	2025	2487	6

The following tables show the numerical strength of the various Administrative Districts, Head Office Divisions, the nurseries and the Ontario Forest Ranger School as of March, 1955.

HEAD OFFICE STAFF

	<u>Perm.</u>	<u>Temp.</u>	<u>Cas.</u>	<u>Total</u>
Minister's Office	5			5
Deputy's Office	3			3
Accounts	57	20	1	78
Fish and Wildlife	49	8		57
Forest Protection	17			17
Lands	20	3	1	24
Parks	3			3
Law	3	1		4
Operation and Personnel	58	15	3	76
Reforestation	15	6	1	22
Research	41	9		50
Surveys and Engineering	61	7	1	69
Timber Management	37	12	5	54
	<u>369</u>	<u>81</u>	<u>12</u>	<u>462</u>

FIELD STAFF

	<u>Perm.</u>	<u>Temp.</u>	<u>Cas.</u>	<u>Total</u>
Air Service	98	3		101
Chapleau	30	1	13	44
Cochrane	51	2	32	85
Fort Francis	40		9	49
Geraldton	23	10	23	56
Gogama	27	1	11	39
Kapuskasing	42		34	76
Kenora	50	2	17	69
Lake Erie	39	3	12	54
St. Williams Nursery	20	1	46	67
Lake Huron	46	2	16	64
Lake Simcoe	41		76	117
Midhurst	29		25	54
Angus	19		2	21
Lindsay	58	3	11	72
South Eastern Region	1		1	2
Orono	14		20	34
North Bay	70	3	33	106
South Central Region	4			4
Parry Sound	52	4	23	79
Pembroke	74	2	51	127
Port Arthur	52	8	59	119
Thunder Bay Nursery	7		4	11
Forest Ranger School	15	1	15	31
Rideau	25	3		28
Rideau Nursery	11	1	4	16
Sault Ste. Marie	68	3	23	94
Sioux Lookout	44		31	75
Sudbury	59	2	23	84
Central Region	3			3
Swastika	46	1	26	73
Tweed	67	4	26	97
White River	<u>24</u>	<u>1</u>	<u>49</u>	<u>74</u>
TOTALS	<u>1249</u>	<u>61</u>	<u>715</u>	<u>2025</u>

Total Staff as of March, 1955

Head Office	369	81	12	462
Field	<u>1249</u>	<u>61</u>	<u>715</u>	<u>2025</u>
	<u>1618</u>	<u>142</u>	<u>727</u>	<u>2487</u>

Number of Licensed Scalers on Staff 392

Number of Ranger School Graduates on Staff 379

Number of employees holding University degrees or titles:

<u>Foresters</u>	<u>Biologists</u>	<u>Civil Engineers</u>	<u>Miscellaneous</u>	<u>Total</u>
174	39	5	26	244

PERMANENT EMPLOYEES AS OF MARCH 31ST EACH YEAR

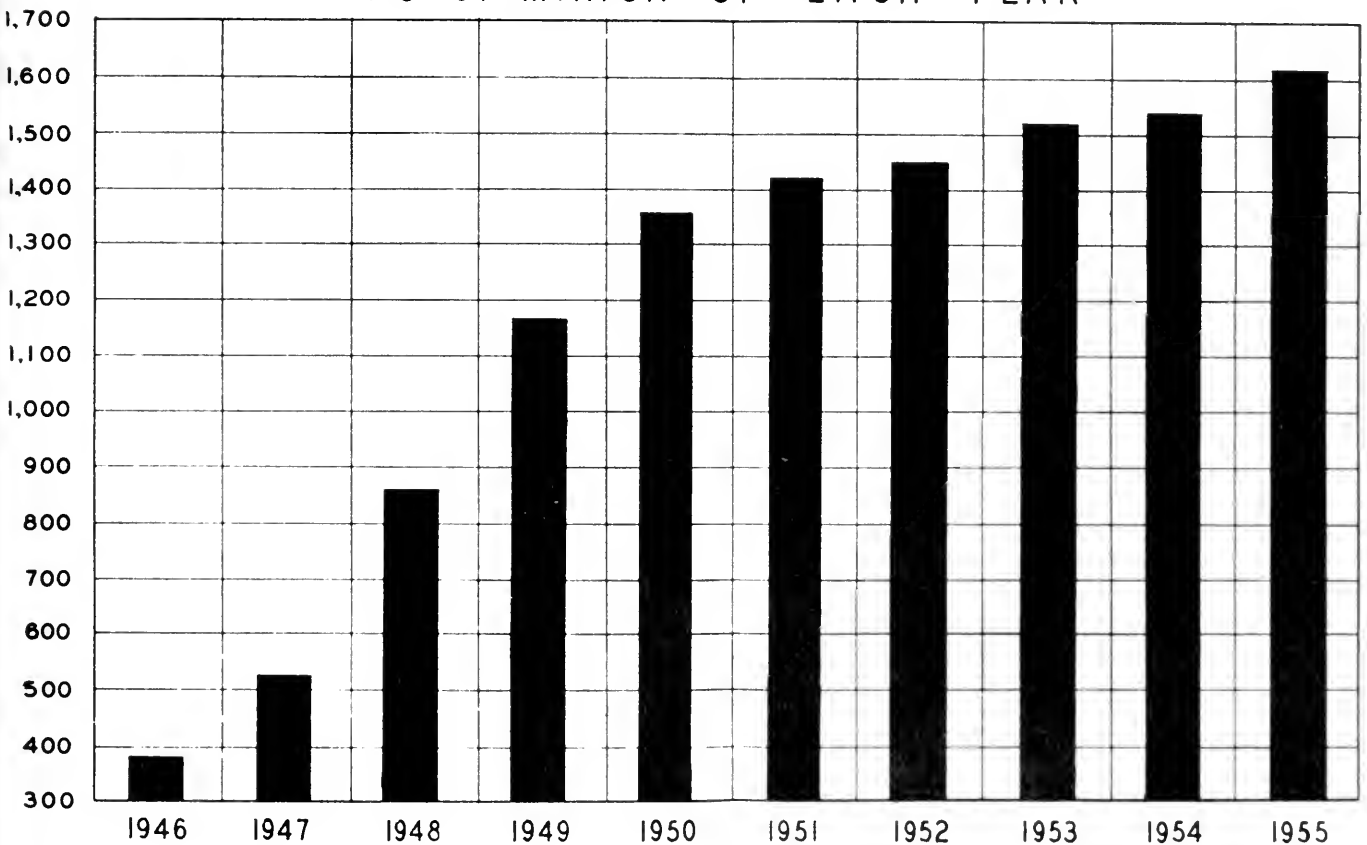
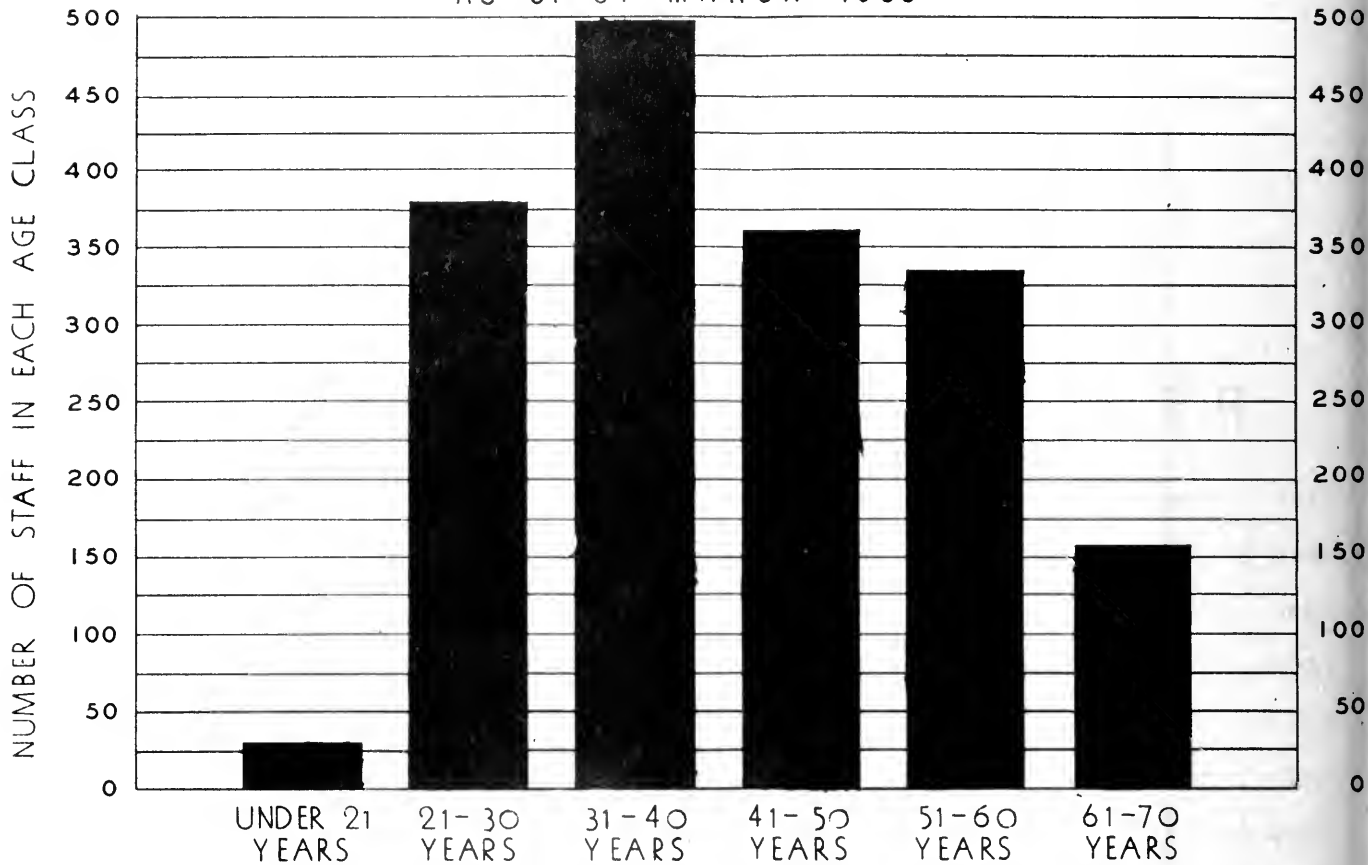


CHART OF AGE CLASSES

AS OF 31ST MARCH 1955



The above is broken down as follows:

	<u>Under 21</u>	<u>21-30</u>	<u>31-40</u>	<u>41-50</u>	<u>51-60</u>	<u>61-70</u>	<u>Total</u>
Head Office	23	108	133	83	74	29	450
Field	<u>8</u>	<u>271</u>	<u>365</u>	<u>277</u>	<u>260</u>	<u>129</u>	<u>1310</u>
Totals	31	379	498	360	334	158	1760

Distribution of Male and Female Employees at Head Office:

<u>Division</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Accounts	50	27	77
Deputy Minister's Office	1	2	3
Fish and Wildlife	37	20	57
Forest Protection	15	2	17
Lands	10	13	23
Law	2	2	4
Minister's Office	1	4	5
Operation and Personnel	51	22	73
Parks	2	1	3
Reforestation	18	3	21
Research	42	8	50
Surveys and Engineering	57	11	68
Timber Management	49	—	49
	<u>334</u>	<u>115</u>	<u>450</u>

Male and Female Employees in the Field:

Male 1243 Female 67

War Veterans in the Department

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Head Office	172	4	176
Field	<u>632</u>	<u>2</u>	<u>634</u>
Totals	<u>804</u>	<u>6</u>	<u>810</u>

Percentage of Veterans as of Male Staff - 51%

The following table indicates the number of employees who terminated their services for various reasons during the fiscal year:

	<u>Resigned</u>	<u>Dismissed</u>	<u>Died</u>	<u>Super-annuated</u>	<u>Retired</u>	<u>Transferred from Dept.</u>	<u>Total</u>
Head Office	55		2		1	1	59
Field	<u>37</u>	<u>1</u>	<u>6</u>	<u>12</u>	<u>2</u>	<u>-</u>	<u>58</u>
Totals	<u>92</u>	<u>1</u>	<u>8</u>	<u>12</u>	<u>3</u>	<u>1</u>	<u>117</u>

<u>New Employees:</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Head Office	44	21	65
Field	<u>88</u>	<u>17</u>	<u>105</u>
Totals	<u>132</u>	<u>38</u>	<u>170</u>

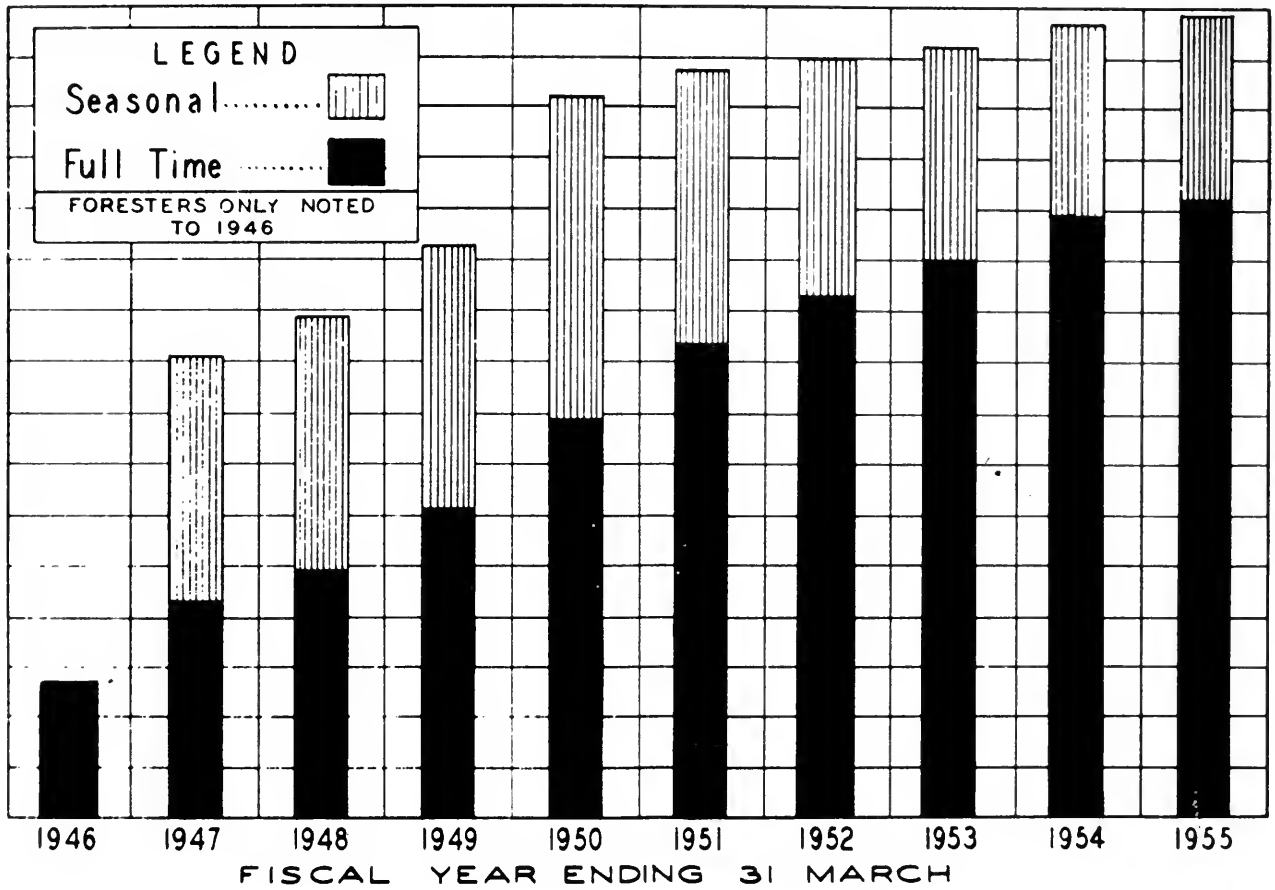
Staff Turnover for Fiscal Year is: 6.8%

Chart showing number of Applications, Interviews, and Appointments:

	<u>Applications</u>	<u>Interviews</u>	<u>Appointments</u>
Full time	674	246	132
University Students	145		75
Junior Rangers	<u>925</u>	—	<u>523</u>
	<u>1744</u>	<u>246</u>	<u>730</u>

The following chart shows the technical personnel for the past 10 years.

TECHNICAL PERSONNEL EMPLOYED



Staff Transfers and Promotion during the Fiscale Year

Cressman, E.M. Forester Port Arthur to Superintendent of Thunder Bay Nursery, Port Arthur, Feb. 1/54.

Kirk, M.D. Zone Forester Lindsay District to Reforestation Supervisor of Lindsay District, April 1/54.

Delahey, G. District Forester at Fort Francis to Rideau as District Forester, May 1/54.

Addison P. Regional Forester, Port Arthur to South Western Region as Regional Forester, May 1/54.

Hyslop, R. Forester at Sault Ste. Marie to Port Arthur as District Forester, May 1/54.

Herridge, A.J. District Forester, Kapuskasing, to Sault Ste. Marie as District Forester, May 1/54.

Crealock, A. District Forester, Cochrane, to Division of Reforestation, May 1/54.

Hess, Q. District Forester, Sault Ste. Marie to Cochrane as Regional Forester, May 1/54.

Whalen, J.M. District Forester at Chapleau, to Sudbury as District Forester, May 1/54.

Hall, F.L. District Forester at Sudbury to Cochrane as District Forester, May 1/54.

Dickson, R.B. Forester, Port Arthur to Gogama as District Forester, May 1/54.

Wilson, D. Forester, Parry Sound to Chapleau as District Forester, May 1/54.

Sider, F.E. District Forester, North Bay to Kapuskasing as District Forester, May 1/54.

Gimby, W.E. District Forester, Pembroke, to Parry Sound as District Forester, May 1/54.

Snow, R. District Forester, Parry Sound to North Bay as District Forester, May 1/54.

Steele, W.E. District Forester, Rideau to Division of Reforestation, May 1/54.

Leman, A. District Forester, Tweed, to Lake Simcoe as District Forester, May 1/54.

Ruxton, J. Ontario Forest Ranger School, Pine Springs to Tweed as District Forester, May 1/54.

Wheatley, A.B. District Forester, Lindsay, to Lake Erie as District Forester, May 1/54.

Thurston, W.A.G. Forester, Lake Huron, to Lindsay, as District Forester, May 1/54.

Omand, D.N. District Forester, Lake Erie, to Pembroke as District Forester, May 1/54.

Simmons, J.F.L. District Forester, Lake Simcoe, to Division of Reforestation, May 1/54.

Newman, F.S. Regional Forester, St. Williams to Division of Reforestation, May 1/54.

Mennill, J.L. Superintendent of Kemptville Nursery to Director of the Ontario Forest Ranger School Pine Springs, May 1/54.

Lane, C.H. Forester Rideau to Superintendent of the Kemptville Nursery, Rideau, May 1/54.

Barron, J. Regional Forester Kenora transferred to Port Arthur as Regional Forester, Sept. 1/54.

Foster, W.T. Assistant District Forester, White River to Fort Francis as District Forester, Sept. 1/54.

Hamilton, G.A. Forester Gogama to Port Arthur as Assistant District Forester, Sept. 1/54.

Lockwood, J.W. Forester Pembroke to White River as Assistant District Forester, Sept. 1/54.

MacKinnon, G.E. Forester, Sudbury to Kapuskasing as Assistant District Forester, Sept. 1/54.

Passmore, R.C. Biologist, Division of Research to Cochrane as Assistant District Forester, Sept. 1/54.

Reynolds, J.K. Biologist, Division of Fish and Wildlife to Sault Ste. Marie as Assistant District Forester, Sept. 1/54.

Goyne, G.F. Forester, Gogama to Assistant District Forester Gogama, Sept. 1/54.

Cleaveley, W.G. Forester, Fort Francis to Sudbury as Assistant District Forester, Sept. 1/54.

Boulton, R. District Forester Fort Francis to Regional Forester of the Western Region, Sept. 1/54.

Bray, A.S. Regional Forester, Port Arthur to Head Office as Chief Division of Lands, Sept. 1/54.

Rich, C.V. Assistant to Purchasing Officer, Office Management Section, Division of Operation and Personnel; to officer in charge of Office Management Section, Division of Operation and Personnel, Oct. 1/54.

Clucas, C.M. Office Management Section, Division of Operation and Personnel to Division of Forest Protection, Oct.1/54.

Stinson, W.J. From Safety Training Officer to Supervisor of Safety and First Aid, Feb.16/55.

Junior Forest Rangers

<u>District</u>	<u>Number of Junior Rangers</u>
Chapleau	40
Cochrane	39
Geraldton	35
Gogama	34
Kapuskasing	32
Kenora	10
Lindsay	29
North Bay	38
Parry Sound	20
Pembroke	42
Port Arthur	11
Sault Ste. Marie	60
Sioux Lookout	19
Sudbury	24
Swastika	31
Tweed	32
White River	28
	<u>524</u>

The Junior Rangers as shown in the above distribution, were employed during the months of July and August.

ONTARIO FOREST RANGER SCHOOL

1954 Course

1st. Term - January 4th. - March 20th. 1954

	<u>Attended</u>	<u>Passed</u>
Forest Rangers	41	40
Conservation Officers	19	19
Miscellaneous	--	--
Industry	<u>2</u>	<u>2</u>
	62	61

2nd. Term - May 17th. - July 31st. 1954

Forest Rangers	40	40
Conservation Officers	19	19
Miscellaneous	--	--
Industry	<u>1</u>	<u>1</u>
	60	60

3rd. Term - October 4 - December 18th. 1954

Forest Rangers	40	40
Conservation Officers	19	19
Miscellaneous	--	--
Industry	<u>1</u>	<u>1</u>
	60	60

TRAINING

1. Fleet Supervisors Training Course:

4 employees took this course.

2. Scaling Supervisors Refresher Course:

44 attended this course which was held on April 6 - 8, 1954 at Sault Ste. Marie.

3. St. John Ambulance Course:

During the year 301 members attended this course.

4. Guide Training Course:

April 5 - 10, 1954. Twenty-eight (28) Guides and six (6) Conservation Officers from Parry Sound, Maple, Hespeler, Lindsay and Tweed Districts attended this course held at the Ontario Forest Ranger School.

5. Automotive Maintenance Course;

4 employees attended this course.

6. Outboard Motor and Marine Course (Peterborough)

4 employees attended this course.

7. Drivers tested by Porto Clinic:

908 Department motor vehicle operators tested.

8. Executive Development Course:

Twenty-one senior personnel including District Foresters, Assistant District Foresters, and Head Office personnel attended an Executive Development Course held in the period of Jan. 17th. to January 28th. 1955.

Other members of the staff, whose duties would not permit full time attendance, were present as observers as time permitted.

A new feature of this course was that, for the first time Division Chiefs and other department personnel participated in the instructing. Formerly members of various faculties of the University of Toronto gave all the instruction. This year the division of the time table provided for one-third of the instruction by departmental personnel and the balance by members of the university.

The course ended with a half day being devoted to a panel discussion on the organization of the Department followed by a plenary session in which all who participated in the course joined in a critical examination of our organization and related matters.

SAFETY CORNER

Safety Council:

25 active Safety Councils in the Province.
108 Safety Council meetings held in 1954 - 1955

Hunting Accidents:

Accidents reported through our department.

15 Fatal Accidents
60 Non Fatal
75 Accidents

13 unsafe firearms were destroyed.

Resuscitators:

There are 22 Resuscitators distributed for use in the District. Resuscitators have been used on accident victims on nineteen occasions resulting in sixteen potential victims being revived.

237 persons received resuscitator training.

WORKMEN'S COMPENSATION

FISCAL YEAR 1954 - 1955

There have been 39 fewer accidents during this fiscal year, than in the last previous year, and the average cost per claim has been decreased by \$9.45. Accident costs and number of accidents, although lower for this fiscal year, are still high. Recurring disabilities received from previous injuries have been one of the reasons why total costs have not been lower.

Axes and falls are still the two major causes of accidents as well as being the most costly. The total number of falls exceed axe accidents only by two, but their cost is double the cost of the latter.

Allergies, from evergreen trees, but more especially from poison ivy, have been steadily increasing.

The fire season was much lighter than in the preceding year, resulting in fewer accidents sustained on fire fighting duty.

There were no deaths during the fiscal year 1954 - 55.

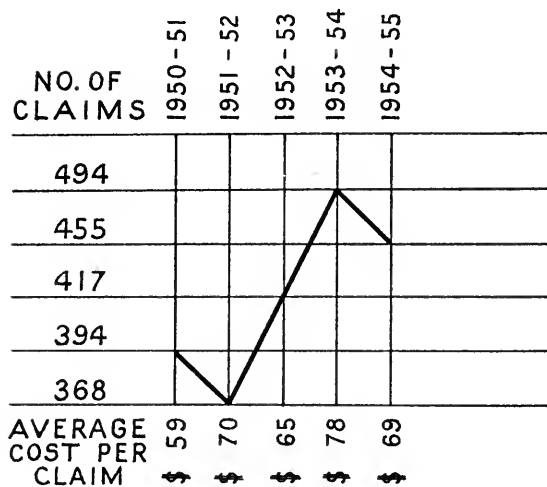
Workmen's Compensation Board Costs for the fiscal year were \$63,356.59 and there were 455 compensable claims for the fiscal year.

Average cost of claims was \$69.25.

Employee Categories Involved In 455 Accidents

<u>Category</u>	<u>Percentage</u>
Extra Fire Fighters	9.8%
Junior Rangers	20.0%
Rangers and Towerman	24.2%
Others	46.0%

AVERAGE COST OF CLAIMS



As compared with the previous fiscal year:
 39 less accidents for the past fiscal year 1954-55
 Average cost per claim decreased by \$9.45.

WORKMENS' COMPENSATION

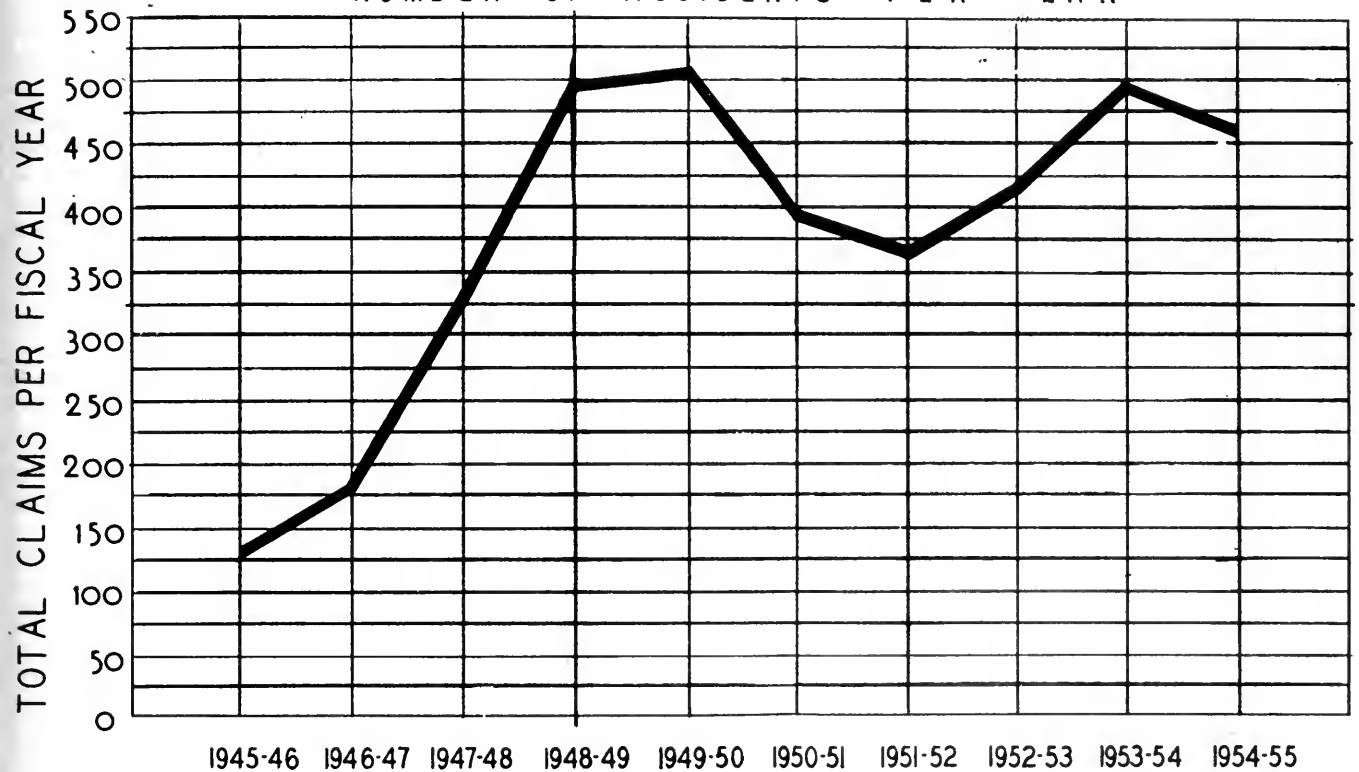
Table 1

TREND IN WORKMEN'S COMPENSATION CLAIMS

PREPARED FROM TOTAL CLAIMS FOR THE PAST TEN YEARS

1945-46 TO 1954-55

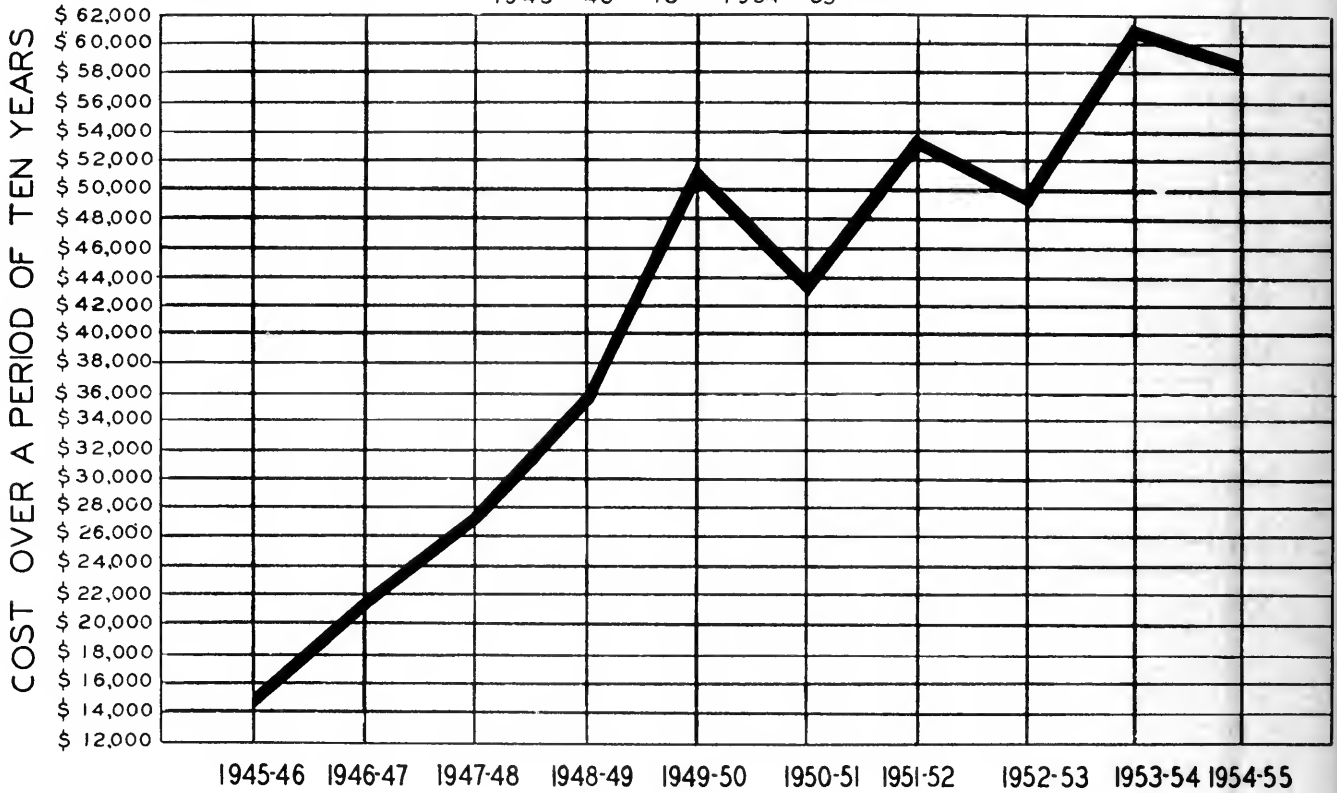
NUMBER OF ACCIDENTS PER YEAR



WORKMENS' COMPENSATION

Table II

TREND IN WORKMEN'S COMPENSATION COSTS
PREPARED FROM TOTALS FOR THE PAST TEN YEARS
1945 - 46 TO 1954 - 55



WORKMENS' COMPENSATION

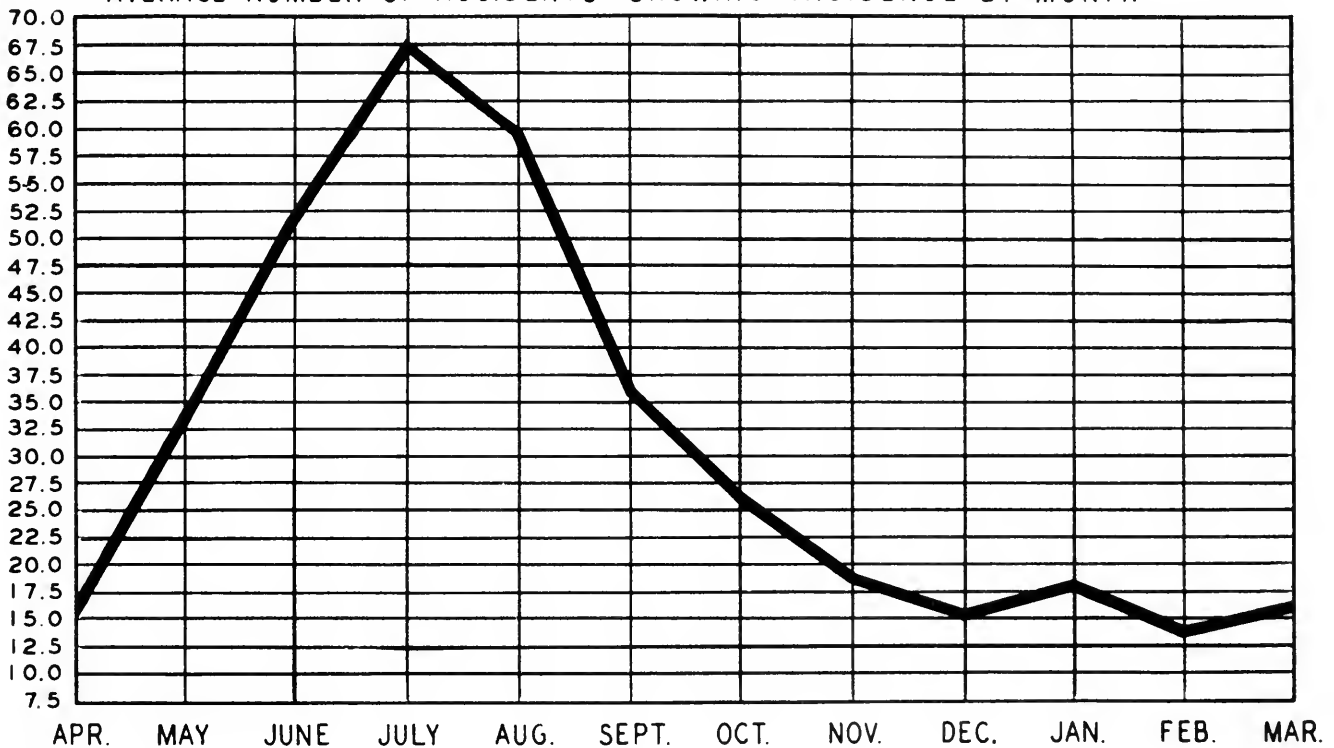
Table III

TREND IN WORKMEN'S COMPENSATION CLAIMS

PREPARED FROM AVERAGE FIGURES FOR THE PAST TEN YEARS

1945-46 TO 1954-55

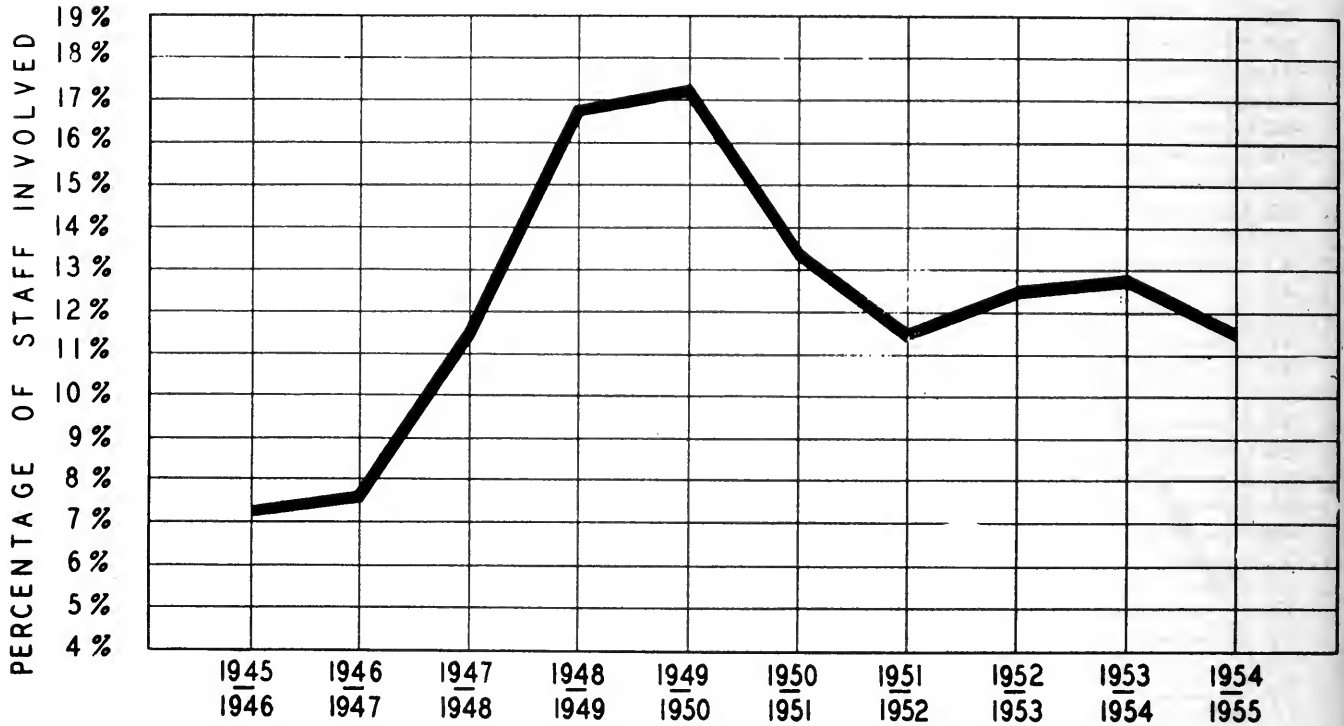
AVERAGE NUMBER OF ACCIDENTS SHOWING INCIDENCE BY MONTH



WORKMENS' COMPENSATION

Table IV

PERCENTAGE OF STAFF INVOLVED
IN COMPENSABLE ACCIDENTS ANNUALLY
OVER A PERIOD OF THE PAST TEN YEARS
1945-46 to 1954-55



HIGHLIGHTS
DIVISION OF OPERATION AND PERSONNEL

1954 - 1955

The Department showed only a slight increase during the fiscal year as in comparison to former years.

There was an increase of 39 permanent and temporary employees as compared to an increase of 45 for the last fiscal year. A total of 117 permanent and temporary employees left the service, and 170 new permanent and temporary employees were appointed during the year.

There was a turnover of 6.8% of staff for the fiscal year 54 - 55 as compared to 7.5% turnover for 53 - 54.

The total number of employees on staff as of March 31, 1955 was 1,760.

Charts:

1) The comparison of number of personnel on staff on March 31, 1954 as to March 31, 1955.

	<u>Permanent</u>	<u>Temporary</u>	<u>Casual</u>
March 31, 1955	1618	142	727
March 31, 1954	<u>1546</u>	<u>175</u>	<u>633</u>
	72 increase	33 decrease	94 increase

2) The comparison of number of personnel with university degrees on March 31, 1954 as to March 31, 1955.

	<u>Foresters</u>	<u>Biologists</u>	<u>Civil Engineers</u>	<u>Others</u>
March 31, 1955	174	39	5	26
March 31, 1954	<u>172</u>	<u>36</u>	<u>6</u>	<u>23</u>
	2 increase	3 increase	1 decrease	3 increase

3) Comparison of number of Personnel with Scaler's Licences.

March 31, 1955	392
March 31, 1954	<u>391</u>
	1. increase

4) Comparison of number of Ranger School Graduates.

March 31, 1955	379
March 31, 1954	<u>331</u>
	48 increase

5) Comparison of Application, Interviews and Appointments for 1954 - 1955 as to 1953 - 1954.

	<u>1954 - 55</u>	<u>1953 - 54</u>
Applications	1744	1404
Interviews	246	170
Appointments	730	638

6) Comparison of number of Junior Rangers.

	<u>1953 - 54</u>	<u>1954 - 55</u>
Chapleau	26	40
Cochrane	36	39
Geraldton	15	35
Gogama	25	34
Kapuskasing	21	32
Kenora	--	10
Lindsay	25	29
North Bay	30	38
Parry Sound	15	20
Pembroke	35	42
Port Arthur	15	11
Sault Ste. Marie	37	60
Sioux Lookout	21	19
Sudbury	23	24
Swastika	27	31
Tweed	29	32
White River	<u>23</u>	<u>28</u>
TOTALS	<u>403</u>	<u>524</u>

Workmen's Compensation:

Comparison of Accidents and their costs up to March 31, 1954 as to March 31, 1955.

	<u>1953-54</u>		<u>1954-55</u>	
	<u>Accidents</u>	<u>No.</u>	<u>No.</u>	<u>Costs</u>
1. Axe Accidents		62	64	\$4,077
2. Falls		70	66	7,473
3. Eye Injuries		29	36	470
4. Allergies		15	23	556

There have been 39 fewer accidents than in the last fiscal year, and the average cost per claim has been decreased by \$9.45.

The fire season was much lighter than in the preceding year, resulting in fewer accidents attributable to fire fighting.

Average cost of claims was \$69.25.

OFFICE MANAGEMENT SECTION

PROCUREMENT AND PURCHASING

With the demand continuing for the standardized items of equipment and materials and the increase of new goods in the consumer market, purchasing has increased considerably over the preceding year. The further expansion of the Department, with its resultant needs, has brought extra procurement duties.

In the established purchase and supply procedure, the efficiency of which has been proven for many years now, all requisitions are channelled to the Purchase and Supply Section for processing, in the course of which they are examined and the equipment compared with competitive or similar brands for quality and economy. New items in office equipment and supplies are constantly being brought to this section's attention, and these, along with new supply sources, must be checked and investigated.

Divisional and district offices are kept informed of new items and their suppliers when the equipment or services warrant such action, and, wherever possible, descriptive sheets, pamphlets, folders, etc., are circulated to the aforementioned offices.

The number of incoming requisitions received in this fiscal year period was 12,500. Each of these must be examined to see what must be ordered, either by direct purchase order, by requisitions to the Queen's Printer for stationery and printing orders, by Public Works requisition, and in some instances by memoranda, and what can be supplied from stock. Involved in this lengthy procedure are innumerable telephone calls, much correspondence, and, where warranted, the calling of tenders. Most orders and requisitions can be processed within a day or two, but there are still many which, requiring investigation and source of supply, may take several days.

The number of purchase orders issued totalled 5,633, this lower figure being achieved by closer surveillance and combination of miscellaneous orders. Included in this figure were 250 items of import which necessitated customs clearance. Requisitions placed with the Queen's Printer for stationery numbered 1,615 and for printing 364. Some 500 requisitions were submitted to Public Works Department for various supplies and services.

SPACE ADJUSTMENTS

The overcrowded state of the Department continued unabated, although constant contact is maintained with the Public Works Department regarding the allotment of more office space. Internal relocations are made from time to time. Major alleviation of this pressing need for adequate office space is looked for in the near future.

SPECIAL ASSIGNMENTS

The arranging of transportation, hotel accommodations, the many details of the District Foresters' Conference, some 61 banquets and lunches, such as the mid-day meetings of the Forestry Advisory Committee and the weekly meetings of the Division Chiefs, are supervised by this section. The acquisition of several properties in Algonquin Park and other park areas continued to be made, and involved the preparation of inventory of equipment and contents which may be included in the sale.

UNIFORMS

Since the inauguration of the Uniform Project by the Department in 1947, officials in the districts are in full agreement that the wearing of the uniform by personnel in close contact with the public has been of great assistance to them in their work. The expansion of the project, which now includes more than 850 personnel, has greatly increased the necessity for rigid control of all issues. The control is maintained by use of a detailed card system, which records all initial and replacement issues for each uniformed employee. Periods of wear for the various items of clothing have been set, with due consideration for the period of time an employee wears the uniform while performing his duties. The issues

are graduated down from 100% in uniform to summer wear only, and protects the Department from unwarranted replacements. Personnel in uniform are governed in the mode of attire by means of an Information Circular, which is amended when regulations are changed, to better the appearance of the general uniform, the method of wearing it, and changes in the period of wear of the uniform clothing. The uniform regulations contained in the Information Circular are being printed in booklet form under the title of "Uniform Manual" and each employee in uniform will receive a copy for his own use.

The initial issue to personnel must be recommended by the District Forester concerned, and the employee's classification must be included in the eligible personnel listing. The District Foresters must also satisfy themselves that garments, considered by the individual to be in need of replacement, are actually past normal wearability before submitting the necessary requisition to Head Office. The requisition is checked against the individual's record card when received, to ensure the entitlement before authorization is granted.

DISTRIBUTION OF EQUIPMENT AND SUPPLIES

Shipment of equipment and supplies during the past fiscal year exceeded the previous year by a considerable margin. In addition there was the distribution of bulletins, technical books, SYLVA MAGAZINE, circular letters, the weekly News Letter, and various items of equipment for tours. There has been a noted increase in the issue of supplies. It may be stated here that, with the advent of a new division, Parks, another outlet for equipment and supplies came into being. Long-term goods, such as printed forms, maps, advertising materials, bulk stationery, office supplies and first aid supplies, have increased owing to the further expansion of the department. A small armoury of revolvers and ammunition is kept in stock for the use of officers in the field.

Eight hundred and twenty tons of various supplies and equipment were received (27,530 packages and cartons) and 470 tons were shipped out, via express, freight, transport and post (7,180 packages and cartons).

including 62,000 copies of SYLVA and 86,700 copies of circulars and weekly News Releases. It is of interest to note that the Stockroom has 5,147 items listed on its stock records and that 26 new forms were added this past fiscal year.

ISSUE OF LICENCES

In the past year there were approximately thirty various types of hunting, fishing and trapping licences distributed to licence issuers and district offices throughout the province. The incoming quantities of these licences varied from 500 to 500,000.

The number of licences prepared, checked and mailed totalled 1,055,299, an increase of about 50,300 over the previous year. They were forwarded in 11,130 parcels to the 2,400 issuers.

DUPLICATING AND PRINTING

New forms of various sizes were continually being prepared for the Department, and many of the existing ones were revised. Each new form was drawn up and checked to see if the requirements were met. Forms, produced by the Printing Section, were completely designed and composed by the staff. In addition, this section also produced circulars, bulletins, and reports, including design and composition. The amount of finished work rose sharply.

Over 15,000,000 copies of various forms, circulars, bulletins and reports were produced in 1,000 jobs. Five thousand plates were required, 900 of which were completely composed by Vari-Type operation, in addition to 700,000 copies of circulars on the duplicating machine.

BOAT LICENSING

This involved considerable correspondence and contacts with various field offices and the Federal Department of Transport, and included boats with motors inboard, motors outboard and motor canoes. The number licensed by the Federal Transport Department in this fiscal period was 86, bringing the total in use to 808.

RECORDS

Among the many duties carried out by this section, the more important was the assembly, indexing and classifying of incoming correspondence for distribution, compilation of new files and recharging files. It may be of interest to note that 496,089 letters were received for attention as noted above in this fiscal period, and 4,800 new files were created. The lack of adequate file storage continues to pose a pressing problem.

CONSERVATION EDUCATION SECTION

Visual Education

During the year the following titles were added to Head Office and Field film libraries:

Accidents Don't Happen #2 - Machine
Accidents Don't Happen #3 - Handling
Accidents Don't Happen #4 - Falls
Accidents Don't Happen #5 - Safe Clothing
Accidents Don't Happen #7 - Spinal Injuries
All Aboard
Artificial Respiration (Holger-Nielsen Method)
The Beaver
Birds of Canada #6
Bobwhite Throughout the Year
Building the Fire Line
Campaign Fire
Common Animals of the Woods
Don't Let It Happen (Then It Happened)
Easier Ways of Logging
Extra Forest Dollars
Fighting Forest Fires With Hand Tools
Fighting Forest Fires With Power Pumps
Forest Conservation
The Forest Grows
Great Lakes (How They Were Formed)
Gunning the Flyways
Holiday Island
Indian Canoeman
Leaves
The Longhouse People
The Living Forest
Lost Hunter
Mighty Muskie
Pierre & Marie

Point Pelee--Nature Sanctuary

Portage

Prairie Chicken in Missouri, The

The Sea Lamprey

There's More Than Money in Woodlots

Time and Terrain

Water on the Fire

Wildlife and the Human Touch

The World At Your Feet

Your Forest Heritage

Large turntables for 16" records to be used with 35 mm filmstrips or slides on Conservation, Care of Equipment, Safety and Mechanical Operation, were supplied to each Region.

Four 16 mm sound projectors were purchased for replacement in the Field. Each District has its own projector and has access to District, Regional and Head Office film libraries. Films and projectors are used by Department personnel for public lecturing and intra-departmental training.

Four 35 mm projectors for slides were also added to our equipment.

General

Considerable Section time was spent in the preparation of schedules and arranging details of the Tour by Members of the Legislative Assembly of North-Western Ontario.

During 1954-55 several hundred feet of motion picture film was used in depicting various phases of the Department's activities. The film was used for T.V. showings and for fillers in films being made by the Department for general distribution.

Exhibits

Conservation appeals were made to the public by means of some seventy-five exhibits and floats shown throughout the Province.

The major exhibits are as follows:

Canadian National Exhibition

Canadian National Sportsmen's Show

Central Canada Exhibition

Northern Ontario Exhibition

Lakehead Exhibition

International Plowing Match

Other exhibits include Sportsmen's Shows, Agricultural Fairs, County Fairs and Parades. Material for major exhibits are prepared and displayed by this section and then sent out for use at other exhibits from our Toronto workshop. Permanent exhibits suitable for transportation are emphasized to make an optimum appeal across the Province.

Radio Broadcasts

During the past year this section has been responsible for the writing and broadcasting of a 15-minute programme "Conservation Corner" on Saturday night, over a Toronto station which provided the time gratis. Various Division Chiefs have appeared on the programme, presenting a well-rounded picture of the Department's activities. In addition, air time has been allotted to other officers of the Department by many radio stations across the Province, a gesture which is much appreciated, particularly in periods of high fire hazard.

Lecture Tours

Officers of the Department keep in constant touch with the public through Fish and Game Associations, Schools, Church groups, Service Clubs and Youth Organizations. Illustrated lectures are given on all aspects of the Department's work, with particular emphasis on Forest Protection, Fish and Wildlife Conservation, Timber Management and Reforestation.

The following table provides a summary of the public lectures delivered by Head Office and Field Staff during the fiscal year.

N.B. - A summary of the lecture tours which were carried out by the Canadian Forestry Association of Ontario during this same period is shown below the Department figures. The conservation lecture activities of the C.F.A.O. are partially subsidized by this Department and much of their success is due to the financial assistance mentioned plus excellent co-operation from our field officers.

REGION	DISTRICT	SCHOOL MEETINGS		PUBLIC MEETINGS		TOTAL	
		NO.	ATTENDANCE	NO.	ATTENDANCE	NO.	ATTENDANCE
Western	Kenora	18	1056	40	3305	58	4361
	Fort Frances	57	4742	27	1510	84	6252
	Sioux Lookout	16	1894	28	3111	44	5005
Mid-Western	Port Arthur	71	4284	78	3805	149	8089
	Geraldton	59	4030	48	3168	107	7198
Central	S. S. Marie	26	1881	38	1737	64	3618
	Sudbury	170	17304	77	4420	247	21724
	Chapleau	21	1669	45	2686	66	4355
	Gogama	25	1273	28	930	53	2203
	White River	7	532	14	737	21	1269
Northern	Kapuskasing	23	2275	12	739	35	3014
	Cochrane	85	5504	26	1196	111	6700
	Swastika	30	2556	41	4374	71	6930
South-Central	North Bay	156	16390	75	5647	231	22037
	Pembroke	16	654	159	8943	175	9597
	Parry Sound	73	3355	76	3929	149	7284
South-Eastern	Rideau	20	2611	56	3934	76	6545
	Tweed	21	1523	54	3343	75	4866
	Lindsay	23	1376	51	3218	74	4594
South-Western	L. Simcoe	133	13190	265	23321	398	36511
	L. Huron	59	2259	141	6761	200	9020
	L. Erie	34	2023	147	25447	181	27470
TOTALS		1143	92381	1526	116,263	2669	208,642
By Canadian Forestry Association		Lectures	Children	Adults	Total		
		601	41,875	25,598	67,473		

Photography

The Department's photographic library has over 9,000 8" x 10" black and white prints and approximately 750 35 mm. colour slides, and includes a cut file section. These are used to illustrate Department and outside publications and for lecture purposes. Over 3,500 Department photographs were loaned to outside publications during the year. These sets mostly consist of from six to twelve photographs telling a story on some phase of the Department's activities. A large number of single photograph requests were also handled during the year.

Approximately 25,700 8" x 10" photographs were produced from our darkroom as well as a large number of 35 mm. slides and black and white prints.

The services of the photographic library were open to all writers, editors, and reporters, as well as to the general public.

Over 5,000 feet of 16 mm. pictures were taken covering Forest Protection, Fish and Wildlife and the M.L.A. Tour.

CONSERVATION INFORMATION

The efforts of this section were directed towards informing the general public of the work of the Department, so as to ensure the continued co-operation essential for successful operation.

Publications

The majority of our publications were prepared for the public although some publications were prepared for certain Departmental groups. The use of general publications saves considerable time in answering personal letters requesting specific information.

Over two-thirds of the original writing is done by the staff of the Department, mostly by personnel of this section. The remaining one-third is done by outside writers, either voluntarily or for a professional fee. In many cases, these outside writers received assistance from our own staff.

During the year the following publications were published:

General

Minister's Annual Report in two parts: (1) Highlights (2) Detailed.

Booklet for M.L.A. Tour

Index to SYLVA. Volume 1 - 10 inclusive.

SYLVA. Volume 10. Nos. 2 - 6. Volume 11, No. 1.

6000 copies of each issue of this magazine are now produced in order to meet increased demand. It is also interesting to note the increased use of articles and photographs from Sylva by magazines and newspapers internationally.

Fish and Wildlife

Condensed pocket size cards: (1) Open seasons: deer.
(2) Open seasons: moose.
(3) Open seasons: migratory birds.
(4) Open seasons: upland game birds.

Game and Fisheries Act

Summary of Fisheries Regulations

Summary of Hunting Regulations

Forest Protection

A City Boy in the Woods (educational comic book) (reprint)

Lands

Summer Resort Lands in Ontario (reprint)

Operation & Personnel

List of Publications

Organizational Chart

Ranger School Prospectus

Reforestation

A Second Look at Reforestation in Ontario

Surveys and Engineering

Ontario Resources Atlas

Ontario Surveys and the Lands Surveyor (reprint)

Timber Management

Forest Resources Inventory Reports (Parts 11 - 15)

Miscellaneous

Special envelopes for Sylva

Certificates for retiring personnel

Publications Prepared but Not Published

Administrative Chart (O & P)

Algonquin Park Booklet (Parks)

Camping Safety Folder (O & P)

Letter to Algonquin Park Angler (Research)

Indians of Ontario (reprint) (General)

Press

The weekly news release "Conservation Corner" was issued regularly to all newspapers in the Province, all radio stations, outdoor writers, Game and Fish Protective Associations, and a miscellaneous list of interested conservationists and house organs. It approximates 2,000 to 2,500 words per issue and consists, for the most part, of reports on Departmental activities, changes in the Acts relating to Game and Fisheries, open seasons for hunting, fishing and trapping, and conservation appeals for the protection of resources.

This release serves a most useful purpose, and its acceptability regarding is continuing to increase. The average annual column space being used by newspapers throughout the Province is close to nine thousand column inches or approximately four hundred and fifty full news columns. This estimate does not include the extensive use of News Release material by outdoor writers in their columns in newspapers and sports and outdoors magazines on both sides of the border. Ninety newspapers made use of mats provided by the section to illustrate News Release Articles of special interest.

In addition to the regular news release, a number of press releases of urgent importance were issued to the metropolitan dailies and to the wire services.

Our clipping file now contains over 400 individual files, with an estimate of more than 30,000 clippings per year.

Articles

A great many articles were provided to newspapers issuing special editions and considerable assistance given to writers seeking information for feature articles.

Advertisements

Copy was supplied for 45 display advertisements in magazines and newspapers during the year. They varied from one-quarter page to full page advertisements, mostly in black and white with art work or photos. Each stressed the need for public co-operation in preventing forest fires and the conservation of land, water, forests, wildlife and forest resources. One hundred and three administrative advertisements were also inserted in newspapers throughout the Province. These dealt with timber sales and crown lands.

Posters

The following posters were produced:

Nature Trails - Algonquin Park
Sibley Park
Extract from Fishery Regulations

Experiments were conducted in the use of plastic coated signs but these were not found to be satisfactory. Under a new process, representative poster material has been printed on plastic sheets. These are presently being distributed to our 22 districts for exposure to the elements for 9 months following which the districts will return the signs with their conclusions.

Correspondence

Over 7,000 routine requests for information or publications were handled during the year. The volume of requests for information regarding the work of the Department, the recreational facilities of the Province and its renewable resources is rapidly increasing. These requests come from adults and students not only in Canada and the United States but from many parts of the world. These are in addition to a large number of requests for information requiring considerable research.

Personal Enquiries

The Section also handled a large number of telephone calls daily and interviewed a considerable number of callers seeking first hand information or publications.

LIST OF PUBLICATIONS FOR DISTRIBUTION

ACCOUNTS

Accounting for Logging Operations

FISH AND WILDLIFE

The Game & Fisheries Act & Regulations
Summary of the Fisheries Regulations
Extract from Fisheries Regulations (poster)
Summary of the Hunting Regulations
Alternate Closure of Lakes in Algonquin Park
Fish & Wildlife Management in Ontario
Fur Farming in Ontario
Prairie Chickens in Ontario
Pheasant Culture
The Bob White Quail in Ontario
Aerial Censusing of Moose at Black Bay Peninsula
Population Studies of Ring-Necked Pheasants on Pelee Island\$2.00
Chart of Ontario Sport Fishes in Colour (Price to be determined)

FOREST PROTECTION

Forest Fires Prevention Act and Regulations
Forest Protection in Ontario
Technical Bulletins:
 (a) Aerial Water Bombing
 (b) Aerial Cargo Dropping
 (c) Aerial Ground Hailer
 (d) Aerial Estimator
 (e) Pack Tractor
A City Boy in the Woods

LANDS

Lands for Settlement in Ontario
Summer Resort Lands in Ontario
Sudbury Forest District
Kenora Forest District
Fort Frances Forest District
North Bay Forest District

LAW

Complete set of 21 Acts administered by Department
 (without binders).....\$5.00
Law Enforcement Guide & Related Subjects

PARKS

The Natural History of Algonquin Park
Algonquin Park

REFORESTATION

Reforestation in Ontario
Planning for Tree Planting
Care and Planting of Forest Trees
Forest Trees of Ontario.....50 cents
The Farm Woodlot
Forest Tree Planting

RESEARCH

Forest Research in Ontario
Bird Population Studies during a Spruce Budworm Outbreak
Forest Spraying and Some Effects of DDT
Bibliography of Canadian Biological Publications 1946
A Letter to Algonquin Park Anglers
Pollution of the Spanish River
Planting Depths and Methods Experiments
Report of the Laboratory for Experimental Limnology

SURVEYS AND ENGINEERING

List of Geographical Townships in Ontario25 cents
List of Water Powers in Ontario.....75 cents
List of Lithographed Maps & Plans
Aerial Surveys in Ontario
Ontario Surveys and the Land Surveyor
Extracts from Lakes & Rivers Improvement Act as pertaining
to Construction, Repair and User of Dams

TIMBER MANAGEMENT

Systems of Forest Cropping
Manual of Scaling Instructions
Timber Management Manual:
Part 11 - Timber Estimating (Field Work).....50 cents
Part 111 - Timber Estimating (Compilations)...50 cents
Part 1V - Timber Marking for Special Cutting Operations...50 cen

Ontario Log Rule
Crown Timber Act & Regulations Made Thereunder
Timber Management in Ontario
Reports^m of Forest Resources Inventory:
No. 1. North Bay District
No. 2. Swastika District
No. 3. Cochrane District
No. 4. Kapuskasing District
No. 5. Geraldton District
No. 6. Port Arthur District
No. 7. Algonquin District
No. 8. Parry Sound District
No. 9. White River District
No.10. Sudbury District
No.11. Sault Ste. Marie District
No.12. Chapleau District
No.13. Gogama District
No.14. Fort Frances District
No.15. Kenora District
No.16. Sioux Lockout District

GENERAL

Algonquin Story.....\$2.00
Administrative Chart
Annual Report of the Minister of Lands and Forests:
Part 1: Detailed
Part 11: Highlights
Definitions of Important Branches of Forestry
The Forest Tent Caterpillar in Ontario
Ontario Resources Atlas.....\$1.00
Indians of Ontario
Camping Safety Folder
SYLVA, Your Lands and Forests Review, bi-monthly....\$1.50 per year
SYLVA Index, Volume 1 - 10 inclusive.

SECTION NO. 8

DIVISION of PARKS

DIVISION OF PARKS

Coincident with the establishing of the Division of Parks on October 1st, 1954, a systematic field survey was inaugurated to locate and assess potential park properties, both Crown and privately owned.

The emphasis was on Southern Ontario, where some sixty properties were located and examined by the field staff. Many of these properties were discarded for various reasons, after personal inspection by the Division Chief; the others were placed on a priority list for acquisition as and when required by the Province.

Suggested and recommended Crown properties were reserved for immediate or for future designation and development as Provincial Parks.

As of October 1st, 1954, the following Provincial Parks had been established:

Algonquin	2,750 sq. miles	Established	1893
Rondeau	8 " "	"	1897
Quetico	1,750 " "	"	1913
Long Point	126 acres	"	1920
Presqu'Ile	420 "	"	1921
Ipperwash	109 "	"	1937
Superior	540 sq. miles	"	1944
Sibley	53 " "	"	1944

Presqu'Ile and Long Point were Commission managed parks under the jurisdiction of the Department of Municipal Affairs. However, with the proclamation of The Provincial Parks Act of 1954, on December 1st these two parks became an administrative problem of the Division of Parks, and plans for their immediate future were formulated.

Between October 1st and March 31st, two additional woodland properties were deeded to the Crown, to be designated and developed as Provincial Parks. These are the Mark S. Burnham property (103 acres) in the Township of Otonabee, in Peterborough County, and the Emily Township property on the Pigeon River (10 acres), in Victoria County.

Negotiations were commenced by the Department of Public Works to acquire two additional properties from the above prepared and recommended list.

The policy of bringing Algonquin Provincial Park back to its original status progressed much more rapidly than was anticipated, with the return to the Crown of some forty-three properties.

In North Western Ontario, the opening for travel of Highway 120 from the Lake Head to Atikokan, made accessible for the first time by motor car, the north side of Quetico Provincial Park. With the contemplated extension and completion of this highway to Fort Frances, some ninety million people will have access to Quetico, via a circuitous route.

This challenge necessitated early and orderly planning, so that the organization may be set up to cope with the expected influx, and the necessary facilities, such as adequate recreational areas, fully established and outfitted in advance. These plans are under way.

During the winter 1000 park tables and 1000 fireplace grills were manufactured for the Division by the Department of Reform Institutions at Burwash and Brampton. These pieces of equipment were well made and reasonably priced. Excellent co-operation has existed between the two departments and it is planned to make further use of Reform Institutions labour and services throughout the summer season.

DIVISION of REFORESTATION

DIVISION OF REFORESTATION

The Division of Reforestation furnished a total of 25,519,383 units of nursery stock for all purposes during the year. This is over a million more than in any previous year. A small trial nursery was established in Widdifield township near North Bay and seed was sown for the production of 150,000 trees. As the demands for nursery stock are still in excess of supply, total nursery stock production targets were maintained at 30 million units annually.

The number of requests received from private landowners for advice in planning and carrying out reforestation and woodlot management work continued to increase. Every effort possible was made to meet these requests although there was not sufficient staff to meet the requirements fully.

Municipalities and conservation authorities continued to acquire lands to be leased to the Minister of Lands and Forests for reforestation and management under the provisions of Section 2 of The Forestry Act, 1952. Counties increased their holdings of such lands during the year by 3,124.23 acres to a total of 89,423.59 acres; townships, by 100 acres to 1,599.24 acres; and conservation authorities, by 3,042 acres to 19,865.75 acres.

Trees planted on Crown lands totalled 6,316,432; on county forests, 3,220,508; on township forests, 304,950; and on conservation authority forests, 1,039,250. Private landowners were furnished with 14,599,040 trees for planting on their lands.

Summary of Dispositions
of
Nursery Stock
April 1, 1954 to March 31, 1955

Planted on lands vested in Her Majesty in right of Ontario.....	6,316,432
Planted on County, Township and Conservation Authority forests managed by the Minister.....	4,564,708
Furnished in respect of private lands.....	14,559,040
Furnished for educational and scientific purposes.....	26,849
Miscellany Departmental exhibits, etc.....	50,676
Balance - Stored at planting sites.....	<u>1,678</u>
Total	<u>25,519,383</u>

Trees planted on lands vested in Her Majesty in right of Ontario

<u>Administrative District and project</u>	<u>Trees</u>	
Aylmer District:		
Ontario Forest Station - St. Williams	35,625	
Rondeau Provincial Park Forest	4,000	
South Walsingham Township	500	
Department of Highways	12,099	
Long Point Provincial Park Forest	6,500	
Vineland Horticultural Station	1,000	
Ontario Hospital - St. Thomas	550	
Western Ontario Agriculture School - Ridgetown	<u>700</u>	60,974
Chapleau District:		
11C Township	125,000	
28 Township	<u>2,000</u>	127,000
Cochrane District:		
German Township	421,030	
Calder Township	20,000	
Allen Island	10,000	
Ontario Industrial Farm - Monteith	<u>145</u>	451,175
Fort Frances District:		
Carpenter Township	11,500	
Miscampbell Township	8,000	
Richardson Township	12,000	
Kingsford Township	11,750	
Seine River Concession - (O&M)	10,000	
Rowe Township	<u>1,000</u>	54,250

Geraldton District:

Pic Township	14,000	
Oakes Township	1,000	
Caramat Demonstration Plantation	1,000	
Stevens Demonstration Plantation	1,000	
Colter Township	4,000	
RC 17 (Unsurveyed)	<u>1,500</u>	22,500

Gogama District:

Foleyet Township	<u>2,000</u>	2,000
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Hespeler District:

Ontario Industrial Farm - Burtch	885	
Ontario Agriculture College	15,000	
Department of Highways	<u>12,050</u>	27,935

Kapuskasing District:

O'Brien Township	128,000	
Faurquier Township	20,900	
Devitt Township	40,000	
Studholme Township	12,000	
Coderre Township	<u>2,000</u>	202,900

Kemptville District:

Ontario Forest Station - Kemptville	33,775	
Ontario Industrial Farm - Burritt's Rapids	12,670	
Ontario Hospital School - Smith Falls	30,000	
Department of Highways	<u>3,233</u>	79,678

Kenora District:

Redditt Township	6,800	
McMeekin Township	3,000	
Heenan Area	3,000	
(Lake of the Woods Conc.) Angle & Heenan Area	20,000	
Unsurveyed - West of Dewan Township	<u>16,000</u>	48,800

Lindsay District:

Methuen Township	210,000	
Galway Township	50,000	
Ontario Forest Station - Orono	37,825	
University (of Toronto) Forest	20,250	
Ontario Training School for Boys - Bowmanville	800	
Gooderham Ranger Headquarters	100	
Minden Ranger Headquarters	150	
Apsley Ranger Headquarters	100	
Ontario Provincial Police Tower Site - Smith Township	<u>899</u>	320,124

Maple District:

East Gwillimbury Township	20,475	
Ontario Forest Station - Midhurst	16,550	
Ontario Tree Seed Plant - Angus	58	
Baxter Township	80,000	
Wood Township	166,000	
Matchedash Township	26,000	
Vaughan Township	35,700	
Department of Highways	31,794	
Chinguacousy Township	<u>575</u>	377,152

North Bay District:

Widdifield Township	1,677	
French Township	85,425	
Strathy Township	<u>2,000</u>	89,102

Parry Sound District:

Boulter Township	414,040	
Chisholm Township	204,160	
Mowat Township	450,230	
Stisted Township	450	
Skelton Lake Hatchery	2,000	
Islands D-212, D-213 - Henvey Township	300	
RCO	2,000	
Burton Township	<u>4,000</u>	1,077,180

Pembroke District:

Bower Township	510,500	
Deacon Township	8,000	
Peck Township	5,500	
Stratton Township	8,400	
Head Township	458,600	
Petawawa Township	700	
Sproule Township	400	
Cameron Township	21,000	
Guthrie Township	6,000	
Fraser Township	5,000	
Lauder Township	<u>5,000</u>	1,029,100

Port Arthur District:

Black Sturgeon Lake Ranger Headquarters	1,528	
Ontario Forest Station - Fort William	57,770	
Unsurveyed - Kab Lake	235,200	
Sibley Provincial Park	20,000	
TB-A-1	<u>200</u>	314,698

Sault Ste. Marie District:

Rose Township	17,050	
Kirkwood Township	11,000	
Haughton Township	450,000	
Cobden Township	246,000	
Gaudette Township	210,350	
Tarentorus Township	3,000	
Korah Township	72	
Department of Highways	<u>60,000</u>	997,472

Sioux Lookout District:

Dome Township	1,200	
Drayton Township	150	
Patricia Concession - Moose Area	<u>16,900</u>	18,250

Sudbury District:

Shakespeare Township	3,000	
Merritt Township	65,500	
Dryden Township	100	
Bigwood Township	200	
Cartier Township	200	
Dieppe Township	1,000	
Maclennan Township	400	
Nairn Township	48,700	
Ontario Industrial Farm - Burwash	50,625	
McKim Township	382	
123 Township	<u>500</u>	170,607

Swastika District:

Nordica Township	200,000	
Marter Township	60,000	
Dack Township	10,500	
Department of Highways	<u>500</u>	271,000

Tweed District:

Kaladar Township	37,050	
Limerick Township	236,600	
McClure Township	150,400	
Sandbanks Forest	13,100	
Gilmore Ranger Headquarters	300	
Tudor Township	7,900	
Faraday Township	101,275	
Wollaston Township	<u>7,800</u>	554,425

White River District:

Black River Concession	20,000	
Hunt Township	<u>110</u>	<u>20,100</u>

Total		6,316,432
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Trees planted on County, Township and
Conservation Authority forests managed by the Minister

<u>County</u>	<u>Trees</u>	
Bruce	181,900	
Dufferin	7,000	
Grey	241,750	
Halton	18,450	
Huron	84,300	
Kent	9,000	
Leeds & Grenville	244,900	
Lennox & Addington	65,100	
Middlesex	48,850	
Northumberland & Durham	299,638	
Prescott & Russell	1,285,495	
Simcoe	307,200	
Stormont, Dundas & Glengarry	253,925	
Victoria	50,000	
Waterloo	20,400	
Wentworth	49,000	
York	<u>53,600</u>	3,220,508
 <u>Township</u>		
Cumberland	40,000	
Galway	47,000	
Marlborough	114,950	
Torbolton	<u>103,000</u>	304,950

Conservation Authority

Ausable Forest	122,800	
Big Creek Forest	59,575	
Ganaraska Forest	372,850	
Grand Valley Forest	25,800	
Humber Valley Forest	166,075	
Moira Forest	34,150	
Saugeen Forest	208,000	
Thames Forest	<u>50,000</u>	<u>1,039,250</u>
Total		<u>4,564,708</u>

Trees furnished in respect of

Private land

<u>County or District</u>	<u>Trees</u>
Algoma	276,650
Brant	221,600
Bruce	202,165
Carleton	113,950
Cochrane	700
Dufferin	555,125
Dundas	26,975
Durham	1,271,050
Elgin	174,550
Essex	47,925
Frontenac	77,075
Glengarry	18,675
Grenville	123,100
Grey	628,075
Haldimand	63,225
Haliburton	111,675
Halton	320,775
Hastings	260,650
Huron	299,500
Kenora	26,500
Kent	107,650
Lambton	229,975
Lanark	157,100
Leeds	58,775
Lennox & Addington	50,425
Lincoln	49,825
Manitoulin	69,525
Middlesex	192,500
Muskoka	577,975
Nipissing	159,725
Norfolk	253,200

Northumberland	390,525
Ontario	600,600
Oxford	241,600
Parry Sound	875,275
Peel	439,175
Perth	115,225
Peterborough	258,425
Prescott	40,550
Prince Edward	24,400
Rainy River	1,375
Renfrew	282,325
Russell	23,950
Simcoe	2,246,075
Stormont	33,500
Sudbury	98,375
Thunder Bay	191,225
Temiskaming	23,375
Victoria	153,525
Waterloo	217,375
Welland	130,525
Wellington	580,925
Wentworth	260,925
York	<u>603,175</u>
Total	14,559,040

NURSERY STOCK FURNISHED EACH YEAR

1945 TO 1955

	<u>Units</u>
1945	11,280,981
1946	13,175,575
1947	12,269,533
1948	13,049,776
1949	17,700,970
1950	19,027,807
1951-52	20,749,268
1952-53	24,241,754
1953-54	23,447,860
1954-55	<u>25,519,383</u>
Total	180,462,907

County Forests

March 31, 1955

	<u>Acres</u>
Brant	50.00
Bruce	13,628.75
Dufferin	2,042.00
Grey	6,668.08
Halton	1,545.63
Huron	1,339.00
Kent	100.00
Lanark	2,100.00
Leeds & Grenville	5,185.00
Lennox & Addington	713.00
Middlesex	280.00
Northumberland & Durham	4,765.00
Ontario	1,553.00
Oxford	713.00
Prescott & Russell	22,008.91
Renfrew	221.00
Simcoe	12,830.78
Stormont, Dundas & Glengarry	1,706.45
Victoria	7,045.00
Waterloo	583.00
Wentworth	760.00
York	<u>3,585.99</u>
Total	89,423.59

Township Forests

March 31, 1955

	<u>Acres</u>
Bonfield	60.00
Cumberland	808.44
Galway	100.00
Torbolton	430.80
Marlborough	<u>200.00</u>
Total	1,599.24

Conservation Authorities

March 31, 1955

	<u>Acres</u>
Ausable	981.00
Big Creek	200.00
Ganaraska	6,546.00
Grand Valley	1,425.00
Humber Valley	713.00
Middle Maitland	250.00
Moira	2,121.00
Napanee	2,281.00
Saugeen	2,839.00
Upper Thames	<u>2,509.75</u>
Total	19,865.75

DIVISION of RESEARCH



DIVISION OF RESEARCH

GENERAL INTRODUCTION

In reviewing the research work for the past year, several subjects may be selected for general comment here.

Marked progress has been made in the evaluation of forest management problems and the establishment of projects. For example, knowledge gained from research in forest site classification and sampling techniques has reached a point where a large-scale program of systematic mapping of the forest sites of the whole province may be undertaken.

The establishment of white pine regeneration and growth projects in the Petawawa Management Unit was completed in 1954, and examination will commence in 1955.

Progress has been made in the study of the silvical characteristics of yellow birch in the Swan Lake area of Algonquin Park. The same applies to the pulp species in the Port Arthur area where research has proceeded in cutting methods, planting and seeding; and in the Cochrane Clay Belt, where cutting systems in black spruce, regeneration in mixed stands, and aspen thinnings have been the most recently pressed projects. In south-western Ontario, the exploration work which started in 1952 has developed into a number of projects including the silvics and silviculture of silver maple, tree poisoning as a silvicultural tool, woodlot studies, artificial seeding, and several types of pruning.

Tree breeding research received an added stimulus in the direction of poplar through the demands of industry for aspen hybrids for immediate use in the plantations of a group of pulp and paper companies.

In 1954, reforestation research was started when a research forester was added to the staff of the Research Division to further a co-operative program with the Reforestation Division in nursery and planting practices. Projects were undertaken in planting depths and methods, nursery stock packaging, culling and grading of seedlings, nursery stock inventory, and nursery treatments.

In the field of fisheries research, it was concluded by the end of 1954 that the major factor influencing the lake trout population in Lake Superior was the lamprey. It is thought that additional research is not justified until the

ultimate status of the lamprey is determined and the effect of lamprey control undertaken by the Federal Government is properly assessed.

Several mile-posts have been passed in wildlife research. The vegetation map of the Wilderness Research area, which was started in 1949, was completed in 1954, and will be related to other projects. The series of phenological plots in the area, which were established in 1948, have now been established in 11 representative plant communities. Sufficient data have been accumulated from beaver in the deciduous forest to show sex and age ratios of colonies and the physical character of dams and ponds in the study area.

A still for the distillation of essential oils from conifer leaves, mostly leaves of black spruce, was built in 1954 and successfully operated by the Mechanical Research Section of the Division. This still was of the single charge type and it was considered by observers that a continuous process still would have some advantage. This was designed and made and is now in process of being tested. Millions of pounds of conifer foliage are produced each year in the process of logging, and a valuable oil may be obtained from it. The yield to be expected runs from $\frac{1}{2}$ to 1 percent of the weight of foliage and the sales value is around \$2 per pound at present. If this still is successful, a valuable product will be added to the long list already obtained from the forest.

In the following pages a more detailed report of the foregoing and other projects is given.

The activities of the Silviculture and Soil Research team for the fiscal year 1954-55 were concentrated in the continuation of previously established programs and projects. Preliminary discussions were held and plans made for several new programs.

Regional Site Research

The main purpose of this program, which was initiated in 1944, is to evaluate land in its capability to produce forest, fish, and wildlife, both in regard to yield and quality, and to evaluate the capability of undeveloped northern Ontario lands for agricultural development.

Field work was concentrated in the white pine belt of the South Central and the South Eastern regions. Reconnaissance work provided supporting data for previously established site districts. Field surveys covered 6,000 square miles of which 4,000 square miles were mapped on a landtype basis. More detailed information was obtained concerning the interrelationships of forest and local conditions in soil and climate, particularly with respect to hemlock and red spruce. Assistance was given to a co-operative experiment studying pathological conditions in yellow birch in Algonquin Park, carried on by the Science Service of the Canada Department of Agriculture and the Regional Research Forester. An investigation was initiated to study the usefulness of various types of aerial photographs for site inventory.

Several instructional courses were given to groups of foresters, in which the Ontario approach to site was presented.

Silvicultural Research in the Petawawa Management Unit

The main object of the work, which was initiated in eastern Algonquin Park in 1951, has been to study growth and regeneration of white and red pine and thereby assist in solving some of the silvicultural problems of forest management in the Petawawa Management Unit.

Experimental regeneration cuttings and small scale thinnings constitute the main work. In order to assess the effects of the lesser vegetation on the survival and development of tree seedlings, the phenological studies begun in 1953 are continuing. The meteorological studies begun in 1952 are being maintained, the present objective being to investigate the changes in ecoclimate due to the various methods of cutting. Additional projects of a supplementary nature include the following: (1) An ecological investigation of a natural burn, (2) a study of the silvicultural significance of forest succession, (3) a study of the effects of wildlife on vegetation, (4) a radial increment study using a dial gauge dendrometer, (5) a reproduction cutting in a tolerant hardwood stand, and (6) a collection of tree volume data for volume table construction.

Greenhouse Research

An investigation is being conducted to correlate amounts of plant nutrients in sand culture with concentrations of the same nutrients in the foliage. Work is also being done under controlled conditions to study the basic causes of compression wood formation in conifers.

Co-operative Experiment at Heron Bay, Ontario (RC-17)

This experimental work, conducted by several co-operating public and private agencies, is designed to find satisfactory means of obtaining spruce regeneration in upland mixedwood stands. The Division of Research is responsible for some of the ecological studies, the site mapping, and the technical direction of the project.

The Reforestation-Research Co-operative Program

A co-operative program has been developed between the Reforestation and Research divisions to apply research methods and findings to the evaluation and solution of problems of reforesting Crown lands. Work done in 1954 included: (1) Site inventory -- to assess conditions from an ecological point of view with particular respect to planting problems, and (2) experimentation -- to test methods of reforesting unproductive land and converting stands of unmerchantable hardwood. The first experiment, an underplanting and release experiment, was established in 1954.

A plan has been submitted for conducting a plantation assessment program to study planting problems on shallow soils in the Lindsay district.

F O R E S T T R E E B R E E D I N G

Breeding work with white pine, aspen poplars, and two-needled pines continued to be the main projects during the year under review.

White Pine

The provenance test plantations established in 1950 and 1951 were tallied. The results show that the materials tested can be subdivided into a northern group, growing on acid soils of granitic origin, and a southern group growing largely on calcareous soils. The strains within each group show similar survival and rate of growth. Northern strains show slow growth and much damping-off in the nursery when grown in southern Ontario. Southern strains show poor survival and growth in northern plantations.

The acquisition of new materials comprised scions from six selected plus-trees from southern Ontario and seeds of 11 populations of western white pine from Spokane, Wash. Four seedling populations of southern white pine were received from the Petawawa Forest Experiment Station to be grown and tested at the Southern Research Station.

Scions of six hybrid pines were grafted on to low side branches of old trees, to induce early flowering. Scions of some early flowering Scotch pine and Japanese red pine were grafted on to white pine seedlings, as the first step in the production of double grafts that are expected to induce early flowering. An experimental grafting on Japanese black pine resulted in good take and survival of Balkan and Himalayan white pine, and no survival of eastern and western white pine. An experiment in fall grafting, using nine different combinations of inner and outer bags to protect the scions through the winter, was started.

In hybridization a new cross, Balkan x Himalayan white pine, made in 1953, produced many good seeds. Crosses of eastern white x Japanese white and western white x Balkan white pine were effected on a fairly large scale in 1954.

Black currant shoots with green leaves were used in the inoculation

of white pine test materials with blister rust instead of the detached black currant leaves used in former years. This new method is more rapid and promises more thorough infection than the old one. The use of plastic hose sprinklers further enhanced the possibility of heavy infection. Two hundred young white pine in a test plantation near Ottawa were selected for freedom from blister rust under conditions of heavy natural infection.

Aspen Poplars

New scion and seedling materials from Hungary showed great promise for direct use and further breeding work. A beaker test for rooting capacity from stem cuttings was devised, to replace former tests in the nursery. Mass selection of some seedling populations in respect to rooting capacity was started.

The breeding work was subdivided into: (1) Mass production of the most promising hybrids for industrial use, (2) breeding of early-flowering materials to serve as stock for grafting, to induce early flowering in important breeding materials, and (3) incorporation of good rooting capacity from stem cuttings of silver poplar and other species into aspen hybrids. Good progress has been made in all these three phases.

A new method of aspen seedling production was worked out, involving the use of krillium, to improve the soil structure in seed beds, followed by soil sterilization with methyl bromide. This resulted in very good stands of seedlings after direct broadcast sowing.

Several new poplar test plantations were established in co-operation with wood-using industries. A new method of fixing and staining of poplar chromosomes has been worked out. Some poplar wood tests were carried out in co-operation with a furniture factory using poplar wood, and several experiments in the rejuvenation of old poplar materials were started. An Industrial Hybrid Poplar Committee was established to utilize the products of current poplar breeding efforts at the Southern Research Station.

Two-needled Pines

Several new materials of Japanese black and red pine were acquired, and crosses involving shoot-moth resistant Asiatic pines and susceptible native red and Scotch pine were carried out on a relatively small scale. A test plantation, for evaluating resistance to shoot-moth, was established at the Southern Research Station.

R E F O R E S T A T I O N
N U R S E R Y A N D P L A N T I N G R E S E A R C H

Planting Depths and Methods Experiments

In July 1954, Research Report #26, entitled "Planting Depths and Methods Experiments" was published. This summarized the series of experiments planted from 1948 to 1952 to study the effect of planting trees at various depths and by several common methods of hand planting, namely: cone, wedge, slit, and "T". The species studied were white pine, red pine, and white spruce.

Nursery Stock Packaging Experiment

Research Report #27, also published in July 1954, was entitled "Nursery Stock Packaging Experiment". This is a report of an experiment designed to study burlap bales as an alternative to wooden crates as a method of packaging nursery stock. The experiment showed that there was a real difference in mortality between bales and crates but that the difference was subject to considerable variation and was not excessive. As a result of this work, the nurseries of the Department are packaging a much larger proportion of their stock in bales.

Nursery Stock Inventory

A progress report, "Nursery Stock Inventory", was prepared in January 1954. This was sent to each of the nurseries. Inventories taken in the summer and fall of 1954 by the nursery staffs were taken largely in accordance with our recommendations presented in the progress report.

Culling and Grading Experiment

In the fall of 1954, the second planting of white spruce stock, both shippable and cull, from Orono, Midhurst, and St. Williams nurseries was established at the three planting sites. Each tree was again tagged and photographed as in the previous year. It is planned to continue with this species for a third year. In the fall of 1954 a mortality count of the 1953 planting was made. Because of the mass of detail required, six measurements for each of 10,800 trees each year, it has been necessary to use IBM card punch and comptometry systems to compile the data for study.

Nursery Treatments Experiment

A study of root and top pruning of white spruce 2-2 was conducted at the Midhurst Nursery during the growing season of 1954. Different degrees and times of root and top pruning were carried out. The stock was planted in a designed experiment near Powassan in the spring of 1955, incorporating a treatment of rooting hormones. It is expected that first results of this study will be available in the form of a survival count in the fall of 1955.

Straw Fumigation Experiment

A study of the effect of straw mulch on the population of weeds and the weeding costs of seed beds was started in 1945. An experiment was started on fall sown beds of 1954 using ordinary straw compared to straw treated with MC_2 and straw treated with steam as mulch. It is planned to compare weed population and costs through the growing season of 1955.

Nursery Stock Packaging, 1955

A study into the possibility of obtaining a cheaper material than sphagnum moss as the moisture retaining agent in packaging was started in 1954. A designed experiment of four treatments: sphagnum, locally collected moss, poplar wood wool, and poplar wood wool treated with a wetting agent was conducted at Kemptville Nursery. Bales of the four treatments were planted at half-week intervals for nine plantings at Larose Forest covering a period of $4\frac{1}{2}$ weeks. The first results of this experiment will be obtained from a survival count in the fall of 1955. To assist in this experiment, the Mechanics Section under Mr. M. H. Baker constructed a mechanical baling machine with an electric motor.

Polyethylene Packaging

A small quantity of nursery stock was packed at the Fort William Nursery in three comparative wrapping materials: burlap, polyethylene, and kraft paper. This was planted in a designed experiment in Algonquin Park in the spring of 1955. Information has been obtained on the ability of these materials to withstand damage during handling and shipping. Further testing of materials is planned.

M I S C E L L A N E O U S F O R E S T R Y P R O J E C T S

Seed Treatment and Coating

Research on coating tree seeds was started in 1946. The object of this project is to treat seed to increase the germination and survival, and to devise and test means of reforestation by direct seeding.

A number of experiments have been conducted in the laboratory and in the field. In 1952, tests indicated an improved coating for seeds using calcium ligno sulphonate, a waste liquor from the pulp sulphide industry. Field data from direct seeding studies indicated some optimum depths for seeding. Experimentation with the "Walking-stick" seeder disclosed that the seed of the pine species could be seeded satisfactorily without being coated.

During 1953 a coating consisting of calcium ligno sulphonate and flyash was experimented with until a satisfactory pellet for white and black spruce seed was evolved. Three sites were seeded in Algonquin Park with the "Walking-stick" seeder using pelleted white spruce seed and unpelleted red and white pine seed. Results of this seeding were recorded in 1954. Seed treatment and coating project was concluded in 1954.

Cargo Dropping

In 1951 research was started on design and construction of suitable cargo parachutes for dropping supplies and equipment from aircraft to forest fire fighters.

In 1952 a number of parachutes made from 4 oz. factory cotton were field tested. Eleven-foot and 8-foot diameter size cargo parachutes were extensively used in the field in 1953. A 16-foot diameter size 'chute was designed and field tested for pump work in 1954. These larger parachutes were supplied to the field for operation during 1954.

Future work should consist largely of a service nature developing items and techniques upon demand or request. Project "Cargo Dropping" as originally designated is now considered completed.

East Gwillimbury Experimental Project

The East Gwillimbury Experimental Project was started in the fall of 1949. The main objectives are the study of the growth rate for tree spacings of six, nine, and 12-foot intervals, the effectiveness of annual pruning of conifers and deciduous trees, the study of compatibility and regeneration of our common species, and the establishment of a plantation in an easily accessible area containing the majority of species.

Replacements have been carried out as necessary in the spacing experiment. Approximately 20 acres of the main plantation were planted in 1952 and 20 acres in 1953. Annual pruning was commenced in 1954.

R E G I O N A L R E S E A R C H F O R E S T E R S

MID-WESTERN REGION

Research conducted during the past year was once again divided into the two fields of silviculture and research co-ordination.

Silvicultural Research

This portion of the research activities was confined to projects dealing with regeneration problems of the commercially important tree species. Studies in the three fields: cutting methods to promote regeneration; tree planting and artificial seeding, were either initiated or continued.

Cutting Methods Research

The work in this field is of necessity of a long term nature and consists of the establishment of permanent study areas where variations in the normal cutting methods can be introduced and their effects studied.

In 1954-55 the work was continued as follows:

- (a) The variations and controls established in the Auden area in 1949 and 1952 were re-examined.
- (b) The final scarification portion of the variation established in the Dog River area was completed. The permanent sample plots were also re-established and examined.

Planting Research

In planting research, the over-all objective has been the establishment of experimental plantations to test theories advanced which might have practical applications in the field of reforestation.

- (a) Survival counts were made on the spacing plantation established in 1950. This test plantation is comprised of four coniferous species planted at three spacings and replicated three times.
- (b) Survival counts were made on the root pruning and root induction experiment established in 1953. This test plantation is comprised of three coniferous species planted with two degrees of root pruning, one root induction treatment, with the necessary controls. In 1954 an identical plantation was established for further studies in this project.
- (c) Survival studies were made on plantations established in 1953 which consisted of trees which had been held in cold-storage over a season. This project was initiated to test the effects of summer planting of trees which had been spring lifted and cold-stored until the planting time. Three coniferous species were test-planted in this way. A further plantation was established in 1954 in the same manner, but utilizing four coniferous species.
- (d) Small block plantations of species not native to north-western Ontario were established in 1954. To test adaptability, plantations of Norway spruce, lodgepole pine, Dunkeld larch, and B.C. fir were established.

Seeding Research

As in planting, the objective of artificial seeding research has been to test seeding theories which might have practical uses in forestry. Incorporated with these practical trials are small-scale basic research studies. In 1954, this program consisted of the following:

- (a) Making survival counts and analysing the results in the spring and fall of the shade and protection tests established in 1953. These tests are aimed at determining the effects of full exposure, partial shading, full shading, and caging on seed spots.
- (b) Making an examination of the results of the comprehensive seed-probe test established in 1952, in co-operation with the Great Lakes Paper Company.

(c) The establishment of a further seed-probe test, in co-operation with the Abitibi Power and Paper Company. An attempt was made to restock bulldozed strip-roads to black spruce using the hand seeder.

(d) The establishment of trials to test the effects of several protective measures aimed at reducing rodent damage to seed and new germinants. The measures tested were: seed encased in paper rolls containing powdered humus; seeds sown and covered with upright sections of cardboard tubing; and deep-hole sowing. These tests were established under both high and low shrub cover.

Research Co-ordination

In the co-ordination phase of the work, slow but satisfactory progress can be reported for our endeavours this past year. The objective of the co-ordination committee, which is comprised of both industrial and governmental representatives, is to place research in northwestern Ontario on a sound co-ordinated basis.

Forestry Library

The Lakehead Institute Library, which is operated by the Research Division, functioned satisfactorily during the year. An increased interest was shown in the growing collection of forestry literature.

NORTHERN REGION

The main work conducted during the year 1954-55 is summarized below:

Cutting Systems in Black Spruce

This experiment was laid out in 1951. The last cutting was done in 1953, when eight plots were cut from a total of 18.

In 1954 the cut-over plots were examined and tallies taken on the mil-acre plots. These plots will be examined annually as will the others as they are cut.

Seed Bed Preparation in Mixed Stands

This project was laid out and treatment completed in the summer of 1953. The plots were re-examined and tallied for regeneration weekly during the summer of 1954. Annual re-examination will continue for some years.

Thinnings in Aspen

The young stand was thinned in 1953. It was remeasured in 1954.

Poster Comparison Study

At the request of the Division of Forest Protection a study was made on poster durability under severe weather conditions. A new plastic covered poster was tested.

Essential Oils

A pilot plant for the distillation of essential oils from spruce foliage was set up at Heron Bay. This project was integrated with a new logging technique being developed by the Ontario Paper Company. This technique, whereby tree lengths were carried to a central landing, resulted in the accumulation of large amounts of slash. To overcome this, the slash was put through a chipper to reduce its volume and make it easier to handle.

It was this chipped material that provided the leaf still with its raw material. The still was in operation during the Annual Field Meeting of the Forestry Advisory Committee to the Research Council of Ontario. A great deal of interest was aroused among the delegates, in the distillation process.

The still functioned satisfactorily for purposes of demonstration but was too slow for production use. About five gallons of high grade essential oil was produced during the demonstration.

Further refinements to the boiler and still are planned in order to increase production. The site of future tests will be the Research Block in the Cochrane District.

Seed Collection for Greenland

At the request of the Danish Government through the Forestry Branch, several pounds of white spruce seed were collected near the mouth of the French River on the James Bay coastal plain.

Other Work

During the summer some time was spent in the field with research parties from other organizations.

W. K. W. Baldwin from the National Museum, Ottawa, completed his work on the Clay Belt flora. Two days were spent in the field with him.

D. W. MacLean, Forestry Branch, Ottawa, was visited during his studies of stand histories in mixed stands.

Preliminary work was done in connection with a project planned for next year in the Englehart Management Unit.

Organization work was initiated on the formation of a local-committee on co-ordinated research. It is hoped to form a sub-committee to the Forestry Advisory Committee to the Research Council of Ontario.

SOUTH CENTRAL REGION

The study of the silvical characteristics of the species occurring in the tolerant hardwood stands was continued throughout 1954 and 1955. This program was initiated at Swan Lake in 1949 and originally applied to yellow birch. The work now includes all the commercial species of this area. The following is a brief outline of the work in progress.

Swan Lake Program

During 1954-55, the results of the experimental logging were studied in detail and permanent sample plots were established under three sets of conditions:

- 1) Uncut stands
- ii) Normal light selection cut
- iii) Experimental clear-cut patches.

The measurements and observations indicate obvious benefits of the experimental logging with respect to yellow birch germination, survival, and height growth.

The work on direct site measurements was continued. Air and soil temperatures, relative humidity, and other factors are being recorded.

The work carried out towards the development of a birch seed orchard was continued this year. Scions were collected during the winter logging operation in 1954 and were grafted at Angus for planting at Swan Lake in the spring.

In 1953, a special study of deer browse upon birch was initiated and the program was enlarged this year. The survey has indicated an unexpected importance of deer damage to seedlings, and to further the study a number of deer exclosures were erected. Seedlings within the exclosures are now being measured and compared with seedlings that suffer normal browse.

The Laboratory of Forest Pathology completed the decay studies at Swan Lake. This work was carried out in co-operation with the Regional Research office and a report of the findings is expected this fall.

Regional Program

During October and November 1954, stand improvement programs were carried out in the following townships: Conger, Sherborne, and McClintock. The

Regional Research office actively participated in the planning and execution of these programs. A series of permanent sample plots were established to evaluate the work, which was primarily a release program in second growth tolerant hardwood stands. The sample plots were established with a view to studying the following:

- 1) The effectiveness of Esteron 2-4-5T as a basal spray
- ii) The response of the trees selected for release
- iii) The results of direct seeding of pine, spruce, and birch.

SOUTH WESTERN REGION

1. Silvics and Silviculture of Silver Maple

The study, established in 1953 in a 19-year old silver maple stand of coppice origin, was continued in 1954. All live trees, following three degrees of thinning by poisoning and cutting, were tallied by d.b.h. A record was kept of the number, size, and occurrence of coppice from stumps cut at four different periods of the year, as well as the occurrence of epicormic branching. Effects of thinning by poisoning and cutting on the regeneration and ground cover was noted.

2. Poisoning as a Silvicultural Tool

A silver maple stand was thinned using Esteron 2-4-5T in late 1953 and in 1954. The stand was given three degrees of thinning (light, medium, and heavy). In all instances, the poorest trees were removed to permit unimpeded growth for the "select" trees.

A second growth silver maple-white elm stand was also thinned with Esteron 2-4-5T. In this instance only the low quality elm were removed. All treated trees had to be girdled or frilled to permit the poison to reach the cambium layer. Results were not satisfactory as the elm appeared to be somewhat resistant to the poison.

3. Use of Dalapon, a Grass Poison, to Assist in Natural and Artificial Regeneration

These studies will be expanded in 1955 and 1956 providing there is a seed year on the commercially important tree species in the region.

4. Woodlot Studies

Mr. I. C. Marritt, District Forester at Hespeler, established ten years ago a series of permanent sample plots in various woodlots throughout the Huron District. The Research Division has undertaken to assist the District staff in studying these plots.

5. Artificial Seeding

Seeding studies were undertaken in Matchedash township at the request of Mr. R. Lane, Management Forester, at Coldwater. Previous work in that township had indicated that there was some possibility of seeding white pine on selected sites.

6. Hardwood Pruning Studies

Most of the woodlots in southern Ontario have been logged from time to time with little thought for the next crop of trees. Consequently, such trees tend to be branchy and many of them, if permitted to reach maturity, would make either low grade, knotty lumber or firewood. With this thought in mind, six acres of second growth hardwoods were pruned to a height of approximately 18 feet. A time study was made on the entire operation, and a number of pruning tools were tested.

7. Christmas Tree Pruning Studies

At the instigation of Messrs. Marritt, Steele, and Davidson of the Huron District office, a study was started to determine the effects of pruning at different times of the year on the subsequent growth of the following year. At the same time, five degrees of pruning were incorporated into the experiment. These consisted of removing two, four, eight, and 18 inches of leader growth. There was a replication of 10 for each treatment. The experiment was repeated 10 times during the growing and dormant seasons.

8. Seran Screening for Seed Beds

It was decided to test this plastic as a possibility for use on shading on seed beds. Preliminary results indicated that it was capable of keeping out seed-eating birds, and at the same time providing adequate shade for the tender seedlings. Unfortunately, this plastic is rather expensive, costing approximately 11¢ sq. ft.

F I S H E R I E S

The fisheries research program in 1954 received considerable impetus from the Dominion-Provincial agreement for lamprey control and research on the Great Lakes. New projects were initiated on Lake Huron and Lake Superior and the study of the Bay of Quinte whitefish was taken over from the Fish and Wildlife Division. Economic studies and biometrical analyses were carried out, with half the cost being met by the Federal Government. Research on inland fisheries was confined mainly to Algonquin Park, although one other project was carried out in co-operation with the Parry Sound District.

Lake Superior

The lake trout population of Lake Superior is seriously threatened by the recent invasion of the sea lamprey. The principal aim of the research in this area is to determine the status of the lake trout population and to follow any changes that may take place. This information will aid in evaluating the lamprey control measures underway.

It would seem, from a preliminary analysis of the lake trout catch per unit of gillnet effort, that the Lake Superior trout fishery is already in a very precarious position. The frequency of lamprey scars on lake trout suggests that lampreys are well established in most of the Canadian waters of Lake Superior, with higher predation occurring on the east shore and in the Whitefish Bay area. One population of trout, inhabiting the Superior shoal in midlake, is still relatively free of predation.

Lake Huron

Lake Huron activities were centered around the experimental fishery at South Bay, where fishing pressure is placed on both desirable and undesirable species with the purpose of increasing the production of game and commercially valuable fish. Analyses have been made of the production of lake trout and bass. The disappearance of South Bay lake trout as a result of lamprey predation has been well documented. The smallmouth bass population appears to have been well utilized by anglers. In spite of this, climatic factors rather than fishing pressure appear to be more important in effecting their abundance. Similarly,

studies of other species indicate that fishing pressure has had little effect in reducing their abundance.

It has become increasingly apparent that there is a high potential production of fish at present unutilized in Lake Huron. It is estimated that at least 2000 tons of fish now unutilized are available each year in the Manitoulin Island area. One of the principal problems facing the laboratory is that of developing uses for this production. Smelt, which are the most numerous species in terms of numbers and total weight, have been processed and sold as both human and animal food. About 80 tons of smelt were frozen in 1954 and the major portion sold to local mink ranchers. A small amount of frozen cooked fish have been supplied each year to the Ontario Veterinary College, Guelph, which is engaged in testing fish diets for mink.

Other projects at South Bay include plantings to re-establish lake trout, introduction of the speckled-lake trout hybrids, studies of lamprey predation in Lake Huron, and routine hydrographic observations.

Lake Erie

Investigations of a general nature were initiated on Lake Erie in 1953. These were followed in 1954 by a closer examination of the fish populations. Routine examinations of the commercial catch were started to provide, among other things, the age structure of the various populations. This is basic information for any proper understanding of the factors affecting abundance. To supplement these data some 2000 fish were tagged and their movements throughout the lake followed by the information provided by recaptures.

A general economic study was commenced in 1954 to consider annual fluctuations in fish production, the value of production, level of employment, and the relative earning power of persons employed in the fishing industry on Lake Erie.

Lake Ontario

The research program on Lake Ontario was largely concerned with continued studies of the Bay of Quinte whitefish population. Since 1944 plantings in alternate years have been made without significant effect on the production of whitefish in the Bay of Quinte area. Detailed examination of the population has now been started to discover some other way of increasing production. Tagging

returns to date suggest that a large proportion of the whitefish stocks are taken annually. Further study is aimed at determining if adjustments of fishing pressure will allow increased production.

Lake trout are rarely taken in Lake Ontario where they were once abundant. In an attempt to re-establish lake trout, plantings of marked fish have been made by both the Province of Ontario and the State of New York. An evaluation of these plantings forms part of the Lake Ontario program.

Algonquin Park

The present program in Algonquin Park, which is attempting to find ways of maintaining and improving the sports fishing, follows two main lines. First, it is attempting to adjust fishing pressure by one means or another to a level that will give the most efficient use of the game fish population. Second, it is attempting to discover what improvements to the environment will give increased production. Some promising techniques, such as lake closure, fertilization, re-stocking, and the construction of artificial spawning areas have not been entirely effective. Certain refinements may make them more effective. The creel census and studies of the habits and requirements of the game fish of the area continue to suggest where weaknesses in these techniques lie.

Parry Sound District

In 1954 research personnel joined the field staff of the Parry Sound district in a study aimed at the improved management of the pickerel sport fishery in Three Mile Lake, Muskoka District. In an effort to improve growth and better utilization of the stock, transfers of fish were made from Three Mile to other lakes, and the minimum legal length for pickerel suspended. A tagging program and creel census were initiated in order to follow any changes that might occur in the fishery as a result of this action.

W I L D L I F E

Wildlife Research Station, Algonquin Park

The summer program began April 28 and concluded October 30.

Phenological plots established in 1948 were expanded to cover 11

representative plant communities. Succession and weather data were also recorded.

The vegetation map of the research area, begun in 1949, was completed. It will provide basic information on the distribution of vegetation types, which will be useful for other studies.

A series of projects was begun in 1945 to study fluctuations in populations of forest birds, and determine differences in species composition and population density in various forest types. A plot prepared in an aspen stand was used in 1954 to provide a population estimate in this type of forest.

A part of the information required relating to the ecology of small mammals -- life-history, habits, population changes, and habitat -- pertains to that important little creature, the deer mouse. In 1954, trapping on the permanently established lines showed that the survival of deer mice during the winter had been high, and mortality of young born in the spring had also been high. The population estimate was double that of the previous year.

The low percentage of recaptures of beaver in the live-trapping program continues to indicate a high population turnover in areas of poor food supply. Sufficient data have been collected to show the sex and age ratios of colonies, as well as the physical character of dams and ponds.

An intensive investigation of food utilization in two colonies of beavers was continued. Aerial photos were taken of conditions surrounding 12 colonies in 1954. The work so far suggests that much of the beaver range in Algonquin Park is marginal and deteriorating, because of poor regeneration of favoured foods, forest succession and very high beaver population. Sex and age ratios suggest unstable colonies and transiency.

The new marten tagging techniques, developed in 1953, were proven effective in 1954 by the better recapture record. This improvement assures of more reliable data in the future on movements of marten in the intensive study of the distribution and movements of this valuable fur-bearer.

Wildlife Habitat Improvement

Previous work on an experimental plantation of seven species of Lespedeza located at the Southern Research Station showed that only one, L.bicolour natob, produced seed. Experimentation was started last year with this species in the hope that it will have a place in habitat improvement in southern Ontario latitudes.

A number of plantings of various species of trees and shrubs were made in 1954 on sites selected in 1953 in two south-western Ontario townships, to determine the ability of various species to withstand the shock of transplanting, to permit growth rate study, and to indicate what effect they may have on the wildlife in the immediate vicinity. During the year, drought caused severe losses in both townships. Weather appears to be the most important limiting factor, but grass competition is also severe.

Laboratory Studies

During the past year, 750 specimens comprising whole animals and various organs were examined as part of a continuing survey of disease conditions and anomalies of birds and mammals. The collection of parasites was reorganized. Eighty-five representative specimens were stained or cleared and mounted for reference. Approximately 150 reports were sent to the members of the field staff who had submitted specimens for examination.

Additional data were obtained on normal weights and measurements of birds and mammals to enable recognition of abnormalities. General conclusions may be drawn when a sufficient volume of these data is on hand.

A large number of waterfowl have been examined to determine the proportion which is carrying lead shot in the muscles. This may provide an index to the intensity of hunting to which the population is subjected, based on the assumption that the number of birds bearing shot from non-cripling wounds will be proportional to the amount of shot fired at the entire population. In the winter of 1954-55 birds of 15 species, totalling 568, were examined. The highest incidence of shot occurred in the greater scaup, followed by American goldeneye and canvasback.

Preliminary examination in 1953-54 of some moose ovaries suggested that the entire breeding history of a cow might be determined from a study of these organs. The ovaries of a number of cows from various parts of the province were examined, and the evidences of pregnancy in the ovaries were related to data on the age of cows and the number of embryos in their uteri. Among the important findings was the discovery of positive evidence of pregnancy in cow moose in the second year.

In an effort to find an accurate method for determining the age of beaver, a laboratory study was begun to relate physical characteristics to age.

Animals of known age are being examined, with reference to changes in size and shape of such parts as skulls.

The accumulation of data on the diagnostic characteristics of mammalian hairs continued. Assistance was provided to the District offices through the identification of hairs for law enforcement purposes.

A general survey of the role of predators in fish hatcheries was initiated by circularizing the District offices for information on the extent of losses at hatcheries to such predators as herons, kingfishers, and mink.

Big Game

The survey of snow conditions in relation to big game, begun in the winter of 1952-53, was continued through the winter of 1954-55. Data on snow depth from 84 stations operated by District personnel were compiled weekly.

The detailed study of the effects of depth and physical properties of snow on the movements of deer, initiated at the Wildlife Research Station in Algonquin Park in the winter of 1953-54, was continued. Variations in activity in relation to snow and weather conditions were determined by counts of various types of new trails made by the deer.

During the hunting season in November, 1954, complete records were obtained of hunting effort, distribution of kill, and of the sex, ages, and weight of 117 deer harvested in the South Cononto Township in the Tweed District.

During the summer of 1954, a survey by helicopter was made of Big Island, Lake-of-the-Woods, and it was found that the adult sex ratio of moose was not significantly different from 1:1; there were eight calves for every 10 adult cows.

The breeding experiments were continued in the colony of coyotes and hybrids at Midhurst. Sufficient data were obtained to clarify some points of identification of coyotes, timber wolves, domestic dogs, and hybrids.

P H Y S I C S

Research in the physical limnology of the Great Lakes was assigned as the major task for the physics group, this being part of the Great Lakes Research program. The research is aimed primarily at application to commercial fisheries, but the information is valuable to studies of lake pollution and of shore erosion as well.

Monthly synoptic surveys were made in Georgian Bay and in Lake Huron; those in the latter were done as a co-operative project with the University of Michigan. Measurements of lake temperatures, chemical constitution, and currents were made in preliminary assessment of the seasonal variations in the physical nature of these bodies of water. In time it will be possible to relate these changes to the movements and growth of populations of fish and the aquatic life upon which they feed. Arrangements were made for conducting similar surveys in lakes Erie and Ontario in 1955.

The Great Lakes studies were partially interrupted in the winter by a hydrological study of the floods from Hurricane Hazel. Field observations were made of the effects of the floods, and of the precipitation that caused them, in collaboration with other sections in the Division of Research and with the aid of other Divisions. The report based on these studies incorporated in addition a number of recommendations concerning flood control and flood warnings.

M E C H A N I C A L S E C T I O N

The projects and other work carried out by the Mechanical Section are described below.

Conifer Leaf Still

The construction of this still for extracting essential oils from conifer leaves was completed in June 1954. During the summer months, numerous tests were conducted, and in September the apparatus was set up at one of the Ontario Paper Company's camps about 50 miles north of Heron Bay.

Due to the special features incorporated in the design of this apparatus, the oil extraction time was reduced from six to four hours.

The oil yield was not as high as expected. There may have been two reasons for this: (1) Extraction from summer leaves may be lower than from spring leaves, and (2) the boiler capacity was insufficient. A more suitable boiler has since been procured.

As a result of these tests, a new type of still is being designed, having a capacity of about 800 lbs. of raw material per hour. This still will operate on the continuous process principle, which, it is hoped, will still further cut down on the oil extraction time. For ease of transport, this apparatus will be trailer-mounted, so that it can be easily set up at any suitable pulp cutting operation.

If an economical apparatus can be produced for extracting the essential oils from conifer leaves, it will be possible to utilize large quantities of raw forest material which are now going to waste.

Post Peeler

A post peeler, to be used in the County forests of the Lake Simcoe District, was produced in the winter of 1954. A machine of this capacity is calculated to peel a maximum of 38 posts per hour. It can be driven by any tractor equipped with a power take-off.

Tree Baler

An electrically operated tree baler was produced for studying new methods of shipping nursery tree stock. This machine will turn out bales up to 18 inches in diameter. It has also been found that baled trees are well suited for dropping from aircraft to remote planting areas. This machine will be tested at the provincial nurseries during the spring shipping season.

Pack Tractors

Several minor modifications were made in the commercially produced pack tractors.

Engineering Services

Layout plans and specifications were prepared for the diesel-powered 40-foot steel boat built for fisheries research. The used diesel marine engine was reconditioned at this station. In addition, suitable personnel were supplied

to test the completed boat and help to deliver it from Goderich to South Baymouth.

The following miscellaneous services were also rendered:

Construction of a 9-foot portable camera tripod for photographing sample plots.

Construction of a portable deer trap.

Construction and repair of research instruments and equipment.

Equipping the Lake Simcoe District snowmobile with skis.

Building equipment for treating silver maple fence posts.

In addition, numerous repair jobs were carried out, and minor pieces of equipment were constructed throughout the year.

S T A T I S T I C A L D E S I G N A N D A N A L Y S I S

The work of the Statistics Section was centered around the following projects:

1) Nursery Inventory.-- Extensive sampling was done in several nurseries and the data submitted was analysed. These partly confirmed previous recommendations, partly gave rise to new ones. A detailed report on the whole problem is forthcoming.

2) Cull and Grading.-- The survival in the first experiment of a series of three has been observed and is now partly analysed. Further work on this experiment is now under way. A second experiment has been set out and survival figures can be expected by this fall.

3) Red Pine Pathogens.-- An experiment with thiram pelleting of red pine seeds showed significant decrease of mortality as the effect of treatment.

4) A detailed report on the effect of planting depths and methods on survival of conifers was prepared and published as Research Report No. 26.

5) An experiment on rooting of poplar cuttings was analysed, showing a significant difference between species. The position of the cuttings showed significant differences. Cuttings near the butt end proved better rooters.

6) An analysis of the preference of black weevils for the roots and stems of two kinds of banana trees -- Gross Michel and Bout Rond. Black weevils respond to Gross Michel roots and Bout Rond roots to a greater extent than to Gross Michel

stems and Bout Rond stems respectively. The extent of this effect is significantly different. The preference of the weevils for roots is proportionately greater in the case of Bout Rond than in the case of Gross Michel.

- 7) A regression analysis of the weight and length of the ammocoetes of two species of lampreys.
- 8) Effect of soaking seed in water and alcohol on germination. The results were inconclusive.
- 9) Effect of methocel treatment on survival of transplant stock. It showed that survival decreased with rising concentration of methocel and the relationship is adequately described by a straight line.
- 10) Effect of calcium lignose pelleting and Filcoat pelleting on germination of black spruce and red pine seed. Within black spruce, unpelleted seeds give higher germination than pelleted ones. Also calcium pellets gave better germination than Filcoat. There is no evidence that seeds once pelleted by the respective methods and then subjected to a solvent differ from each other as far as germination is concerned. Within red pine, unpelleted seed shows higher germination but calcium and Filcoat pellets show no significant differences.

Other Work

The section supplied designs for experiments:

- a) on root and top pruning of transplant stock
- b) on substitutes to sphagnum moss for packaging transplant stock
- c) on rooting and seeding of basswood
- d) on soil treatments to combat damping-off of red pine.

Statistical assistance was given in the analysis of data in connection with an economic survey of the Lake Erie fishing industry.

B R A N C H E S O F W O R K

The work of the Division in 1954-55 was divided among three main sections: Forestry, Fisheries, and Wildlife. A Mechanical section served all. In addition there were smaller groups: Tree Breeding, Nursery Practices, Statistical Analysis, and Physics.

Four forest research co-ordinators made their headquarters at Port

Arthur, Cochrane, Pine Springs, and Maple; and three fisheries research co-ordinator were responsible for the four Great Lakes -- Ontario, Erie, Huron, and Superior.

Research funds were divided among the following interests:

	Per cent
Fish and Wildlife	54
Timber Management	31
Reforestation	13
Forest Protection	1
Lands	1

STAFF

(at 31st March, 1955)

Professionals:

Foresters	18
Biologists	10
Others	7

Laboratory technicians, clerks,

stenographers, and other assistants 36

Maintenance staff, including cleaners 18

Total 89

Summer Staff, 1954

Students 40

Staff Classification

Permanent 48

Temporary 9

Casual 32

Total 89

REPORTS

During the fiscal year 1954-55 some 54 reports were prepared. Many of these were interim, file, and progress reports for use within the Department.

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DIVISION of SURVEYS and ENGINEERING

DIVISION OF SURVEYS AND ENGINEERING

Magnitude of new investments and developments of the natural resources of the Province has increased the work in all of the branches of this Division.

The largest programme in recent years of the extension of the network of meridian and base lines for the control and mapping from aerial photography was undertaken during the year. The Thirteenth Base Line at approximate latitude 52 degrees and 30 minutes was surveyed, extending from the Ontario-Manitoba Boundary east, a distance of one hundred and seventy-four miles. At approximate longitude 92 degrees a meridian was surveyed north from the Thirteenth Base Line a distance of forty-eight miles to establish the Fifteenth Base Line. This base line was produced west a distance of thirty-two miles. The sale of Crown lands for summer resort locations made it necessary to increase the number of resurveys of old township surveys to establish obliterated lot corners.

There was a marked increase in the demand for maps published by this Department and those of the National Topographical Series. The District Offices have prepared tracings on a scale of two miles to an inch of areas not covered by the National Topographical Series. Booklet (Form S. 82) was issued illustrating the definition of frontage, side, width, regular area, irregular area, minimum and maximum areas of land to be disposed of for private or commercial summer resort locations on Crown lands. A Manual of General Survey Instructions (Form S. 84) was prepared and issued governing the survey of summer resort locations and water lots as required by this Department.

A new map was prepared and published showing the Electoral Districts in accordance with the provisions of the Act respecting Representation of the People in the Legislative Assembly. Revised base maps are being prepared for the Districts of Algoma and Sudbury, using type-face lettering and figures instead of the hand-drawn lettering formerly used. The map of islands in Timagami Lake has been revised showing the details of the topography obtained

from aerial photographs.

Owing to most unfavourable photographic weather, only nine thousand square miles were photographed. Fortunately, weather conditions permitted photographs to be taken shortly after the excessive floods in October. These photographs were made available to assist in estimating the damages and planning for rehabilitation of the areas affected.

Due to the interest in conservation of water resources in the southern part of the Province, new dams have been constructed and old dams improved or rebuilt. This has materially increased both the office and field work of the engineering branch.

LEGAL SURVEYS

Survey Instructions issued during the period between April 1st, 1954 to March 31st, 1955:

General

1. Retracement survey to establish the allowance for road between concessions 2 and 3, across lots 16, 17 and 18 inclusive, in the Township of Ashby, County of Lennox and Addington, relative to the finalization of the surveys of summer resort locations.
2. Retracement survey of the south boundary across lots 21 to 25 inclusive and the allowance for road between lots 25 and 26, concession 1, in the Township of Conger, District of Parry Sound, to facilitate the finalization of the surveys of summer resort locations.
3. Survey to determine the boundary between the Townships of McFarlan and Alderson, District of Algoma, in connection with timber operations; part of the cost of survey borne by the Upper Canada Lumber Company, and the Newago Timber Company.
4. Survey of part of the Thirteenth Base Line for a distance of approximately 94 miles, in the District of Kenora, Patricia Portion, for the purpose of establishing control for aerial mapping, under The Canada Forestry Act.
5. Survey of summer resort locations in the County of Haliburton.
6. Survey of summer resort locations in the districts of Parry Sound and Muskoka.
7. Survey of summer resort locations in the counties of Haliburton and Simcoe and the districts of Parry Sound and Muskoka.
8. Subdivision survey of parts of lots A to E inclusive, concession C, Township of Carling, District of Parry Sound, for summer resort purposes.
9. Retracement survey of the allowance for road between concessions 10 and 11, across lots 3 to 10 inclusive, Township of Methuen, County of Peterborough, to facilitate the survey of a right of way for the Canadian Pacific Railway, survey costs over \$100.00 per mile to be borne by the Canadian Pacific Railway.

10. Survey of a meridian south from the south-east corner of the Township of Schwenger, District of Rainy River, a distance of approximately four miles, and to survey summer resort locations in the District of Rainy River.
11. Survey of part of the Thirteenth Base Line for a distance of approximately 83 miles in the District of Kenora, Patricia Portion, for the purpose of establishing ground control for aerial mapping, under The Canada Forestry Act.
12. Survey of summer resort locations in the District of Sudbury.
13. Retracement surveys to permit finalization of the surveys of summer resort locations in the counties of Haliburton and Simcoe and the districts of Parry Sound and Muskoka.
14. Subdivision surveys in the townships of Croll and Lindsley and south of O'Meara Township, District of Thunder Bay, for summer resort locations.
15. Subdivision survey of part of lots 6 and 7, concession 5, Township of Airy, District of Nipissing, for residential purposes.
16. Inspection of portions of the survey of part of the Thirteenth Base Line, District of Kenora, Patricia Portion, surveyed under the provisions of The Canada Forestry Act.
17. Subdivision surveys for summer resort locations on Middle Shebandowan Lake, Township of Hagey, District of Thunder Bay.
18. Subdivision survey on One Island Lake, in the Township of Fowler, District of Thunder Bay, for summer resort locations.
19. Survey of additional road allowances in the Township of Methuen, County of Peterborough, in connection with the right of way for the Canadian Pacific Railway. Survey costs over \$100.00 per mile to be borne by the Canadian Pacific Railway.
20. Retracement survey of the south boundary of lot 24, Addington Road West, Township of Denbigh, County of Lennox and Addington, required in connection with timber operations.
21. Survey of the boundaries of Mining Location 10X, Township of Oliver, District of Thunder Bay, in connection with a park reservation at Kakabeka Falls.
22. Subdivision survey north of Ear Falls, District of Kenora, Patricia Portion, for residential purposes.
23. Retracement survey of certain allowances for road in lots 25 to 32, concessions 5 to 9, Township of McClintock, County of Haliburton, for the purpose of preparing a revised plan of part of the Township of McClintock.
24. Subdivision survey at Hillspport, on the Canadian National Railway, District of Thunder Bay, for residential purposes.
25. Restaking of certain lot corners in the Townplot of Gowganda, Township of Nicol, District of Timiskaming, for disposition of lots for residential purposes.
26. Survey to establish certain lines in lots 11 and 12, concessions 7 and 8, Township of Faraday, County of Hastings, required in connection with timber operations.

27. Retracement survey of the east boundary of the Township of Falconbridge, District of Sudbury, for mining purposes, part of the costs of survey borne by the Department of Mines.
28. Resurvey of Island 427P, Lake of the Woods, District of Kenora, with regard to the disposition of Crown lands.
29. Survey of a meridian a distance of 48 miles and part of the Fifteenth Base Line a distance of approximately 42 miles, in the District of Kenora, Patricia Portion, for the purpose of establishing ground control for aerial mapping, under The Canada Forestry Act.
30. Retracement survey of certain lines in the vicinity of Pencil Lake, Township of Cavendish, relative to the finalization of the surveys of summer resort locations.

Municipal Surveys

- No. 845 - Re-establish and mark with permanent monuments, the north-east and south-east corners of lot 48, concession 4, and the north-west and south-west corners of lot 49, concession 4, Township of Ancaster, County of Wentworth.
- No. 846 - Re-establish and mark with permanent monuments, certain angles in lots 2, concessions 3 and 4, Township of Balfour, District of Sudbury.
- No. 847 - Re-establish and mark with permanent monuments the allowance for road between lots 8 and 9, concession 2, known as McNeilly's Road, in the Township of Saltfleet, County of Wentworth.

Private Surveys on Crown Lands

Under authority of the Public Land Regulations, 1670 summer resort locations were surveyed and the returns of survey filed in the Department for examination and approval. 709 surveys of this number were surveyed under direct departmental instructions to the surveyor where the applicant paid in the survey fee to the District Office, in accordance with the provisions of the Public Land Regulations. The following is a breakdown of the summer resort locations surveyed in the various Administrative Districts in the Province:-

<u>Administrative District</u>	<u>Crown Surveys</u>	<u>Private Surveys</u>
Algonquin	18	122
Chapleau	Nil	10
Cochrane	Nil	34
Fort Frances	17	13
Geraldton	Nil	10

<u>Administrative District</u>	<u>Crown Surveys</u>	<u>Private Surveys</u>
Gogama	N11	2
Kapuskasing	N11	N11
Kenora	N11	132
Lake Simcoe	76	29
Lake Huron	N11	2
Lake Erie	N11	11
North Bay	46	49
Parry Sound	128	116
Port Arthur	9	61
Quinte	26	105
Rideau	N11	N11
Sault Ste. Marie	46	72
Sioux Lookout	N11	17
Sudbury	167	69
Timiskaming	2	27
Trent	168	55
White River	<u>6</u>	<u>26</u>
Totals...	709	961 ---- 1670

SURVEY RECORDS AND MAP DISTRIBUTION

A general increase of 40% in the distribution of all types of lithographed maps is to be noted for this year. White prints were made from tracings drawn by the District Offices on a scale of 2 miles to the inch, covering areas where only small scale lithographed maps are available. Similar prints were substituted for the Georgian Bay Island lithographed maps, as the stock has been exhausted. The increased distribution is due to the increased demand for maps, covering the Haliburton and Muskoka areas and the new Provincial Topographic sheets now available for North-eastern Ontario, and many of the army ordnance maps on the scale of one mile to the inch (1:63,360) are being converted to the 1:50,000 scale, and into east and west half sheets, requiring the distribution of two maps in place of one.

The distribution of various District and other maps produced by this Department totalled 25,264 copies; of these, 1,250 copies were distribution for official Departmental use. The distribution of map sheets produced by the Dominion Department of Mines and Technical Surveys and the Army Survey Establishment Bureau Department of National Defence for resale to the public or for official use of this and other Departments of the Ontario Government increased to a total of 34,060. Of these, 4,084 were supplied to this Department including District Offices, for official use, by the Department of Mines and Technical Surveys, without charge. Seven thousand, one hundred and twenty-nine copies were purchased by District Offices for resale purposes. An additional number of 4,320 map sheets were distributed for the official use of this or other Departments of the Provincial Government from the purchased stock of the National Topographic Series and the stock of Provincial Topographic Maps.

The Provincial Topographic Map sheets as produced by the Army Survey Establishment Bureau, Department of National Defence, Ottawa, from aerial photography supplied by the Forest Resources Inventory, increased in distribution by 48%. A total of 14,223 were distributed. The "Foleyet" sheet between latitudes 48° and 48° 30' and longitudes 82° and 83°, was received. The "Gogama" sheet on the scale of 4 miles to the inch was completed by the Department of Mines and Technical Surveys and made available for distribution.

The following map sheets on the scale of 2 miles to the inch were received in proof form only:

Elsas	Latitude 40° 30' to 49° 00'	Longitude 82° 00' to 83° 00'
Kapuskasing	Latitude 49° 00' to 49° 30'	Longitude 82° 00' to 83° 00'
Opasatika	Latitude 49° 30' to 50° 00'	Longitude 82° 00' to 83° 00'
Opasatika Lake	Latitude 49° 00' to 49° 30'	Longitude 83° 00' to 84° 00'
Hearst	Latitude 49° 30' to 50° 00'	Longitude 83° 00' to 84° 00'

Summary

The summary of the total quantity of lithographed maps distributed in this fiscal year is as follows:

National Topographic Series	48,283
Map 20A (free issue)	3,045
District Maps	12,137
Island Maps	607
Miscellaneous Maps	<u>9,475</u>
TOTAL -----	<u>73,547</u>

Six thousand, two hundred and eighty letters covering requests for maps and survey records were handled during the year. This was an increase of approximately 800 and is exclusive of Departmental or District Office requests. Direct sales totalled 5,950 showing a marked increase. A policy of payment in advance was adopted and this eliminated making invoices for small amounts. An electric cash register was installed and much of the clerical work has been eliminated.

Photostat paper used increased by 19% to a total of 55,125 square feet. Included in this are some 5,000 card references to surveyors' letters for filing in the new survey record catalogue; 300 photostatic copies of quarter session road descriptions and 175 of the very old field note books, comprising approximately 22,000 pages. This completes the photostating of the very old field note books which was commenced in 1951 and which photostatic copies of field notes will now be used for reproduction purposes to save handling the originals.

An amount of 210,162 square feet of sensitized paper and linen was used in the reproduction of various tracings of topographic maps, township prints, miscellaneous survey plans and Georgian Bay island map sheets by the Dry Process Printing method. This is an increase of 83% of that used last year. This large increase in reproductions is due mainly to large-scaled activity in hydro, highway, summer resort and other private surveys, as well as that many of the District Offices of this Department had produced tracings on the scales of one, two or four miles to the inch of their administrative districts for purposes of forest protection, game and fish administration and sale to the public. These sectional tracings were reduced photographically from original hand-drawn maps on the scale of one mile to the inch and, in most cases, made by the "Litholine" process

commercially. Under this process, 36 sectional tracings, reduced from the Forest Resources Inventory planimetric base maps to the scale of one-half mile to the inch, to be used as Crown land plans, were completed.

A summary of the dry process material used as follows:

Black and blue line paper prints	-	201,892 square feet
Transparent linen duplicates	-	4,380 square feet
Opaque linen printing	-	3,890 square feet

Total	-	210,162 square feet
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Eighteen thousand photostat pages of very old field notes were bound into 225 field note books. Field notes of 27 current surveys and two volumes of instructions to surveyors were also bound. In addition to this, approximately 100 miscellaneous books or volumes of various types were bound or repaired for the various divisions of the Department. The reproduction of and reference to original survey records continued to be a major item due to the heavy demand by the public, land surveyors in private practice, the Department of Highways and the Ontario Hydro-Electric Power Commission. Twenty-five field note books of Crown surveys and two sets of municipal survey field note books as well as 96 Crown survey plans and 26 municipal survey plans were registered, catalogued and filed. A less complicated and more efficient system of cataloguing rolled plans has been inaugurated. Catalogue sheets have been prepared for 1,636 plans and 7,600 cards have been filed under this revised system. A card index system has been prepared to record surveyed parcels under the surveyor's designation number. Six hundred and fifty recently surveyed parcels were recorded in addition to others transferred from old records. Four hundred and seventy-five plans of survey and 24 field note books comprising four reels of 35 mm negative microfilm and 104 reels of positive microfilm were completed this year.

In continuing the programme of the preservation of old original survey plans, two of the old Upper Canada partial plan volumes comprising approximately 250 plans and 40 descriptions were remounted by a commercial firm on individual boards with a cellulose wash finish applied to the surface. These were re-indexed. An Historical Atlas and 39 old miscellaneous survey plans were remounted. Approximately 300 reproductions

of survey plans of subdivisions and other miscellaneous maps were also mounted. These were for filing in the Registry and Land Titles Office, the Patents Branch of this Department and for use in various departmental offices.

Supplies and equipment were provided for parties employed on the surveys of base and meridian lines, retracement surveys and surveys of summer resort locations. One thousand, two hundred and fifty surveyors' iron bars in the standard sizes of 1" x 1" x 48" x 3/4" x 30" were purchased and distributed throughout various District Offices for subdivision and summer resort surveys. Two hundred and ninety-nine standard Crown survey posts, 12 municipal survey posts and 1,036 aluminum preliminary survey identification plates were shipped to various districts for survey work.

GEOGRAPHIC AND MAP PUBLICATION

In co-operation with the Army Survey Establishment, Department of National Defence, the Geographic Office of this Division completed the basic drawings and colour plates required for the reproduction of two more maps of the National Topographic Series. These drawings were returned to Ottawa for final reproduction.

Revision of nomenclature and verification of place names was completed for 11 maps of the National Topographic Series, as requested by the Department of National Defence. Similar work was completed on several other maps and charts as requested by the Department of Mines and Technical Surveys. Three maps were revised in the same manner for the Ontario Department of Mines.

The checking and revision of the nomenclature relative to the Province as required by the Canadian Board on Geographical Names, for the purpose of publishing a Gazetteer for South-eastern Ontario, was continued throughout the year.

Revision and incorporation of new information into our card index of geographical names within the Province was continued, about 2000 name cards were revised and some 4000 new cards were added.

The preparation of the fair drawings for the new base outline for our map 32a - Districts of Algoma and Sudbury has been continued and it is anticipated that reproduction will be completed in 1955 - 56.

As requested by the Chief Election Office for the Province, our map 33a - Electoral Districts of the Province of Ontario, was completely revised in accordance with the new Representation Act passed in 1954, including the compilation of a new inset map showing the Electoral Districts of Metropolitan Toronto. 4,000 copies of this map were reproduced in readiness for the Provincial Election taking place in June 1955.

Coincident to the above map, some 25 copies of maps of Toronto, Windsor, Hamilton, London and Ottawa were marked up showing new electoral boundaries in those areas. A complete revision of the booklet "Excerpts from the Canada Official Postal Guide" was made in readiness for printing also in preparation for the forthcoming 1955 election.

Reprint editions were made from existing reproduction plates for the following maps:

- Map 47 - Algonquin Provincial Park; scale 2 miles to 1 inch. Recent changes in the boundary of the Park are shown on this edition; 7500 copies were reproduced.
- Map 24a - Districts of Rainy River and Kenora; scale 8 miles to 1 inch, 4,000 copies. Recent changes in boundaries of Mining Divisions and new lines of survey were incorporated into this edition.
- Map 21c - District of Timiskaming and parts of Sudbury and Nipissing; scale 4 miles to 1 inch, 4,000 copies.

Reference work and recommendation of nomenclature, to be shown on base maps of the Forest Resources Inventory, was completed on 174 maps of this series.

AERIAL SURVEYS

Due to adverse weather conditions, the amount of photography obtained was the lowest in recent years. The area affected by the excessive flood conditions in October was photographed on scales of four hundred to six hundred feet.

The mapping was completed on a scale of one-half mile to an inch of the area between latitudes 50° 30' and 52° 00' from the Quebec boundary to longitude 88°, having an area of 41,700 square miles. The photography and mapping of an area of 16,000 square miles on a scale of one quarter mile to an inch, which had been contracted was also completed.

Mosaic panels, seven and one-half minutes in latitude and fifteen minutes in longitude have been prepared of the southern portion of the Province. An area of nine thousand, three hundred square miles has been completed. While these panels are prepared primarily to obtain the forest resources, they are being used in land use planning and the development of all natural resources.

<u>Vertical Photography</u>	<u>Area Square Miles</u>
Forest Resources Inventory	8,333
Flood damaged area and other Departments	<u>717</u>
	9,050
<u>Mapping</u>	<u>Square Miles</u>
Planimetric - scale 40 chains = 1 inch	41,670
Mosaic Panels - scale 20 chains = 1 inch	9,300
<u>Total Aerial Photography and Sketching by Department from 1924 to March 31st, 1955 (does not include areas photographed by contract)</u>	
Aerial Sketching	----- 26,903 square miles
Oblique Photography	----- 10,780 " "
Vertical Photography	----- 168,784 " "

ENGINEERING

During the year plans of 19 dams to be constructed for timber operations, storage reservoirs, conservation and diversion of streams were examined and approved. Licences of Occupation were issued for 6 dams to be used to provide storage reservoirs for power developments.

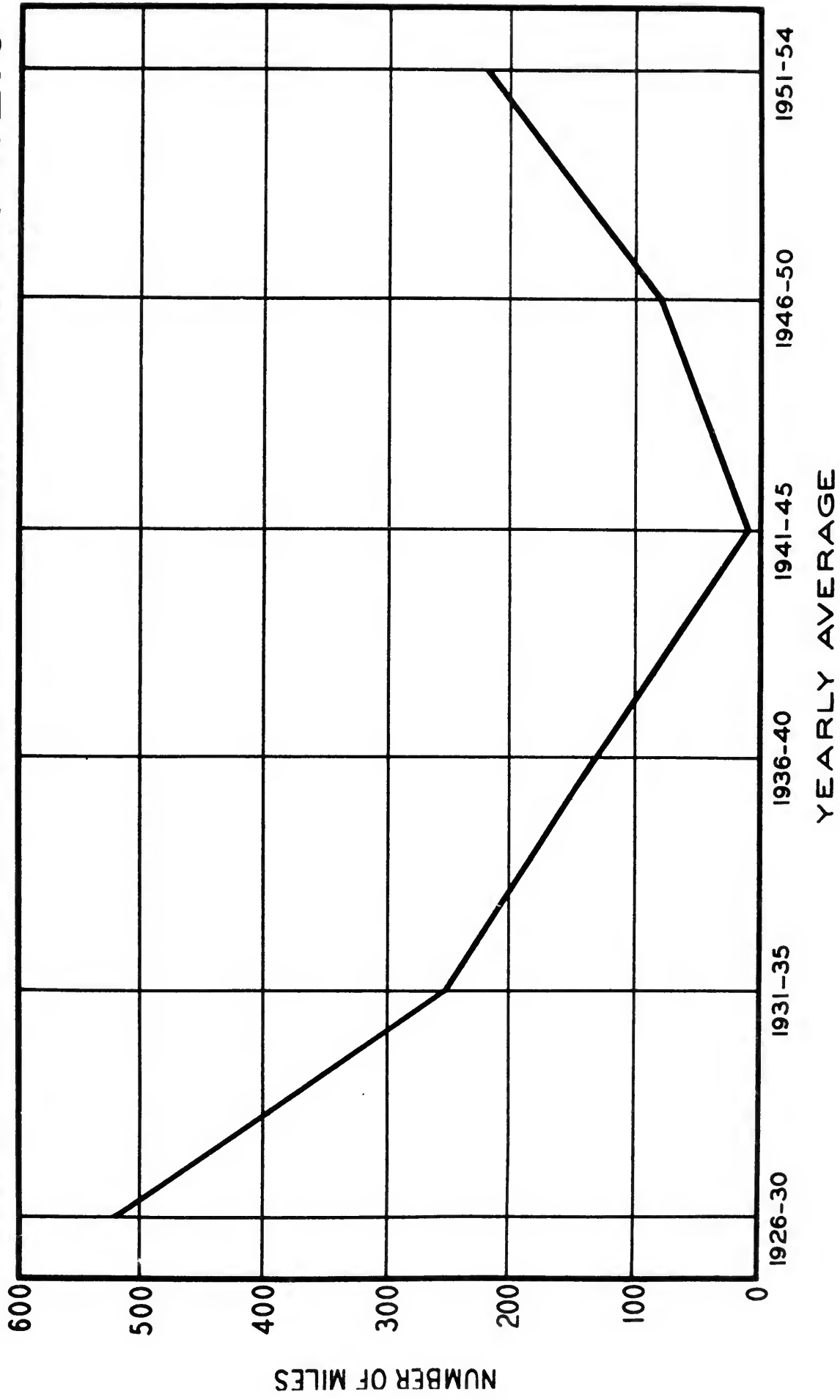
Two new Water Power Lease Agreements were prepared and issued for leases which had expired during the year.

Many dams which had formerly been used in connection with lumbering operations are now in a state of disrepair. The Department of Public Works rebuilt or repaired five dams at the request of this Department in the interests of conservation, propagation of fish and wildlife and in connection with forest protection. During the year, surveys of the sites and hydrologic studies were made in connection with 9 dams requested by this Department for re-construction in the summer of 1955. The information so obtained enabled the Department of Public Works to carry out design and preliminary engineering work prior to the opening of the construction season.

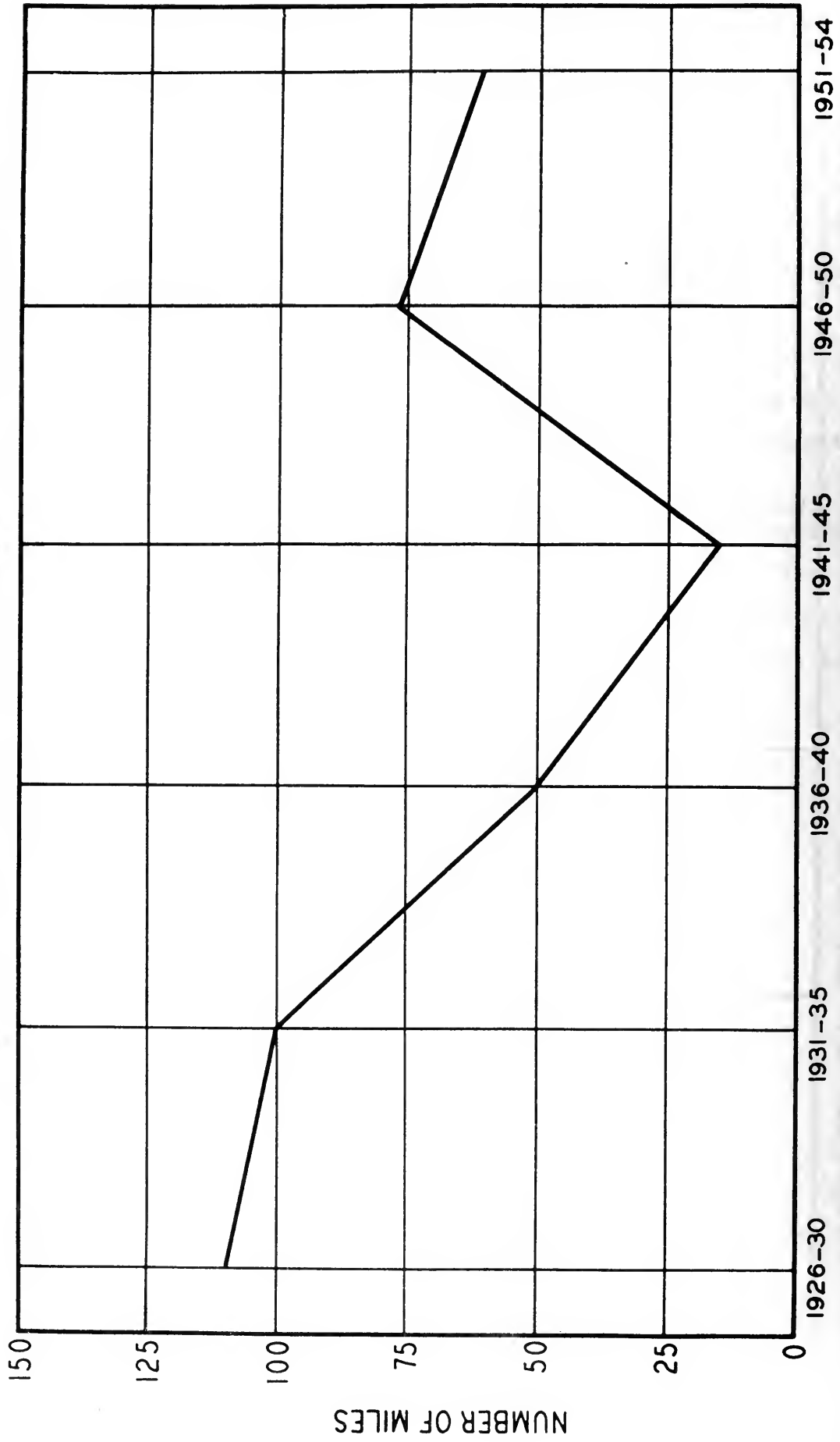
Inspections were made of the construction, operation and maintenance of dams which are operated by the staffs of the Department through the various District Offices. Throughout the Province there are now 60 dams operated and regulated by this Department.

There has been a decided increase in the past year in requests from the public for information concerning the construction of private dams and farm ponds and the requirements of this Department with regard to approval of such construction. Copies of The Extracts from The Lakes and Rivers Improvement Act were sent to all applicants.

TREND OF BASE AND MERIDIAN LINE SURVEYS



TREND OF RETRACEMENT SURVEYS

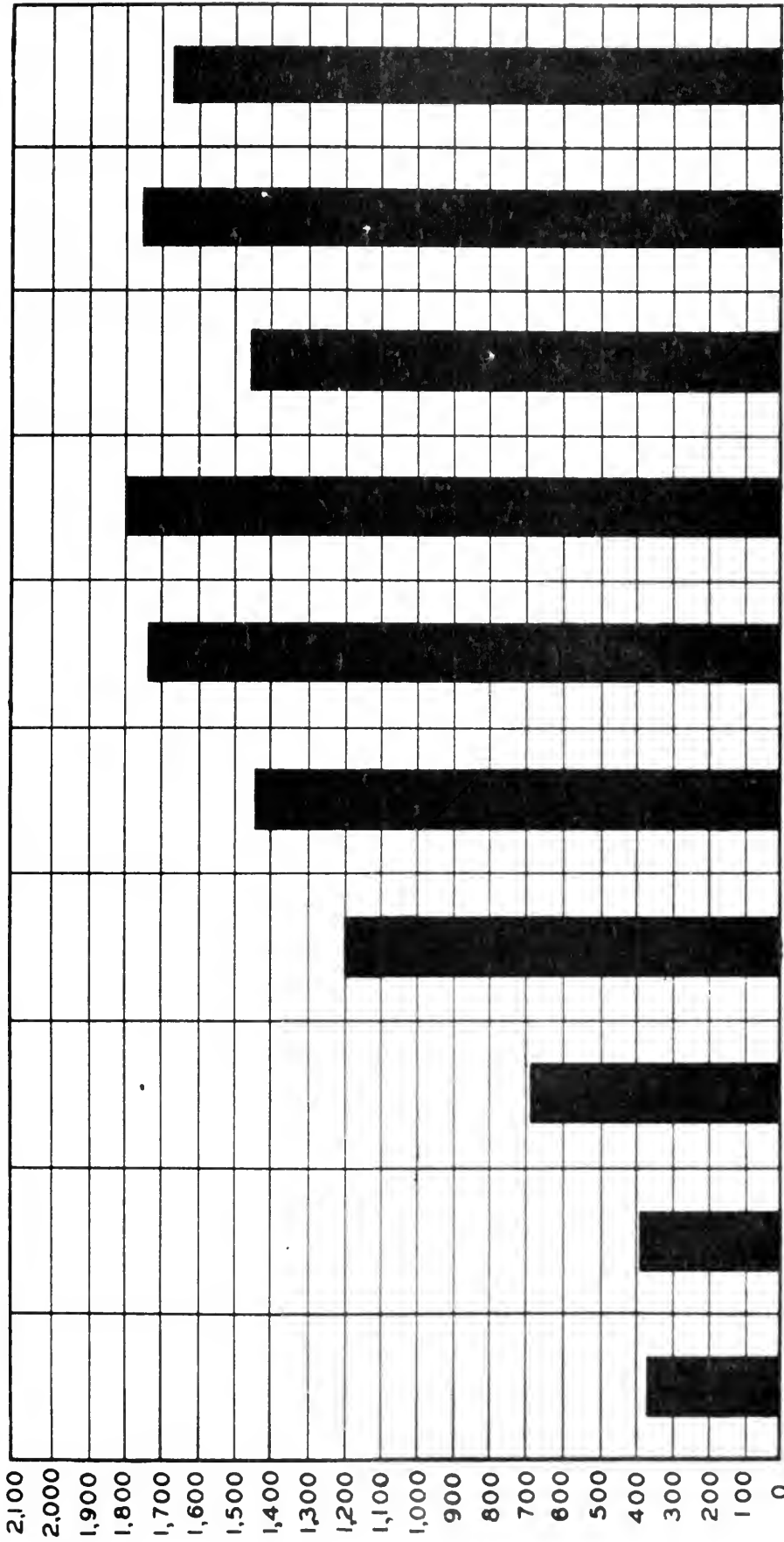


YEARLY AVERAGE

SURVEYED SUMMER RESORT LOCATIONS ON CROWN LAND

INDIVIDUAL SURVEYED SUMMER RESORT LOCATIONS

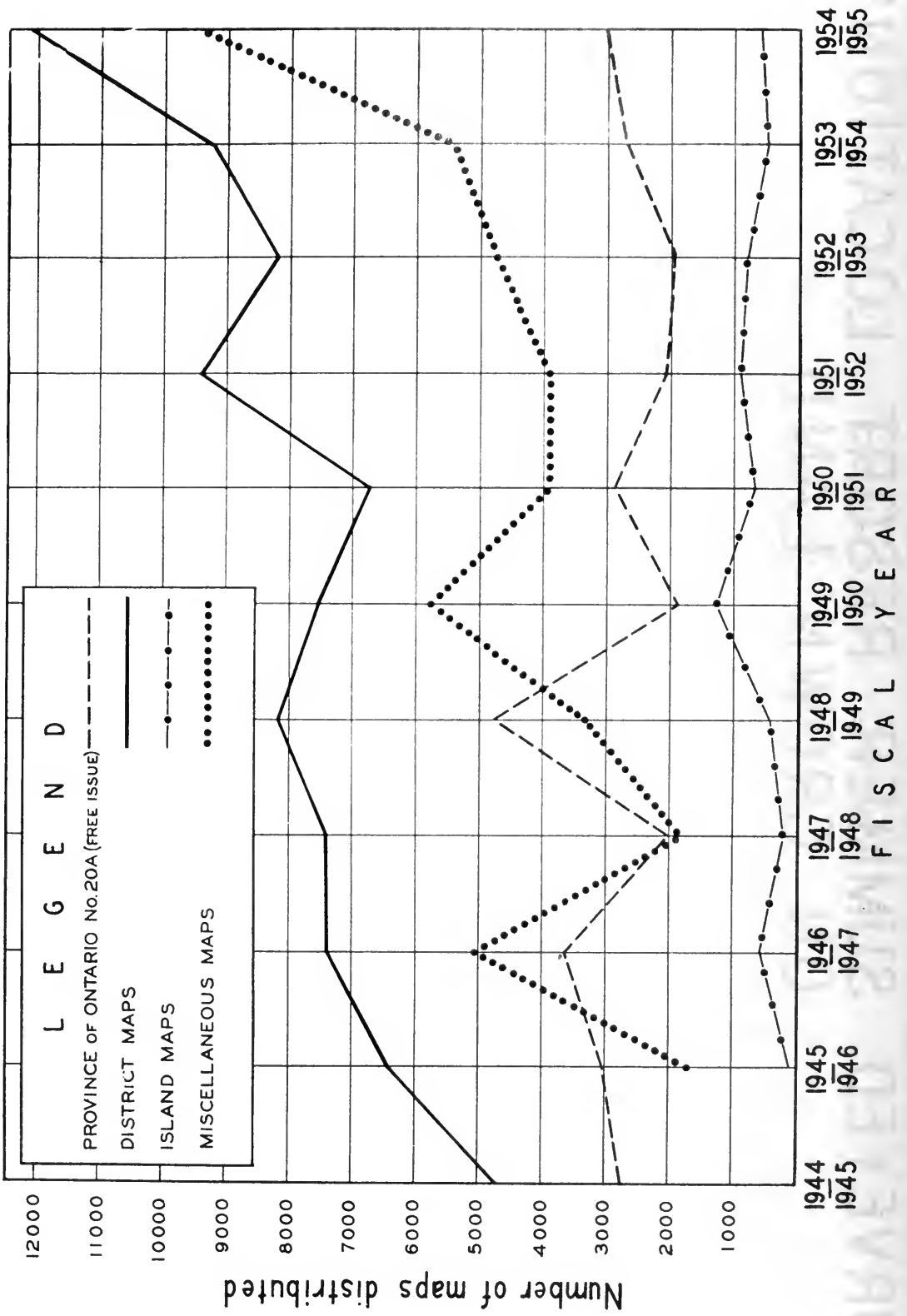
EXAMINED BY THE DIVISION OF SURVEYS AND ENGINEERING
DEPARTMENT OF LANDS AND FORESTS



1945-46 1946-47 1947-48 1948-49 1949-50 1950-51 1951-52 1952-53 1953-54 1954-55
FISCAL YEAR ENDING MARCH 31ST.

TREND OF MAP DISTRIBUTION

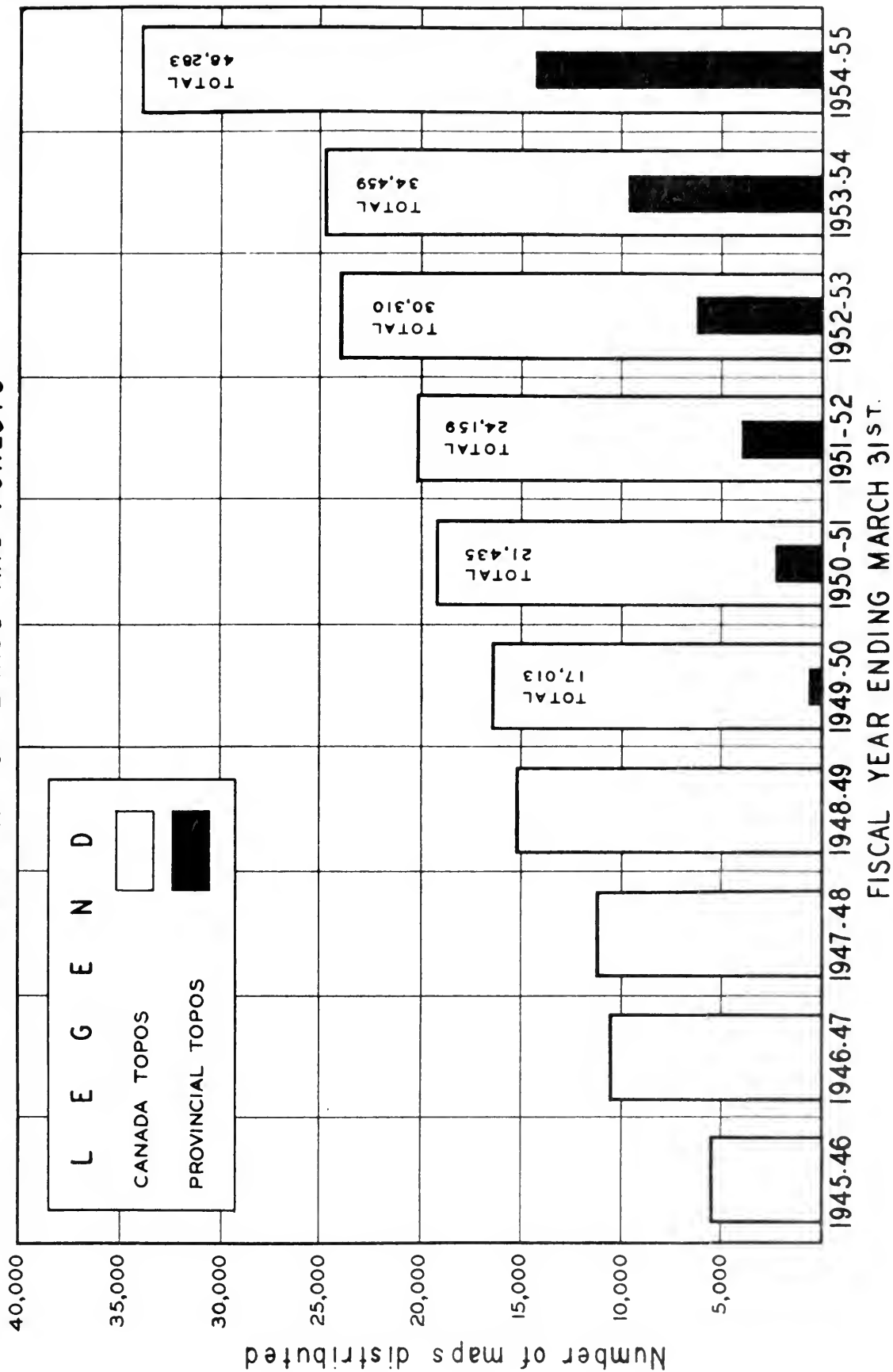
PROVINCIAL ISSUES
DEPARTMENT OF LANDS AND FORESTS



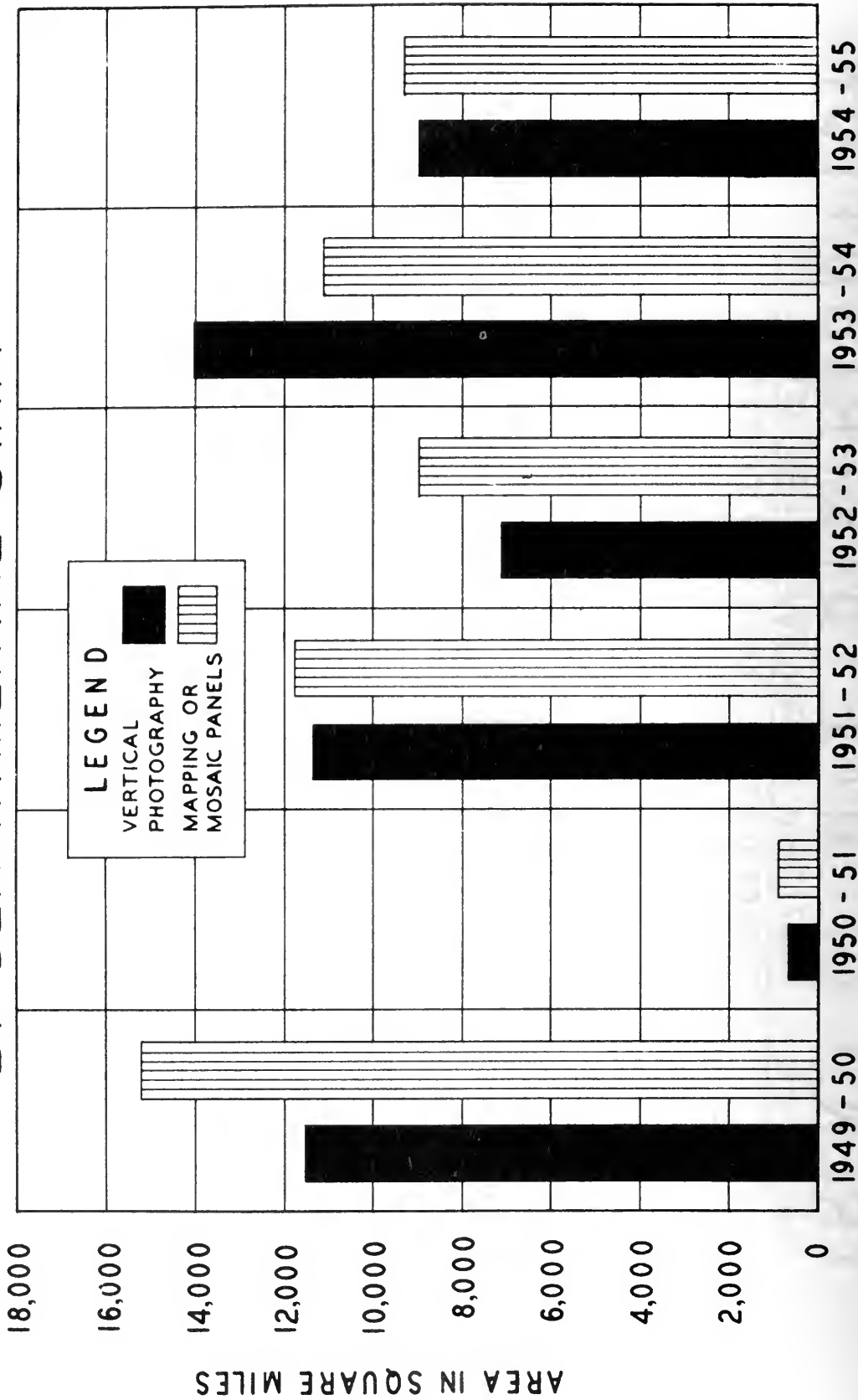
2066/REVISED/STANDARD/PROVINCIAL ISSUES

TREND OF MAP DISTRIBUTION

NATIONAL TOPOGRAPHIC SERIES
DEPARTMENT OF LANDS AND FORESTS

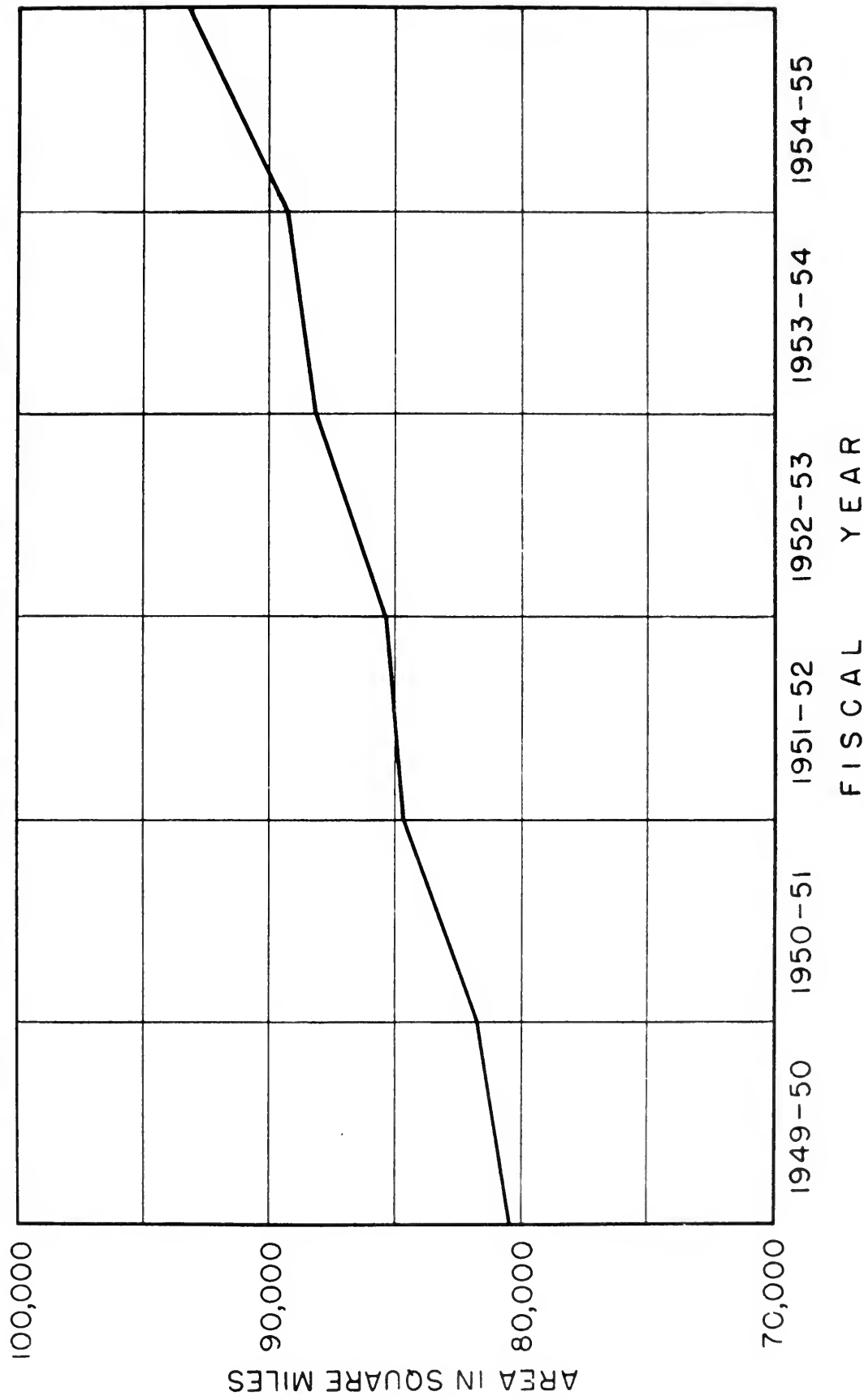


VERTICAL PHOTOGRAPHY AND MAPPING FOR FOREST RESOURCES INVENTORY BY DEPARTMENTAL STAFF



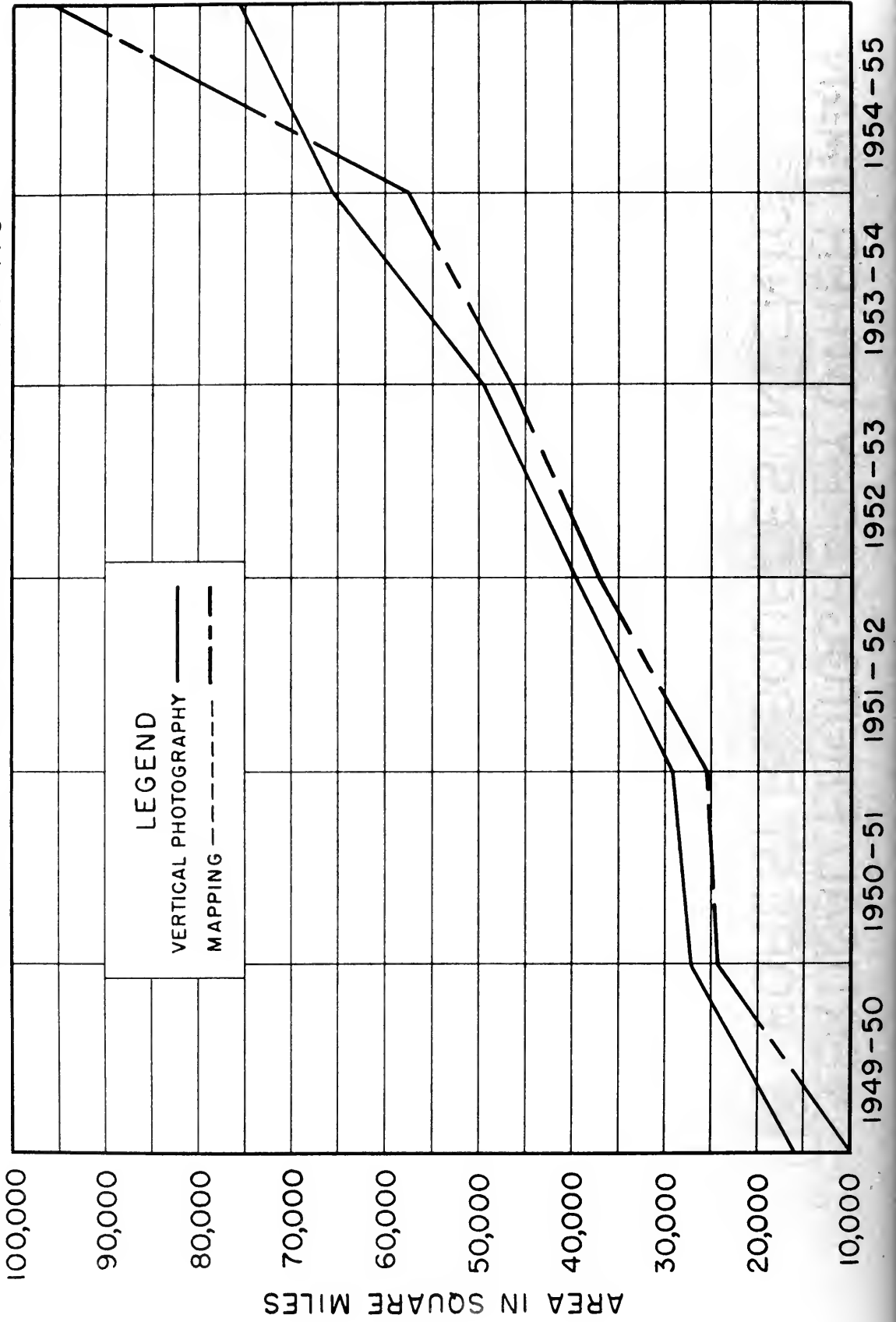
MAPPING AT 40 CHAINS = 1 INCH - 41,670 SQUARE MILES FOR YEAR 1954 - 55

VERTICAL PHOTOGRAPHY OTHER THAN FOREST RESOURCES INVENTORY



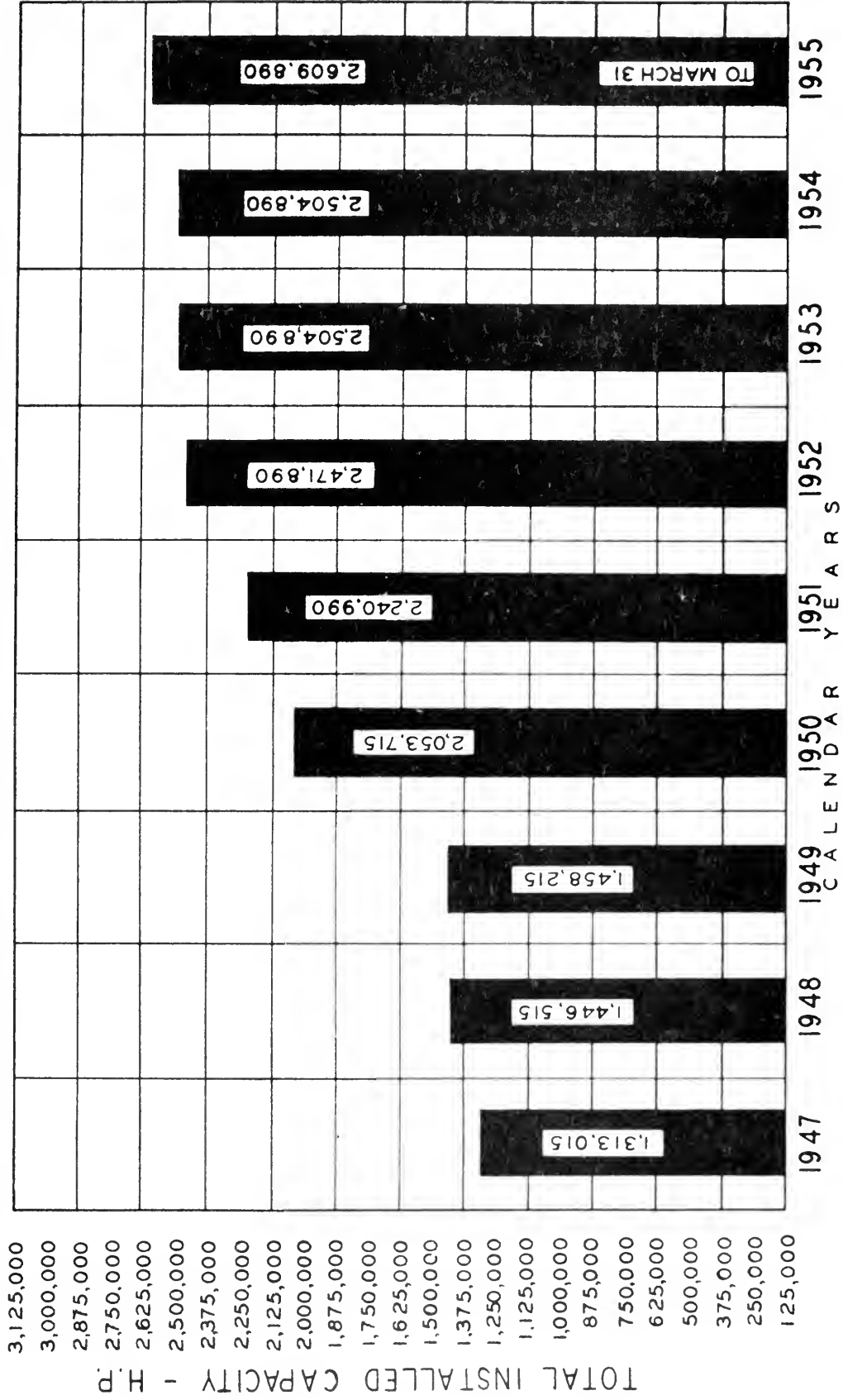
PROGRESS CHART

VERTICAL PHOTOGRAPHY AND MAPPING



INSTALLED CAPACITY IN HORSE-POWER

OF ALL PLANTS UNDER CROWN LEASE FOR YEARS 1947 - 1955



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MS1011ED CYBCLM HOB22 BOWEB

M. B. Morrison

Annual Report

OF THE MINISTER OF LANDS AND FORESTS

OF THE PROVINCE OF ONTARIO

for the fiscal year ending

MARCH 31, 1956

CONTAINING THE
DETAILED REPORTS OF
THE DIVISIONS OF

ACCOUNTS

AIR SERVICE

FISH AND WILDLIFE

FOREST PROTECTION

LANDS

LAW

OPERATION AND PERSONNEL

PARKS

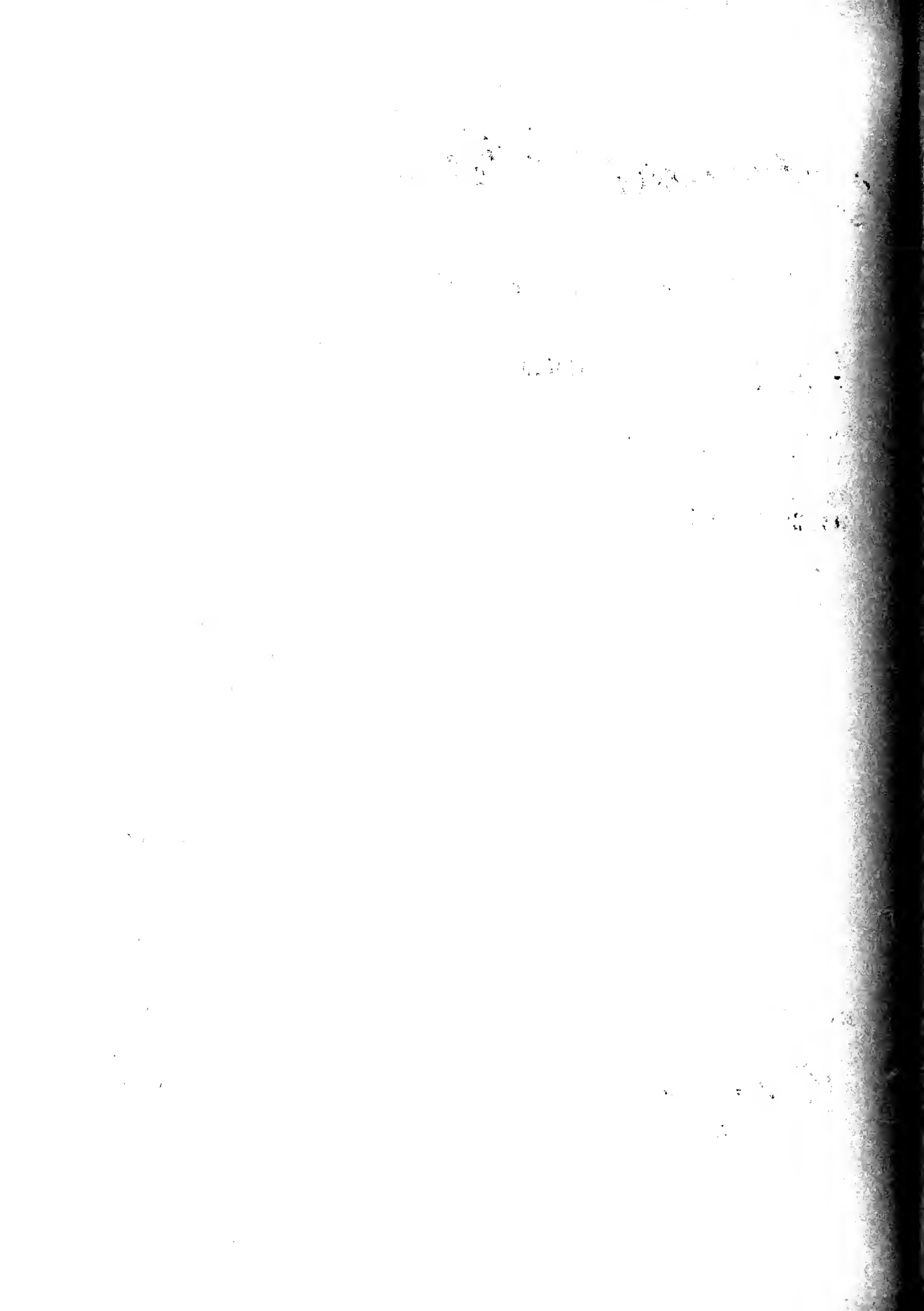
REFORESTATION

RESEARCH

SURVEYS AND ENGINEERING

TIMBER MANAGEMENT



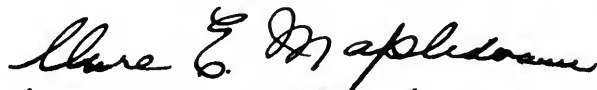


To His Honour,

The Lieutenant Governor
of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

The undersigned begs respectfully to present to your Honour, the Annual Report of the Department of Lands and Forests for the fiscal year commencing April 1st, 1955 and ending March 31st, 1956.



(Clare E. Mapledoram)
Minister

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THE DETAILED ANNUAL REPORT

of the

MINISTER OF LANDS AND FORESTS

of the

PROVINCE OF ONTARIO

-x-

For the Year ending March 31st, 1956.

-x-

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Division of Accounts	Section No. 1
Division of Air Service	Section No. 2
Division of Fish and Wildlife	Section No. 3
Division of Forest Protection	Section No. 4
Division of Lands	Section No. 5
Division of Law	Section No. 6
Division of Operation and Personnel	Section No. 7
Division of Parks	Section No. 8
Division of Reforestation	Section No. 9
Division of Research	Section No. 10
Division of Surveys and Engineering	Section No. 11
Division of Timber Management	Section No. 12

SECTION NO. 1

DIVISION of ACCOUNTS

DIVISION OF ACCOUNTS

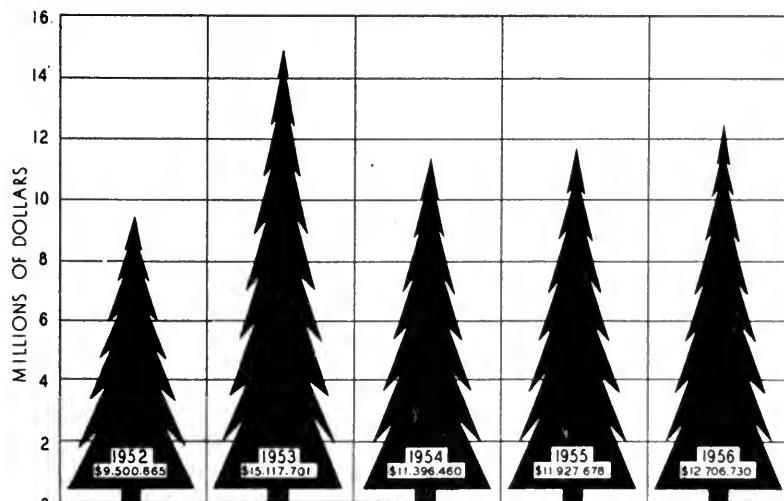
During the year ending March 31st, 1956, cash receipts for the Department of Lands and Forests totalled \$20,151,106.33. Total cash disbursements amounted to \$17,276,820.88, representing an excess of \$2,874,285.45 in receipts over disbursements.

Total receipts show an increase as compared with the previous year, principally reflected in the returns from the sale of timber and from hunting and fishing licenses, the Department's main sources of revenue. The increase in income derived from Crown timber is due in part to the constant demand for forest products of the pulp and paper trade, and the resulting expansion in that industry. Sale of angling and hunting licenses continues in its upswing, and may be accounted for by the steady population growth and influx of American visitors, and serves to point out the mounting pressure on our game and fish resources. There is every indication that the increased demand for the products of our renewable natural resources will continue.

The sharp increase in disbursements over the previous year is due to the most severe fire season in the Department's history. Expenditures in the year for Extra Fire Fighting amounted to \$4,089,604.30, as compared to the previous year, when expenditures were \$704,486.48.

TREND OF DEPARTMENTAL REVENUE

TIMBER RETURNS—CROWN DUES—GROUND RENT & FIRE TAX CHARGES
FOR THE FIVE YEARS ENDING 31 MARCH 1956



DEPARTMENT OF LANDS AND FORESTS

DIVISION OF ACCOUNTS

FINANCIAL REPORT

FOR YEAR ENDING MARCH 31ST, 1956

1. Cash Receipts and Disbursements

The following summarizes the result of operations for the year: -

Total - Cash Receipts	\$20,151,106.33
Cash Disbursements	<u>17,276,820.88</u>

Excess of Receipts over Disbursements \$2,874,285.45

2. Comparison of Results with those of prior years

(a) Receipts

Cash receipts for the year under review compare with those of the previous two years as follows:

<u>Division</u>	Years ending March 31st		
	<u>1954</u>	<u>1955</u>	<u>1956</u>
	\$	\$	\$
Accounts			
Water Power Rentals	1,672,735.	1,539,686.	1,530,748.
Provincial Land Tax	562,723.	644,961.	687,296.
Long Lac Diversion	17,250.	16,800.	16,350.
Miscellaneous	23,546.	30,660.	39,579.
Air Service	16,361.	16,724.	15,267.
Fish and Wildlife	3,800,735.	3,989,256.	4,154,714.
Forest Protection	46,269.	46,487.	98,385.
Land & Recreational Areas	408,848.	456,318.	591,685.
Reforestation	157,892.	216,247.	174,279.
Surveys	1,451.	238.	-
Timber Management	11,396,460.	11,927,678.	12,706,730.
Mississagi Salvage Project	<u>1,863,165.</u>	<u>440,730.</u>	<u>136,073.</u>
	<u>19,967,435.</u>	<u>19,325,785.</u>	<u>20,151,106.</u>

(b) Disbursements

Disbursements for the year under review compare with the previous two years as follows:

	<u>1954</u>	<u>1955</u>	<u>1956</u>
	\$	\$	\$
Chargeable to Ordinary Account	12,608,258.	12,716,508.	17,148,524.
Chargeable to Capital Payments			
Mississagi Salvage Project	800,000.	178,810.	33,000.
Logging Roads	-	-	<u>95,297.</u>
	<u>13,408,258.</u>	<u>12,895,318.</u>	<u>17,276,821.</u>

DEPARTMENT OF LANDS AND FORESTS
DIVISION OF FISH AND WILDLIFE
ANALYSIS OF CASH RECEIPTS
FOR YEAR ENDING MARCH 31ST, 1956

GAME

Licenses

Trapping	\$56,545.00
Non-Resident Hunting	513,088.28
Deer	405,200.92
Moose	90,040.00
Ground Hog	21,017.70
Gun	250,758.18
Dog	23,543.70
Fur Dealers	17,093.90
Fur Farmers	2,635.00
Tanners	110.00
Cold Storage	<u>471.00</u>
	\$1,380,503.68

Royalty

Game	<u>260,506.99</u>	\$1,641,010.67
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FISHERIES

Licenses

Commercial Fishing	96,797.00
Smelt	26,163.90
Angling	<u>2,279,335.59</u>
	2,402,296.49

Royalty

Commercial Fish	<u>9,982.72</u>	2,412,279.21
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GENERAL

Licenses

Guides	12,444.00
Tourist Outfitters	19,419.44
Fines	44,444.33
Costs Collected	1,280.65
Sales - Confiscated Articles, etc.	23,212.66
Miscellaneous	<u>623.45</u>

101,424.53
\$4,154,714.41

DEPARTMENT OF
DIVISION OF
ANALYSIS OF CASH
FOR YEAR ENDING

DISTRICT	CROWN DUES	GROUND RENT	FIRE TAX	INTEREST SCALERS' WAGES MILL LICENSES ETC.
Chapleau	528,176.85	551.00	7,052.80	80.00
Cochrane	1,577,492.98	7,229.00	92,748.80	2,436.21
Fort Frances	247,116.93	1,080.00	14,340.62	540.69
Geraldton	1,266,510.52	8,094.00	103,603.20	79.89
Gogama	287,341.74	3,285.00	9,894.40	12.00
Kapuskasing	1,680,234.37	8,712.00	112,419.58	220.87
Kenora	628,866.69	9,423.00	120,614.40	487.57
Lindsay	129,284.26	238.00	2,908.27	269.54
North Bay	831,342.16	3,331.00	42,636.80	221.16
Parry Sound	250,649.67	1,394.00	17,856.00	255.74
Pembroke	511,407.48	4,153.00	53,128.80	673.27
Port Arthur	1,505,156.94	13,343.00	182,906.20	858.98
Sault Ste. Marie	618,745.51	5,282.00	75,845.54	604.00
Sioux Lookout	475,551.32	1,675.00	22,504.48	194.00
Sudbury	170,481.07	4,445.00	57,139.20	855.74
Swastika	288,615.63	2,177.00	28,845.00	701.80
Tweed	133,156.07	473.00	5,931.00	381.19
White River	535,751.07	1,349.00	21,142.20	210.51
Other Districts	1,121.56			917.00
	<u>11,667,002.82</u>	<u>76,234.00</u>	<u>971,517.29</u>	<u>10,000.16</u>

Percentage of Total

Timber Revenue	91.69%	.60%	7.63%	.08%
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LANDS AND FORESTS

TIMBER MANAGEMENT

RECEIPTS BY DISTRICTS

MARCH 31ST, 1956

TOTAL TIMBER REVENUE	CASH DEPOSITS RECEIVED AND REFUNDED	TOTAL TIMBER REVENUE AND CASH DEPOSITS	PERCENTAGE OF TOTAL TIMBER REVENUE AND CASH DEPOSITS
\$ 535,860.65	\$ 13,400.00	\$ 549,260.65	4.32
1,679,906.99	6,295.72 (Cr.)	1,673,611.27	13.17
263,078.24	1,087.01	264,165.25	2.08
1,378,287.61	300.00 (Cr.)	1,377,987.61	10.84
300,533.14	-	300,533.14	2.37
1,801,586.82	18,800.19 (Cr.)	1,782,786.63	14.03
759,391.66	2,331.64	761,723.30	5.99
132,700.07	1,250.00	133,950.07	1.05
877,531.12	2,273.40 (Cr.)	875,257.72	6.89
270,155.41	6,081.15 (Cr.)	264,074.26	2.08
569,362.55	-	569,362.55	4.48
1,702,265.12	3,277.66 (Cr.)	1,698,987.46	13.37
700,477.05	4,498.53 (Cr.)	695,978.52	5.48
499,924.80	100.00	500,024.80	3.94
232,921.01	1,025.00 (Cr.)	231,896.01	1.83
320,339.43	5,609.56	325,948.99	2.56
139,941.26	749.47	140,690.73	1.11
558,452.78	-	558,452.78	4.39
2,038.56	-	2,038.56	.02
12,724,754.27	18,023.97 (Cr.)	12,706,730.30	100.00%

100.00%

100.00%

DEPARTMENT OF
STATEMENT OF RECEIPTS
FOR YEAR ENDING

RECEIPTS

DIVISION OF ACCOUNTS

Water Power Leases	\$1,530,748.10	
Provincial Land Tax	687,296.11	
Long Lac Diversion	16,350.00	
Sale of Maps, Casual Fees, etc.	<u>39,579.23</u>	\$2,273,973.44

DIVISION OF AIR SERVICE

Flying Fees		15,267.05
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DIVISION OF FISH AND WILDLIFE

Licenses, Royalties and Sundry		4,154,714.41
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DIVISION OF FOREST PROTECTION

Recovery of Fire Fighting Costs & Miscellaneous		98,384.51
--	--	-----------

DIVISION OF LAND AND RECREATIONAL AREAS

Land Sales	\$295,056.86	
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Land Rentals (other than Parks) Leases and Licenses of Occupation	199,833.92	
--	------------	--

Park Revenue

Algonquin			
Rentals	\$19,349.43		
Miscellaneous	<u>17,124.53</u>	\$36,473.96	

Rondeau			
Rentals	\$22,210.24		
Miscellaneous	<u>4,962.55</u>	27,172.79	

Quetico			
Rentals	-		
Miscellaneous	<u>4,307.50</u>	4,307.50	

Ippeewash Beach			
Rentals	1,052.00		
Miscellaneous	<u>7,982.00</u>	<u>9,034.00</u>	76,988.25

Other Lands Division Receipts	<u>19,805.67</u>	591,684.70
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DIVISION OF REFORESTATION

Sale of Nursery Trees		<u>174,278.65</u>
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Carried Forward		\$7,308,302.76
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LANDS AND FORESTSAND DISBURSEMENTSMARCH 31ST, 1956DISBURSEMENTSMAIN OFFICE

Minister's Salary - Statutory	\$10,000.00	
Salaries - Permanent and Temporary	1,171,667.37	
Travelling Expenses	58,054.08	
Maintenance and Operating	16,724.69	
Damage and Other Claims, Sundry Contingencies, etc.	2,135.80	
Compensation for Injured Workmen	107,035.58	
Cost-of-Living Bonus - Entire Department	358,302.18	
Unemployment Insurance Stamps	4,177.77	
Annuities and Bonuses to Indians	28,376.00	
Advisory Committee to the Minister	<u>938.52</u>	\$1,757,411.99

FIELD SERVICESBASIC ORGANIZATION - Including District Offices

Salaries	\$6,974,277.95	
Travelling Expenses	473,230.82	
Maintenance and Operating	<u>2,744,686.82</u>	10,192,195.59

EXTRA FIRE FIGHTING

Salaries, etc., Maintenance and Operating		4,089,604.30
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DIVISION OF AIR SERVICE

Salaries	\$424,082.15	
Travelling Expenses	15,914.96	
Maintenance and Operating - including purchase of aircraft	<u>378,391.14</u>	818,388.25

DIVISION OF SURVEYS

Aerial Surveys	\$17,225.79	
Ground Surveys	101,880.61	
Lac Seul Storage Dam - control and Maintenance	<u>486.39</u>	119,592.79

Carried Forward

\$16,977,192.92

RECEIPTS

FOR YEAR ENDING MARCH 31ST, 1956

Brought Forward

\$7,308,302.76

DIVISION OF TIMBER MANAGEMENT

Crown Dues	\$11,667,002.82	
Ground Rent	76,234.00	
Fire Tax	971,517.29	
Interest, Scalers' Wages, Mill Licenses, etc.	<u>10,000.16</u>	
	\$12,724,754.27	
Cash Deposits (Net)	<u>18,023.97</u>	12,706,730.30

MISSISSAGI SALVAGE PROJECT (See Contra)

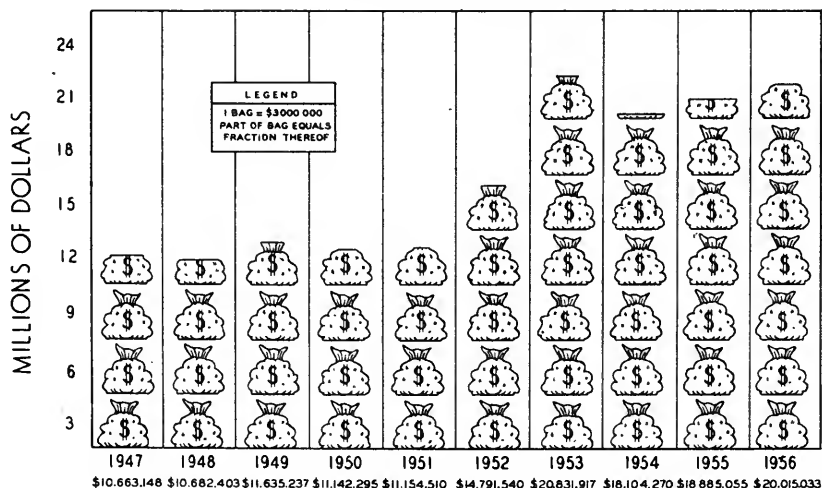
Proceeds of sale of fire-damaged timber		
Ordinary	\$103,073.27	
Capital	<u>33,000.00</u>	<u>136,073.27</u>

TOTAL RECEIPTS		<u><u>\$20,151,106.33</u></u>
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TREND OF TOTAL ANNUAL RECEIPTS

FOR THE TEN YEARS ENDING 31 MARCH 1956

DOES NOT INCLUDE MISSISSAGI SALVAGE PROJECT



DISBURSEMENTS

FOR YEAR ENDING MARCH 31ST, 1956

Brought Forward	\$16,977,192.92
<u>PUBLIC INFORMATION ON (1) FIRE PREVENTION, (2) FISH AND WILDLIFE, (3) REFORESTATION AND (4) TIMBER MANAGEMENT</u>	
Salaries, etc., Maintenance and Operating	107,970.73
<u>GRANTS</u>	
Association of Ontario Land Surveyors	\$200.00
Canadian Forestry Association	7,500.00
Violet Downing	5,000.00
Jack Miner Migratory Bird Foundation Inc.	1,500.00
Thomas N. Jones	300.00
E. L. Marsh	100.00
Ontario Fur Breeders' Association Inc.	2,500.00
Ontario Federation of Commercial Fishermen	<u>2,500.00</u>
	19,600.00
<u>WOLF BOUNTY</u>	37,550.00
<u>BEAR BOUNTY</u>	6,210.00
<u>LOGGING ROADS</u>	95,297.23
<u>MISSISSAGI SALVAGE PROJECT (See Contra)</u>	
Salvaging fire-damaged timber - Payments to contractors, and other incidental expenses	<u>33,000.00</u>
TOTAL DISBURSEMENTS	\$17,276,820.88
Excess of Receipts over Disbursements	<u>2,874,285.45</u>
	<u>\$20,151,106.33</u>

DEPARTMENT OF LANDS AND FORESTS

RESEARCH DIVISION - PROJECTS

STATEMENT OF EXPENDITURE

FOR YEAR ENDING MARCH 31ST, 1956

PROJECT

Administration, Research Station, and Sundry Projects	\$105,480.18
Forest Research	145,640.73
Fisheries Research	127,304.67
Mechanical Research	16,986.60
Physical Research	5,171.41
Statistics and Design	6,898.23
Wildlife	56,487.42
	<hr/>
	\$463,969.24
	<hr/> <hr/>

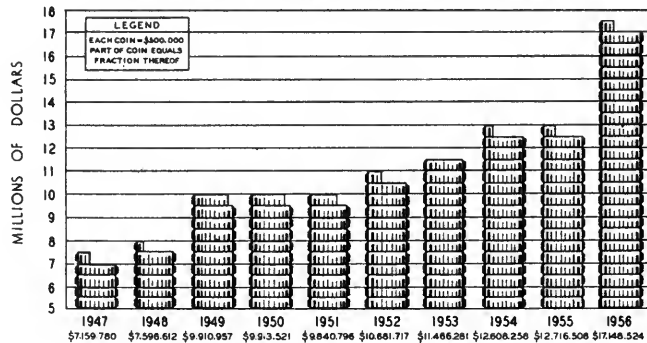
DISTRIBUTION OF EXPENDITURE

Research - Field Services	\$360,854.00
Equipment	23,414.24
District Office Establishments	79,701.00
	<hr/>
	\$463,969.24
	<hr/> <hr/>

TREND OF TOTAL ANNUAL DISBURSEMENTS

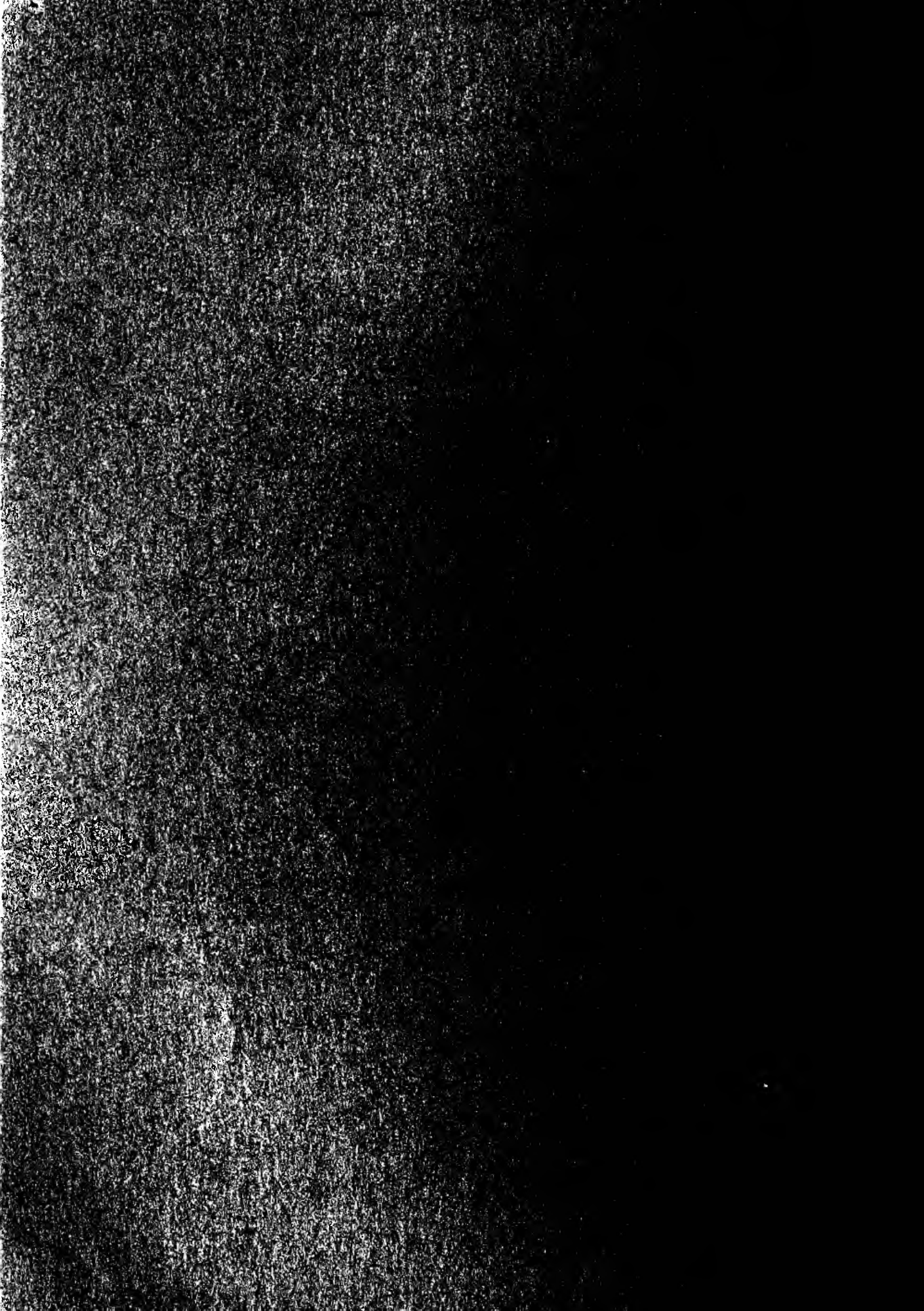
FOR THE TEN YEARS ENDING 31 MARCH 1956

DOES NOT INCLUDE MISSISSAGI SALVAGE PROJECT AND CONSTRUCTION OF LOGGING ROADS



SECTION NO. 2

DIVISION of AIR SERVICE



D I V I S I O N O F A I R S E R V I C E

G E N E R A L

The summer of 1955 will long be remembered in this Department as the worst fire season on record. Perhaps coming events cast their shadow in the unusually early Spring. Break-up occurred between two and four weeks earlier than usual and virtually all our aircraft were at their operating bases on or before May 1st and even then it was not too early. During this month two large fires occurred in the Chapleau and Soo Districts and the full force of the Region's aircraft was required to deal with them.

In the month of June another 4000-acre fire broke out in the Goulais Lake area and this again was purely an aeroplane fire. That is to say, it could only be reached by air and everything had to be flown in and out. This was only one of a number that started in that month and early July, resulting in the tremendous outbreaks north of Blind River and in the vicinity of Chapleau, Sudbury and Gogama. Towards the end of the fire season there was also a serious outbreak in the Kapuskasing District.

Paradoxically, most of the fires were in the eastern part of the Province and their numbers and proportions were such that men and equipment had to be flown from the West in order to cope with it. Because of the tremendous demand, everything used in fighting fires was in short supply and as a case in point, the Department was buying hose as fast as the manufacturers could produce it and the urgency was such that it was even flown from England.

Never in the history of the Service were our pilots and maintenance staff called upon to meet such exacting and demanding conditions. Our pilots flew from daylight until dark and in many cases in smoke haze through which it was almost impossible to see. The rescue of fire crews from areas surrounded, or about to be surrounded, by fire were common-place and the supply of food and equipment to the fire-fighting crews was a herculean task requiring the highest degree of skill.

Altogether the Service amassed the highest total of flying hours ever attained in one year (17,785:10 hours) and I think the total of 182 hours flown by one of our pilots in thirty days is perhaps another all-time record

GENERAL - cont'd.

in this Department.

It is further fortunate the Service possessed five spare aircraft. The tremendous pressure of meeting requirements under these demanding conditions piled up time so fast that 50-hour checks were recurring in a matter of days and engines were piling up their normal overhaul periods much more rapidly than anyone could have envisioned. The result was a continuing demand for replacement aircraft and although we were at one time completely without a spare, this condition did not maintain for very long and at no time were we unable to replace an unserviceable aircraft when the demand arose.

I am more than pleased to state that, in spite of this high total, attained under such difficult conditions and requiring thousands of landings and take-offs, there was still not an accident to any of our aircraft or our staff. I think this is an outstanding accomplishment and perhaps without parallel in this type of flying in the history of Canada.

During the year our aircraft supplied a valuable service to the election enumerators in preparation for the vote on June 9th. It is essential that each eligible voter be given an opportunity to cast a ballot and since the time available for enumerating and preparing voters' lists is relatively short, aircraft must be used in order to conserve the limited time available.

Another first occurred in the middle of May when our Sault Ste. Marie Otter proceeded to Port Arthur to pick up a load of chum salmon fingerlings to be deposited in the Attawapiskat River. This experiment along with another conducted in the Severn River was to determine whether or not James and Hudsons' Bay will support this type of salmon. If so, it is hoped they will return to these rivers annually to spawn and in so doing, create a source of food and livelihood for the Indians and perhaps constitute the basis of a new industry in which the Indians may be gainfully employed.

The year 1955 was also the occasion of the Sault Ste. Marie Centennial and as a part of the civic program, groups of sightseers were escorted through our Plant each Friday afternoon. This included groups of Girl Guides, Boy Scouts and an association of American writers.

Extensive photographic operations were completed in the southern part of the Province during the early summer. As our photographic Otter worked

GENERAL - cont'd.

north it came closer and closer to the great fire area and finally, for about the last six weeks of the season, it was taken off photography completely and assigned to fire protection.

During the summer of 1955, the union employees of the De Havilland Company of Canada struck and the plant was closed down. This put a premium on Beaver and Otter parts but fortunately we had laid in sufficient to carry us through and our Service did not suffer. While the strike did not do the De Havilland Company much good it is said that it is an ill wind that does not blow some one some good. In this case De Havilland had three pilots on their year-round staff whose services they were not able to use and they were kind enough to loan them to us during the period that our fires were at their peak. All three performed excellent service and I believe we are indebted to and must thank the De Havilland Company for this valuable contribution.

I think I should also mention the advantages of our present type of field organization. The Regional system, sub-divided into Districts, provides a sufficient measure of over-all control to allow and expedite the transfer of equipment from one Region or District to another. When the fires became so bad in the eastern part of the Province, only a skeleton force of aircraft was left in the west and the balance transferred to the east to work on them. I do not think the advantages of this system can be over-rated.

This report would scarcely be complete without making mention and giving due credit to those responsible for the production and maintenance of the Department's Radio Communications System and in this I refer particularly to aircraft radio. It is almost incredible that such a huge system could function so effectively with so little maintenance and I can only view it as a tribute to the knowledge, skill, resourcefulness and ingenuity of this Department's radio section.

H E L I C O P T E R S

The Department contracted for the services of two helicopters but before the summer was over it became necessary to supplement them considerably. I believe one or two were procured from the Hydro Electric Power Commission, several from the Royal Canadian Air Force and others from any source from which they could be procured. This type of vehicle provides a very useful service under certain conditions but it is still my opinion; and I believe it is shared by the field staff; that this type of vehicle cannot operate without the support of a fleet of conventional aircraft such as our Beavers. I have yet to find a senior field official that is prepared to trade his Beaver for one helicopter as standard equipment for a base.

M A I N T E N A N C E, N E W C O N S T R U C T I O N
A N D E X P A N S I O N

No construction was undertaken during the fiscal period under review but normal maintenance was performed where and when required. Painting and running repairs were carried out to the end that the condition of our buildings and equipment was maintained to our usual standards.

It is hoped that 1956 will see the addition of sanitary equipment at two or three of our outlying bases. Such improvements were completed at Pays Plat and Nakina and a substantial start was made on similar improvements at Temagami.

W I N T E R O P E R A T I O N S

Winter operations were conducted from Toronto, Algonquin Park, Sudbury, Gogama, Chapleau, Geraldton, Port Arthur, Eva Lake, Kenora and Sioux Lookout and in addition, one spare machine was assigned to supplement the activities of the Chapleau machine in conducting a moose census under the supervision of the Division of Fish and Wildlife and the Division of Research.

A C C I D E N T S

I am very pleased to report there were no serious accidents of any kind during the period under review.

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The following tables are submitted as supplementary to this report.

T A B L E 1
Operating Bases
1955 - 56

<u>BASE</u>	<u>TYPE OF AIRCRAFT</u>
Red Lake	Beaver
x Kenora	Beaver (2)
Fort Frances	Beaver
x Eva Lake	Beaver
x Sioux Lookout	Beaver (2) Otter
Ignace	Beaver
x Port Arthur	Beaver
Caribou Lake	Beaver
Orient Bay	Beaver
Pays Plat	Beaver
Twin Lakes	Beaver
x Geraldton	Beaver
Pickle Lake	Beaver
Oba Lake	Beaver
White River	Beaver
x Sault Ste. Marie	Beaver (2) Otter
x Chapleau	Beaver
x Gogama	Beaver
South Porcupine	Beaver
Temagami	Beaver
x Sudbury	Beaver
Parry Sound	Beaver
x Algonquin Park	Beaver
Carey Lake	Beaver
Kenogami	Beaver
Remi Lake	Beaver
Lauzon Lake	Beaver
* Toronto	Beaver (2) Dove
Photography	Otter

x - Denotes year-round bases

T A B L E 11

Transport Aircraft - Effective Loads Carried

1955 - 56

<u>Aircraft</u>	<u>Hours Flown</u>	<u>Effective Loads</u>	
<u>BEAVER</u>			
CF-OBS	354:20	378,220 lbs;	189 tons 220 lbs.
CF-OBT	443:05	424,840 lbs;	212 tons 840 lbs.
CF-OBU	354:55	157,669 lbs;	78 tons 1669 lbs.
CF-OBV	602:55	380,755 lbs;	190 tons 755 lbs.
CF-OBW	522:15	256,060 lbs;	128 tons 60 lbs.
CF-OBX	472:40	602,025 lbs;	301 tons 25 lbs.
CF-OBY	336:50	218,715 lbs;	109 tons 715 lbs.
CF-OBZ	434:45	318,000 lbs;	159 tons
CF-OCA	574:30	307,900 lbs;	153 tons 1900 lbs.
CF-OCB	650:00	410,685 lbs;	205 tons 685 lbs.
CF-OCC	268:15	174,845 lbs;	87 tons 845 lbs.
CF- OCD	630:10	368,240 lbs;	184 tons 240 lbs.
CF-OCE	514:35	509,700 lbs;	254 tons 1700 lbs.
CF-OCG	399:35	330,470 lbs;	165 tons 470 lbs.
CF-OCH	261:00	133,560 lbs;	66 tons 1560 lbs.
CF-OCJ	181:55	77,950 lbs;	38 tons 1950 lbs.
CF-OCK	428:55	213,035 lbs;	106 tons 1035 lbs.
CF-OCL	356:25	182,710 lbs;	91 tons 710 lbs.
CF-OCN	547:25	466,500 lbs;	233 tons 500 lbs.
CF-OCO	526:40	282,510 lbs;	141 tons 510 lbs.
CF-OCP	322:25	210,190 lbs;	105 tons 190 lbs.
CF-OCQ	559:55	266,092 lbs;	133 tons 92 lbs.
CF-OCR	584:20	422,480 lbs;	211 tons 480 lbs.
CF-OCS	412:25	251,505 lbs;	125 tons 1505 lbs.
CF-OCT	379:30	248,823 lbs;	124 tons 823 lbs.
CF-OCU	442:35	473,305 lbs;	236 tons 1305 lbs.
CF-OCV	429:10	224,965 lbs;	112 tons 965 lbs.
CF-OCX	375:10	197,520 lbs;	98 tons 1520 lbs.
CF-OCY	470:15	180,360 lbs;	90 tons 360 lbs.
CF-OCZ	361:45	221,090 lbs;	110 tons 1090 lbs.

T A B L E 11 cont'd.

<u>Aircraft</u>	<u>Hours Flown</u>	<u>Effective Loads</u>	
CF-ODA	413:35	357,505 lbs;	178 tons 1505 lbs.
CF-ODB	365:25	263,805 lbs;	131 tons 1805 lbs.
CF-ODC	484:35	275,034 lbs;	137 tons 1084 lbs.
CF-ODD	94:25	25,280 lbs;	12 tons 1280 lbs.
CF-ODE	340:00	107,440 lbs;	53 tons 1440 lbs.
CF-ODF	545:15	482,495 lbs;	241 tons 495 lbs.
CF-ODG	522:25	328,020 lbs;	164 tons 20 lbs.
CF-ODN	289:45	225,710 lbs;	112 tons 1710 lbs.
CF-ODO	72:10	16,290 lbs;	8 tons 290 lbs.
<u>DOVE</u>			
CF-ODI	316:45	42,226 lbs;	21 tons 226 lbs.
<u>OTTER</u>			
CF-ODJ	343:30	115,780 lbs;	57 tons 1780 lbs.
CF-ODK	408:30	429,355 lbs;	214 tons 1355 lbs.
CF-ODL	390:10	623,184 lbs;	311 tons 1184 lbs.

Total Transport Section:-

Total Flying Time, Hours:	17,785:10
Total Loading, lbs.	12,182,893
Total Loading, tons	6,091 tons, 893 lbs.

.

T A B L E III

Hours Flown on Various Phases of Flying Operations

	<u>1949-55</u>	<u>1955-56</u>	<u>Total</u>
Fire Ranging (Detection & Supression)	33,309:30	11,395:35	44,705:05
Timber Management	5,148:30	835:20	5,983:50
Fish & Wildlife	12,074:15	2,333:20	14,407:35
Lands	1,317:50	180:35	1,498:25
Commercial Flying	1,821:10	457:50	2,279:00
Administration	21,558:30	2,582:30	24,141:00
	<hr/> 75,229:45	<hr/> 17,785:10	<hr/> 93,014:55

T A B L E III cont'd.

Break-down of Administration

	<u>1955-56</u>	<u>TOTAL</u>
Mercy Flights	54:45	54:45
Tests (Radio & Aircraft)	140:55	140:55
Ferrying & Instructions	106:40	106:40
Research, Incl. Entomology and Dusting	192:20	192:20
Forced Landings & Operations	634:25	634:25
Transportation Ordinary	759:20	759:20
Transportation Special	436:25	436:25
Photography	129:45	129:45
Surveys	127:55	127:55
	2,582:30	2,582:30

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T A B L E IV

Passengers and Personnel Carried

	<u>1924-55</u>	<u>1955-56</u>	<u>TOTAL</u>
Passengers Carried	340,114	46,478	386,592
Personnel Carried	123,730	6,723	130,453
Total Passengers and Personnel Carried	463,844	53,201	517,045
Effective Loads Flown, lbs;	97,343,378	12,182,893	109,526,271
Effective Loads Flown, Tons;	48,669 tons 5,378 lbs.	6,091 tons 893 lbs.	54,763 tons 271 lbs.

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T A B L E V

Hours Flown At Bases

1955 - 56

<u>BASE</u>	<u>HOURS FLOWN</u>
Algonquin Park	600:45
Carey Lake	391:45
Caribou Lake	344:00
Chapleau	730:25
Eva Lake	674:05
Fort Frances	573:50

T A B L E V cont'd.
Hours Flown At Bases
1955 - 56

<u>BASE</u>	<u>HOURS FLOWN</u>
Geraldton	511:05
Gogama	937:20
Ignace	356:20
Kenogami	622:40
Kenora	873:10
Lauzon Lake	527:25
Oba Lake	493:15
Orient Bay	407:50
Pays Plat	426:40
Parry Sound	349:10
Pickle Lake	431:50
Port Arthur	571:10
Red Lake	413:45
Remi Lake	527:15
Sault Ste. Marie	1,314:20
Sioux Lookout	941:10
South Porcupine	561:10
Sudbury	577:30
Temagami	502:15
Twin Lakes	371:20
Toronto	1,062:30
Photographic Operations	308:25
White River	488:55
Air Service Operations, testing, ferrying etc.	893:50
	<hr/> 17,785:10

T A B L E VI
Flying Time - Pilots

<u>PILOTS</u>		<u>1924-55</u>	<u>1955-56</u>	<u>TOTAL</u>
Allen	DW	810:00	393:45	1,203:45
Beaushene	GD	1,041:20	433:55	1,475:15
Burton	EC	3,950:50	447:55	4,398:45
Burt	AE	5,033:30	593:55	5,627:25
Buckworth	WB	3,019:15		3,019:15
Calladine	TJ	2,171:00	549:55	2,720:55
Calver	DRH	646:15	510:40	1,156:55
Campbell	GE	733:20	873:25	1,606:45
Colfer	AP	1,753:40	603:55	2,357:35
Cooke	TC	3,581:30	590:00	4,171:30
Culliton	JP	3,776:40	73:40	3,850:20
Denley	JG	4,851:55	477:50	5,329:45
Dinnin	AR	241:20	5:15	246:35
Evans	FB	2,061:00	548:35	2,609:35
Fairbanks	DC		113:35	113:35
Fawcett	TB	2,370:30	486:30	2,857:00
Ferderber	WA		130:15	130:15
Fiskar	UW		10:55	10:55
Glennie	NA		490:40	490:40
Hoar	HA	1,442:00	351:35	1,793:35
Hoeberg	PS	753:40	440:20	1,194:00
Hugill	WA	393:05	427:45	820:50
James	FC		279:00	279:00
Kincaid	J	4,256:00	534:05	4,790:05
Kirk	CJ	2,198:10	478:00	2,676:10
Lamont	JA	1,381:25	513:10	1,894:35
Lanktree	WJ	1,321:20	370:25	1,691:45
LeFeuvre	CJ	5,823:05	707:40	6,530:45
MacDougall	FA	4,548:15	64:05	4,612:20
Neale	G		134:45	134:45
Parsons	R	5,646:40	458:10	6,104:50

T A B L E VI cont'd.

Flying Time - Pilots

<u>PILOTS</u>		<u>1924-55</u>	<u>1955-56</u>	<u>TOTAL</u>
Ponsford	GE	1,099:20	93:45	1,193:05
Phillips	GHR	10,862:45	241:50	11,104:35
Poulin	LD	5,736:15	718:40	6,454:55
Reid	DM	2,902:15	356:50	3,259:05
Reynolds	R		301:55	301:55
Siegel	J	3,000:55	429:00	3,429:55
Speight	HC	4,057:55	525:15	4,583:10
Stone	RWE	2,512:25	618:45	3,131:10
Smith	AB	4,851:45	540:40	5,392:25
Shinnie	RD		511:10	511:10
Taylor	JM	3,076:20	69:00	3,145:20
Thompson	FJ	563:55	514:25	1,078:20
Trussler	GE	5,591:35	363:35	5,955:10
Thomas	E	1,516:15	402:10	1,918:25
Other Pilots		140,942:00	4:30	140,946:30
		250,519:25	17,785:10	268,304:35

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T A B L E VII

Flying Time - Aircraft

<u>AIRCRAFT</u>		<u>1924-55</u>	<u>1955-56</u>	<u>TOTAL</u>
<u>Beaver</u>				
CF-OBS		3,105:25	354:20	3,459:45
CF-OBT		2,120:00	443:05	2,563:05
CF-OBU		2,337:20	354:55	2,692:15
CF-OBV		2,267:35	602:55	2,870:30
CF-OBW		2,302:25	522:15	2,824:40
CF-OBX		2,083:15	472:40	2,555:55
CF-OBY		2,249:15	336:50	2,586:05
CF-OBZ		2,177:25	434:45	2,612:10
CF-OCA		1,715:25	574:30	2,289:55
CF-OCB		2,201:40	650:00	2,851:40

T A B L E VII cont'd.

Flying Time - Aircraft

<u>AIRCRAFT</u>	<u>1924-55</u>	<u>1955-56</u>	<u>TOTAL</u>
<u>Beaver</u>			
CF-OCC	2,208:35	268:15	2,476:50
CF- OCD	1,623:00	630:10	2,253:10
CF-OCE	2,311:15	514:35	2,825:50
CF-OCG	1,721:45	399:35	2,121:20
CF-OCH	1,866:55	261:00	2,127:55
CF-OCJ	1,639:30	181:55	1,821:25
CF-OCK	1,976:30	428:55	2,405:25
CF-OCL	1,992:55	356:25	2,349:20
CF-OCN	2,012:30	547:25	2,559:55
CF-OCO	1,418:10	526:40	1,944:50
CF-OCP	1,639:25	322:25	1,961:50
CF-OCQ	2,372:55	559:55	2,932:50
CF-OCR	1,790:05	584:20	2,374:25
CF-OCS	2,177:35	412:25	2,590:00
CF-OCT	1,536:20	379:30	1,915:50
CF-OCU	1,845:05	442:35	2,287:40
CF-OCV	1,394:40	429:10	1,823:50
CF-OCX	1,272:30	375:10	1,647:40
CF-OCY	1,246:35	470:15	1,716:50
CF-OCZ	1,012:20	361:45	1,374:05
CF-ODA	1,148:10	413:35	1,561:45
CF-ODB	1,604:55	365:25	1,970:20
CF-ODC	1,558:10	484:35	2,042:45
CF-ODD	391:55	94:25	486:20
CF-ODE	453:45	340:00	793:45
CF-ODF	1,104:25	545:15	1,649:40
CF-ODG	864:35	522:25	1,387:00
CF-ODN	72:50	289:45	362:35
CF-ODO		72:10	72:10

T A B L E VII cont'd.

Flying Time - Aircraft

<u>AIRCRAFT</u>	<u>1924-55</u>	<u>1955-56</u>	<u>TOTAL</u>
<u>Dove</u>			
CF-ODI	633:30	316:45	950:15
<u>Otter</u>			
CF-ODJ	538:55	343:30	882:25
CF-ODK	731:20	408:30	1,139:50
CF-ODL	456:15	390:10	846:25
All Other Aircraft	182,401:15		182,401:15
	249,578:20	17,785:10	267,363:30

.

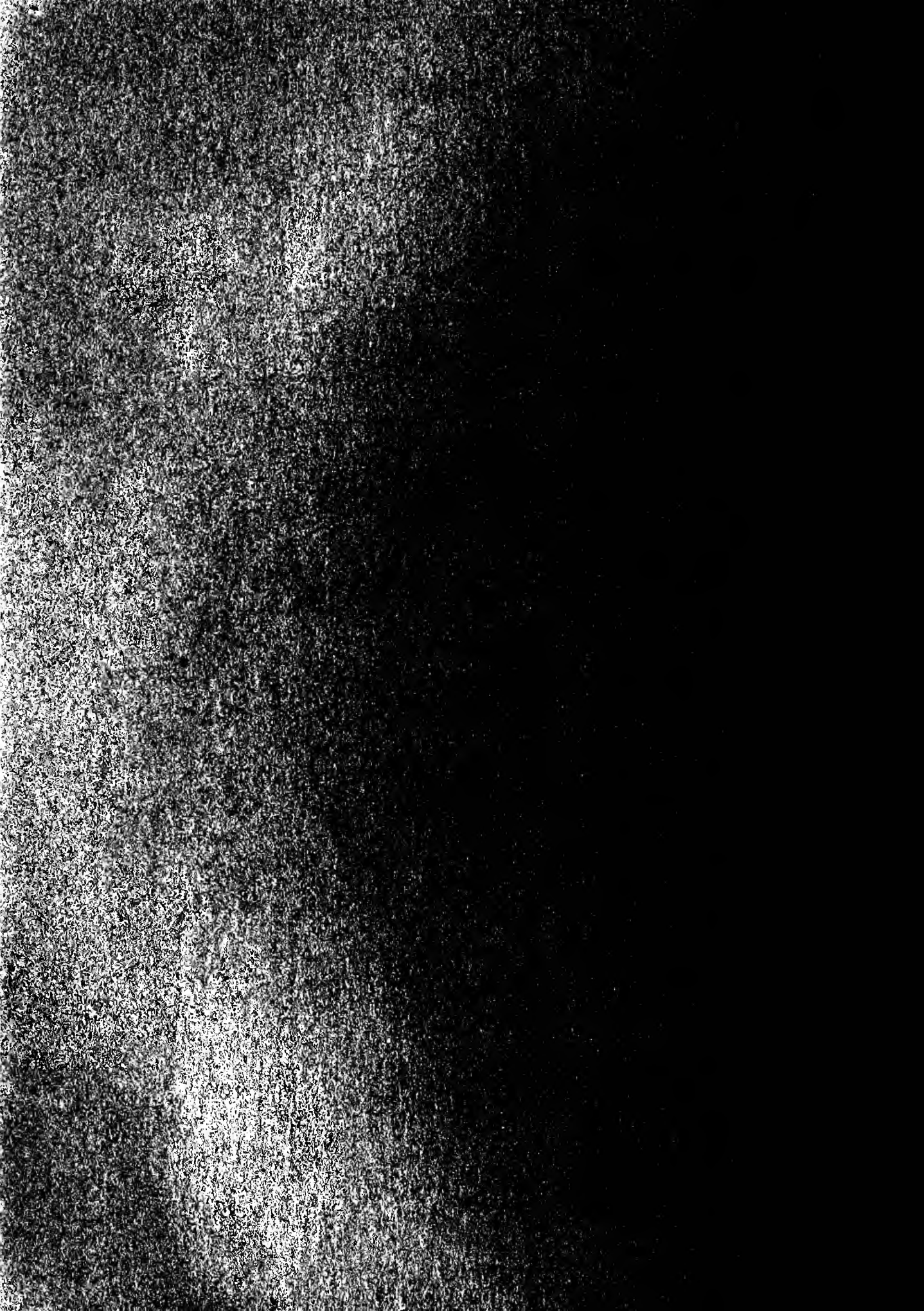
MERCY AND EMERGENCY FLIGHTS 1955-56

<u>DATE</u>	<u>AIRCRAFT</u>	<u>PILOT</u>	<u>JOURNEY</u>	<u>TIME</u>	<u>REASON</u>
May 3/55	CF-ODC	G.H.R. Phillips	Smoke Lake to Brent Lake to Smoke Lake	1:00	Bring Ranger with severely cut leg to Doctor.
May 25/55	CF-OBU	W.J. Lanktree	Dryden to Cedar Lake to Dryden	:50	Take Doctor to treat man with serious head injuries.
June 13 and June 14/55	CF-OCH CF-ODA	C.J. Kirk	Geraldton to Sault to Toronto to Sault to Geraldton	10:50	Transport seriously ill baby to Toronto Hospital.
June 15/55	CF-OCB	T.B. Fawcett	McAlpine Lake to Niobe Lake	:20	Bring injured woman hurt in fall for medical attention.
June 30/55	CF-OCV	G.D. Beaushene	Jackfish Island to Nipigon to Orient Bay	1:00	Man with severed artery on left ankle rushed to Hospital.
July 22/55	CF-OBZ	F.J. Thompson.	Mobert to Wawa to White River	1:25	L & F employee flown to hospital at Wawa after having suffered a stroke.
July 27/55	CF-OCK	A.E. Burtt	Port Arthur to Sibley to Ship "Starbuck" to Port Arthur	1:00	Fly Doctor to boat to treat injured sailor.

MERCY AND EMERGENCY FLIGHTS 1955-56 cont'd.

<u>DATE</u>	<u>AIRCRAFT</u>	<u>PILOT</u>	<u>JOURNEY</u>	<u>TIME</u>	<u>REASON</u>
Aug. 3/55	CF-OCS	D. C. Fairbanks	Ivanhoe Lake to Sudbury	1:25	Transport young girl with spinal meningitis to Sudbury Hospital.
Aug. 8/55	CF-ODC	G. Neale	Smoke Lake to Dickson Lake to Smoke Lake	:50	Man suffering from heart attack flown to Hospital.
Aug. 9/55	CF-OCL	D.M. Reid	Parry Sound to Byng Inlet to Harris Lake to Parry Sound	:50	Man with severely cut knee flown to Hospital.
Aug. 3/55	CF-ODJ	E. Thomas	Timmins to Toronto to Sudbury	5:25	Seriously ill child flown to Toronto Hospital.
Aug. 9/55	CF-OCQ	D.R. Calver	Remi Lake to Camp 15 to Remi Lake	:50	Seriously ill woman flown to Hospital.
Sept. 6/55	CF-ODI	R. Reynolds	Toronto to Timmins to Toronto	4:30	Take injured man to Toronto Hospital for medical treatment.
Sept. 5/55	CF-OCB	F.C. James	Bayley Bay to Ely, Minnesota to Prairie Port	:30	Man with injured back flown to Hospital.
Sept. 7/55	CF-OCT	R.D. Shinnie	Oba Lake to Tatnall Lake to Wawa	:40	Transport seriously ill woman to Hospital for medical care.
Sept. 18/55	CF-OBT	G.E. Campbell	Gogama to Ronda to Sudbury to Gogama	2:05	Transport injured accident victim to Sudbury Hospital.
Jan. 1 and Jan. 2/56	CF-OBT	G.E. Campbell	Gogama to Sudbury to Gogama	1:45	Man suffering from heart attack flown to Sudbury Hospital.

DIVISION of FISH and WILDLIFE



WILDLIFE SECTION

Open Seasons

During 1955 - 56 open seasons were established by regulation as follows:

Deer

(a) October 1st to November 25th: North of the northernmost east-west line of the Canadian National Railway from the Quebec boundary to the Manitoba boundary and south of the southern boundary of the "Hinterland Area."

(b) October 15th to November 25th:

(1) That part of Kenora District which lies south of the transcontinental line of the Canadian National Railway; and

(2) Those parts of Algoma, Cochrane, Sudbury and Temiskaming Districts which lie south of the transcontinental line of the Canadian National Railway, and north of Highway No. 66 westerly from the Quebec boundary along that highway and the new Matachewan Highway to Highway No. 65, south-easterly to the Elk Lake-Westree Road, south-westerly to Westree at the Canadian National Railway, southerly to the north boundary of Blewett Township, westerly to the N.W. angle of Brebeuf Township, southerly to the S.W. angle of Antrim Township, westerly to the S.W. angle of X Township, northerly to the N.W. angle of 7Z Township, westerly sixty-six miles to the meridian line surveyed in 1898 by T. B. Speight, O.L.S., southerly to the N.E. angle of Township 24 range 14, westerly along the north boundaries of townships 24 to 29 inclusive range 14, and westerly to the southerly production of the boundary between Algoma and Thunder Bay Districts.

(c) October 22nd to November 12th: That part of the District of Thunder Bay lying south of the main transcontinental line of the Canadian National Railway from Fowler Station east to the easterly boundary of the Township of Nakina.

(d) November 1st to November 25th: The District of Rainy River and the area south of (b) (2) and north of the French and Mattawa Rivers, the north shore of Georgian Bay, the north shore of the North Channel, and

including Cockburn, Great Cloche, Little Cloche, and Phillip Edward Islands, and the islands in McGregor Bay and Bay of Islands.

(e) November 15th to November 25th: St. Joseph Island, Manitoulin Island, and the other islands in Manitoulin district except those referred to in (d).

(f) November 7th to November 19th: The District of Parry Sound; the District of Muskoka (except the townships of Medora and Wood); that part of the District of Nipissing lying south of the northerly boundary of the Township of West Ferris and the Mattawa River; the counties of Haliburton, Lanark and Renfrew; the Township of Rama in the County of Ontario; the townships of Dalton, Longford and Somerville, and the Township of Digby (except concessions 1 and 2) in the County of Victoria; those parts of the counties of Peterborough, Hastings and Lennox and Addington lying north of No. 7 Highway; and those parts of the County of Frontenac and the Township of North Crosby in the County of Leeds lying north of No. 7 Highway from the west boundary of the Township of Kennebec, in the County of Frontenac, easterly to the Frontenac County road between concessions 2 and 3, Township of Alden, thence southerly along this county road through Mountain Grove and along the west side of Eagle Lake to No. 38 Highway at Parham, thence easterly along No. 38 Highway to the Mass Road at a point between Parham and Tichborne, thence southerly, easterly and northerly along the Mass Road around the south shore of Bob's Lake to the county road at Fermoy, thence easterly along this county road through Westport in the County of Leeds to the north shore of the Upper Rideau Lake, thence easterly along the north shore of the Upper Rideau Lake to the east boundary of the Township of North Crosby in the County of Leeds.

Excepting therefrom those portions of the District of Nipissing and the County of Haliburton which comprise Algonquin Park.

(g) November 7th to November 12th: That part of the County of Carleton lying west of the Rideau River.

(h) November 9th to November 12th:

(1) Those parts of the counties of Peterborough, Hastings and Lennox and Addington, lying south of No. 7 Highway, and that part of the

County of Frontenac lying south of the line defined in (f).

- (2) (1) The counties of Dundas, Glengarry, Grenville, Prescott, Russell and Stormont;
- (ii) That part of the County of Carleton lying east of the Rideau River; and
- (iii) The County of Leeds (except that part of the Township of North Crosby lying north of the line defined in (f)).

(1) November 23rd to November 26th:

- (1) The counties of Bruce and Grey; and
- (2) The counties of Brant, Huron, Oxford, Perth and Waterloo.

Only shotguns may be used during the open season for deer in the areas enumerated in subclause (2) of clause (h) and in subclause (2) of clause (i).

Moose

Schedule 1. South of the southern boundary of the "Hinterland Area" and north of the northernmost east-west line of the Canadian National Railway, easterly from the Ontario-Manitoba boundary to the westerly bank of the Little Jackfish River, southerly along the Little Jackfish River and the westerly shore of Lake Nipigon to a point west of Macdiarmid, easterly to Highway No. 11 in Macdiarmid and easterly along Highway No. 11 to the Nagagami River, northerly along that river to the line of the Canadian National Railway and easterly along that railway to the Ontario-Quebec boundary:

EXCEPT: That portion of the District of Kenora lying north of the northernmost east-west line of the C.N. Railway between Canyon Lake and the 6th meridian line; east of Canyon Lake, Canyon River, Wabigoon River, Ball Lake, Tide Lake, and Maynard Lake, and their connecting waters and the connecting waters between Maynard Lake and Oak Lake to the 7th Base Line, the 7th Base Line easterly to Highway No. 105 (Red Lake Road), Highway No. 105, northwesterly to the south boundary of Heyson Township, westerly to the south-west angle of Baird Township, and northerly to the 9th Base Line; south of the 9th Base Line easterly to the 6th meridian line; and west of the 6th

meridian line southerly to the line of the C.N. Railway.

(a) October 1st to October 15th;

Any moose--resident and non-resident hunters.

(b) November 26th to December 24th;

Any moose--resident hunters only.

Schedule 2. South of the northernmost east-west line of the C.N. Railway easterly from the Ontario-Manitoba boundary to the 4th meridian line; west of the 4th meridian line southerly to the base line surveyed in 1893 by A. Niven, O.L.S.; north of that base line westerly to the meridian line surveyed in 1927 by Speight and Van Nostrand, O.L.S.; west of that meridian line southerly to the south boundary of Kenora District; north of that south boundary westerly to the Ontario-Manitoba boundary; and east of that boundary northerly to the line of the C.N. Railway; and

INCLUDING the area comprising the exception defined in Schedule 1.

(a) October 15th to October 30th; and

(b) November 26th to December 24th;

Any moose--resident hunters only.

Schedule 3. South of the transcontinental line of the C.N. Railway easterly from the 4th meridian line to the boundary between Kenora and Thunder Bay Districts; west of that boundary southerly to the boundary between Kenora and Rainy River Districts; north of that boundary westerly to the meridian line surveyed by O.L.S. Speight and Van Nostrand in 1927; east of that meridian line northerly to the base line surveyed by A. Niven, O.L.S., in 1895; south of that base line easterly to the 4th meridian line; and east of that meridian line northerly to the transcontinental line of the C.N. Railway.

(a) October 15th to October 31st;

Bulls only--resident and non-resident hunters.

(b) November 26th to December 24th;

Any moose--resident hunters only.

Schedule 4. South of the transcontinental line of the C.N. Railway easterly from the boundary between Kenora and Thunder Bay to the

west bank of the Little Jackfish River; west of that river, the west shore of Lake Nipigon and No. 11 Highway from Macdiarmid southerly to the south limit of Nipigon Provincial Forest; north of that south limit in a general westerly direction to the N.W. angle of Nipigon Township, the S.W. angle of that township, the N.W. angle of Stirling Township, the S.W. angle of that township, the intersection of a line drawn south through the S.E. angle of G.T.P. Railway land grant Block No. 3, the south boundary of that land grant Block to its intersection with the C.P. Railway and that railway to the boundary between Kenora and Thunder Bay districts; and east of that boundary northerly to the transcontinental line of the C.N. Railway.

(a) October 1st to October 31st;

Bulls only--resident and non-resident hunters.

(b) November 1st to November 30th;

Any moose--resident hunters only.

Schedule 5. East of the west boundary of Thunder Bay District southerly from the intersection at that Boundary with the line of the C.P. Railway to the south boundary of Thunder Bay District; north of that south boundary easterly to its intersection with meridian 88° west; west of that meridian northerly to the south boundary of Nipigon Provincial Forest following Nipigon Strait, Nipigon Bay and No. 17 and No. 11 Highways; and south of the southerly boundary of Schedule 4.

(a) October 15th to October 31st;

(b) November 15th to November 30th;

Bulls only--resident hunters only.

Schedule 6. West of the Ontario-Quebec boundary southerly from the transcontinental line of the C.N. Railway to Highway No. 66; north (in a general westerly direction) of this highway, the new Matachewan Highway, Highway No. 65, the Elk Lake-Westree Road, the C.N. Railway from Westree to the north boundary of Blewett Township, to the N.W. angle of Brebeuf Township, to the S.W. angle of Antrim Township, to the S.W. angle of Township X, to the N.W. angle of Township 7Z, to the N.W. angle of Township 29 range 14, to the S.W. boundary of Algoma district; northwesterly along that boundary

and the S.W. boundary of Thunder Bay district to meridian 88° west; east of that meridian northerly to Macdiarmid along Isle St. Ignace, Nipigon Strait, Nipigon Bay, and Nipigon River to Highway No. 17 and easterly to Highway No. 11; west of No. 11 Highway northerly from No. 17 Highway to Macdiarmid; and south of the southerly boundary of Schedule 1 from Macdiarmid east to the Ontario-Quebec boundary.

(a) October 15th to October 31st;

Any moose--resident and non-resident hunters.

(b) November 26th to December 24th;

Any moose--resident hunters only.

Schedule 7. East of the high-water mark of Lake Superior southerly from the N.W. angle of Township 29 range 14 to the high-water mark of the North Channel; north of that high-water mark easterly to the high-water mark of Serpent River and Serpent Lake and the west boundary of Shedden Township; west of a line drawn northerly to the N.W. angle of Township O, westerly to the S.W. angle of Township X and northerly to the N.W. angle of Township 7Z; south of a line drawn westerly to the N.W. angle of Township 29 range 14.

November 12th to December 17th;

Bulls only--resident hunters only.

Schedule 8. South of a line drawn westerly along the south boundary of Schedule 6 from the Ontario-Quebec boundary where it is intersected by Highway No. 66 to the N.W. angle of Township O; east of a line drawn southerly to the west boundary of Shedden Township where it is intersected by Highway No. 17; north of Highway No. 17 easterly to Highway No. 63 in North Bay, the last mentioned highway to Trout Lake, Talon Lake, Mattawa River and connecting waters to the Ontario-Quebec boundary; west of that boundary northerly to Highway No. 66.

November 26th to December 10th;

Bulls only--resident hunters only.

Upland Game Birds and Small Game Animals

Hungarian Partridge: (a) September 17 to November 19 inclusive:
North and West of the French and Mattawa Rivers and Lake Nipissing, and

including Manitoulin Island;

(b) October 8 to October 15 inclusive: The counties of Carleton, Dundas, Glengarry, Grenville, Prescott, Russell and Stormont; and

(c) October 3 to October 22: That part of Ontario not described in (a) and (b).

Bag Limit--8 per day; possession limit--16 at any one time.

Ruffed Grouse, Sharp-tailed Grouse, Spruce Partridge: (1) September 17 to November 19: North and West of the French and Mattawa Rivers and Lake Nipissing and including Manitoulin. Bag Limit--5 per day; possession limit--15 at any one time.

(2) October 8 to November 19: South of the French and Mattawa Rivers and Lake Nipissing excluding the counties named in (3). Bag Limit 5 per day; possession limit--15 at any one time.

(3) October 29 to November 5: Brant, Elgin, Essex, Haldimand, Halton, Kent, Lambton, Lincoln, Middlesex, Norfolk, Oxford, Peel, Welland, Wentworth and York Counties. Bag Limit--3 per day; possession limit--15 at any time.

Ptarmigan: September 1, 1955 to March 31, 1956, inclusive: In any part of Ontario.

Bag Limit--5 per day; possession limit--15 at any one time.

*Pheasants: (a) October 26 and 27 (8:00 a.m. to 5:00 p.m.): Pelee Island. Aggregate possession limit: 12 birds (8 cocks, 4 hens).

(b) October 26, 28 and 29 (8:00 a.m. to 5:00 p.m.): The counties of Brant, Halton, Huron, Oxford, Waterloo, Wellington and Wentworth. Bag Limit: 3 cock birds per day.

(c) October 28 and 29 (8:00 a.m. to 5:00 p.m.):

(1) The County of York;

(ii) The Township of Darlington in Durham County; and

(iii) The townships of East Whitby, Pickering, and Whitby in Ontario County.

Bag Limit: 3 cock birds per day.

(d) October 26 to November 2 (8:00 a.m. to 5:00 p.m.): That part of Ontario not described in (a), (b) and (c). Bag Limit: 3 cock birds per day.

Squirrel (Black, Grey and Fox): October 26 to November 12 inclusive: In any part of Ontario. Bag Limit--5 per day; possession limit--10 at any one time.

*Rabbit: (a) November 1, 1955, to January 31, 1956, inclusive: The counties of Essex and Kent.

(b) November 1, 1955, to February 29, 1956, inclusive:

(i) The counties of Elgin, Haldimand, Lambton, Lincoln, Middlesex, Norfolk, Peel, Welland and York;

(ii) The townships of Clarke and Darlington in Durham County;

(iii) The townships of East Whitby, Pickering and Whitby in Ontario County; and

(iv) The townships of Adjala, Tecumseh, and West Gwillimbury in Simcoe County.

(c) October 26 and October 28, 1955--February 29, 1956:

(i) The counties of Brant, Halton, Oxford and Wentworth;

(ii) The townships of Hay, Stanley and Stephen in Huron County;

(iii) The township of Wilmot in Waterloo County; and

(iv) The township of Puslinch in Wellington County.

(d) May 20, 1955, to October 31, 1956: That part of Ontario not described in (a), (b) and (c).

Bag Limit--6 cotton-tail rabbits per day.

Raccoon: August 1, 1955 to October 31, 1956: In any part of Ontario.

*Special Township Hunting Licences are required to authorize the hunting of pheasants, rabbits and foxes in specified townships in the counties of Brant, Durham, Elgin, Essex, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Ontario, Oxford, Peel, Prince Edward, Simcoe, Waterloo, Welland, Wellington, Wentworth and York. Special licences obtainable only through local Departmental Offices are required in order to hunt raccoon at night with hounds.

Fur

Beaver (By quota only):

1. November 1st, 1955 to May 21st, 1956: In that part of Ontario lying north of the northernmost line of the C.N.R.

2. November 1st, 1955 to April 30th, 1956: In that part of Ontario lying south of the northernmost line of the C.N.R.

Fisher and Marten (On registered traplines and by quota only):

November 1st, 1955 to January 21st, 1956: In all parts of Ontario.

Fox: May 20th, 1955 to October 31st, 1956: In all parts of Ontario.

Lynx (On registered traplines and by quota only): November 1st, 1955 to February 29th, 1956: In all parts of Ontario.

Mink: 1. November 1st, 1955 to February 29th, 1956:

(a) In that part of Ontario lying north of the northernmost line of the C.N.R.

(b) In the counties of Elgin, Essex, Haldimand, Kent, Lambton, Middlesex, Norfolk and Welland.

2. November 1st, 1955 to January 21st, 1956: In that part of Ontario lying south of the northernmost line of the C.N.R. excepting therefrom the counties of Elgin, Essex, Haldimand, Kent, Lambton, Middlesex, Norfolk, and Welland.

Raccoon: August 1st, 1955 to October 31st, 1956: In all parts of Ontario.

Otter: November 1st, 1955 to April 30th, 1956: In all parts of Ontario except in the counties of Brant, Dufferin, Elgin, Essex, Grey, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Ontario, Oxford, Peel, Perth, Simcoe, Waterloo, Welland, Wellington, Wentworth, York, and in the townships of Arran, Brant, Bruce, Carrick, Culross, Elderslie, Greenock, Huron, Kincardine, Kinross, and Saugeen in the County of Bruce, where there is NO OPEN SEASON.

Muskrat: 1. November 1st, 1955 to May 31st, 1956: In that part of Ontario lying north of the northernmost line of the C.N.R.

2. November 1st, 1955 to May 21st, 1956: In the remainder of the province lying north of the French and Mattawa Rivers. (Including Manitoulin)

3. November 1st, 1955 to April 21st, 1956. In the counties of Elgin, Essex, Kent, Middlesex and Norfolk.

4. November 12th, 1955 to December 11th, 1955.

(a) In the county of Prince Edward.

(b) In the Holland Marsh Trapping Unit as described in OR 95/55, Schedule 7 Item 2.

(c) In the townships of Adjala, Essa, Innisfil, Tecumseth, Tosorontio and West Gwillimbury in the County of Simcoe.

5. March 1st, 1956 to April 21st, 1956: In the counties of Brant, Bruce, Carleton, Dufferin, Dundas, Durham, Glengarry, Grenville, Grey, Haldimand, Halton, Huron, Lambton, Leeds, Lincoln, Northumberland, Ontario, Oxford, Peel, Perth, Peterborough, Prescott, Prince Edward, Russell, Simcoe, Stormont, Victoria, Waterloo, Welland, Wellington, Wentworth, and York, and in those parts of the counties of Frontenac, Hastings, Lanark and Lennox and Addington, lying southerly and easterly of Highway No. 7, Highway No. 15 between Perth and Carleton Place, and Highway No. 29 from Carleton Place to where it intersects the boundary between the counties of Lanark and Carleton.

6. March 10th, 1956 to April 30th, 1956: In the districts of Muskoka and Parry Sound, and that part of the district of Nipissing lying south of Trout Lake and the Mattawa River, in the county of Renfrew and the Provisional County of Haliburton, and in those parts of the counties of Frontenac, Hastings, Lanark, and Lennox and Addington lying northerly and westerly of Highway No. 7, Highway No. 15 between Perth and Carleton Place, and Highway No. 29 from Carleton Place to where it intersects the boundary between the counties of Lanark and Carleton.

NOTE: On all registered traplines the muskrat season opens on November 1st and extends to the closing date given above for the region in

which the trapline is located. All trapping of beaver, fisher, lynx and marten is on a quota basis only, set by the Department. Quotas are set for fisher, lynx and marten for registered traplines only. All beaver, fisher, lynx, marten, mink and otter are to be sealed by a Department Officer before being sold by the trapper.

Migratory Birds

Duck hunters in Ontario were allowed a daily bag limit of eight ducks during the 1955 hunting season. This bag limit does not include mergansers, and may include not more than one wood duck. Five geese, twenty-five rails, coots and gallinules (in the aggregate), eight Wilson's snipe, eight woodcock and eight mourning doves may also be taken each day in this Province, and the possession limit for all is two days' bag.

Open seasons will be as follows: (all dates inclusive) Ducks, geese, rails, coots, gallinules, mourning doves, woodcock and Wilson's snipe in the Northern District, September 15th to December 15th; in the Central District, September 17th to December 15th; in the Southern District, October 1st to December 15th (except that in Essex County the open season for geese is October 1st to December 31st, inclusive).

The Northern District of Ontario comprises that part of the Province lying north of a line described as follows: Commencing at the point where the right of way of the Canadian National Railway intersects the east boundary of the Province near Goodwin Station; thence westerly along the said right of way of the Canadian National Railway through Cochrane, Kapuskasing, Hearst and Sioux Lookout to the intersection of the said right of way with the west boundary of the Province near White Station.

The Southern District of Ontario comprises: those parts of Muskoka District and Simcoe County lying west of Highway 69; in Ontario County, those parts of the townships of Rama, Mara, Thorah, Brock, and Reach lying west of Highways 69 and 12, and the townships of Scott, Uxbridge, Pickering, Whitby and East Whitby; in Durham County, the townships of Darlington and Clarke; and the Counties of Brant, Bruce, Dufferin, Elgin, Essex, Grey, Haldimand, Halton, Huron, Kent, Lambton, Lincoln, Middlesex, Norfolk, Oxford, Peel, Perth, Waterloo, Welland, Wellington, Wentworth and York.

The Central District of Ontario comprises all that part of the Province which is not included in the Northern District or the Southern District.

Wildlife Management

Moose

The moose inventory upon which the 1956 open season decisions will be based was again carried out throughout the province. The results are presented in Table 1. It will be seen that the total for the province is a little higher than in 1954. There is probably little change in the status of moose in the province, and any changes in the totals for individual districts are the result of revisions of estimates based on more complete data. For example, a moose census research project was carried out with the aid of a helicopter and beaver aircraft in the White River, Chapleau and Gogama Districts during the winter. The result of this gave Gogama District some very complete counts of moose on some study areas. Interpolation of these results over the whole district enabled the staff to revise their moose population estimate upward from an estimate of 1690 in 1954 to 4451 in 1955.

TABLE 1ONTARIO MOOSE POPULATION ESTIMATES 1955

<u>Districts</u>	<u>1954</u>	<u>1955</u>
Chapleau	1489	772
Cochrane	2348	2970
Fort Frances	368	367
Geraldton	2844	2727
Gogama	1690	4451
Kapuskasing	3249	3854
Kenora	2221	982
Lindsay	118	105
North Bay	900	808
Parry Sound	285	300
Patricia Central	5375	5675
Patricia East	2861	2345
Patricia West	5550	6665
Pembroke	582	609
Port Arthur	2908	2595
Sault Ste. Marie	1878	1470
Sioux Lookout	1185	1100
Sudbury	924	1000
Swastika	1000	1067
Tweed	116	175
White River	1350	1900
Kenora - Patricia West portion	<u>1400</u>	<u>1863</u>
Total	40641	43800

Again there was a substantial increase in the number of moose licences sold in 1955.

	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>
Resident	3620	5196	7502	8958
Non-resident	<u>0</u>	<u>637</u>	<u>735</u>	<u>1141</u>
Total	3620	5833	8237	10099

Deep snow coming during the early part of the season cut off access to remote areas and tended to concentrate hunters. In spite of this hunter success was generally higher than in previous years and ran at 28% compared to 25% in 1954.

Table 2 gives the licence sales, returns, and hunter success for each district in which the season for moose was open.

Table 3 gives the reported kill of bulls, cows and calves for each district and the estimated total kill for the province.

TABLE 2.

SUMMARY OF MOOSE LICENCES SOLD,
RETURNS MADE AND HUNTER SUCCESS 1955

	<u>R e s i d e n t</u>			<u>N o n - R e s i d e n t</u>		
	<u>Licences Issued</u>	<u>Returns Made</u>	<u>Hunters Success</u>	<u>Licences Issued</u>	<u>Returns Made</u>	<u>Hunters Success</u>
Chapleau	328	230	25%	61	38	16%
Cochrane	1,642	303	51%	92	42	98%
Fort Frances	127	-	-	19	-	-
Geraldton	717	659	40%	73	34	79%
Gogama	266	205	61%	52	32	72%
Kapuskasing	1,104	758	36%	68	58	73%
Kenora	437	383	43%	269	31	16%
North Bay	278	222	25%	5	-	-
Port Arthur	1,052	440	24%	49	22	68%
Sault Ste. Marie	581	556	21%	64	54	46%
Sioux Lookout	398	378	58%	258	449	69%
Sudbury	690	114	30%	15	1	100%
Swastika	993	726	17%	25	1	100%
White River	345	91	80%	91	21	90%
Totals	8,958	5,065		1,141	783	

TABLE 3.

MOOSE HARVEST STATISTICS FOR 1955.

District	Bulls	Cows	Calves	Unspeci- fied	Reported Kill	Estimated Kill	Estimated Yield Per 100 Miles
Chapleau							
Res:	43	28	9	0	80	90	1.5
Non-Res:	4	4	1	0	9		
Cochrane							
Res:	82	57	16	0	155	285	1.9
Non-Res:	29	10	2	0	41		
Geraldton							
Res:	134	95	36	0	265	321	1.7
Non-Res:	16	8	2	1	27		
Gogama							
Res:	60	53	9	3	125	157	2.7
Non-Res:	8	9	2	4	23		
Kapuskasung							
Res:	144	98	32	1	275	494	2.7
Non-Res:	29	9	0	0	38		
Kenora							
Res:	87	50	29	0	166	192	2.6
Non-Res:	3	1	1	0	5		
North Bay							
Res:	52	0	0	0	52	59	1.2
Non-Res:	0	0	0	0	0		
Port Arthur							
Res:	91	69	20	0	180	245	1.8
Non-Res:	11	4	0	0	15		
Sault Ste. Marie							
Res:	100	8	7	0	115	140	1.7
Non-Res:	12	10	3	0	25		
Sioux Lookout							
Res:	106	78	34	1	219	602	1.7
Non-Res:	200	89	23	0	312		
Sudbury							
Res:	24	7	1	0	32	39	0.6
Non-Res:	1	0	0	0	1		
Swastika							
Res:	74	44	9	0	127	128	2.5
Non-Res:	1	0	0	0	1		
White River							
Res:	31	33	9	0	73	115	1.8
Non-Res:	12	7	0	0	19		
TOTALS:	1354	771	245	10	2380	2867	

White-tailed Deer

Hunting Pressure:

The rapid increase in license sales that occurred in the immediate post-war period has not been maintained during the last five years. From 1945 to 1950 the increase was 66%. Total sales stood at 113,120 in 1955 a 17% increase over 1950.

The following table gives the figures for each type of license for the last five years.

<u>Year</u>	<u>Residents</u>	<u>Farmers</u>	<u>Non-residents</u>	<u>Camp</u>	<u>Totals</u>
1951	78,760	9,750	10,400	780	99,690
1952	70,500	25,500	870	790	97,660
1953	73,500	18,500	8,300	785	101,085
1954	79,000	13,180	10,400	620	103,200
1955	87,150	17,160	8,100	710	113,120

The marked decrease in Non-resident license sales in 1952 was due to the ban on the export of cloven hoofed animals to the United States because of the outbreak of foot and mouth disease in Saskatchewan.

In 1952 the farmers license previously valid only in the district of Haliburton, Muskoka, Parry Sound, Nipissing, Manitoulin and the country north and west of there was extended to cover the province. There is evidence that this privilege was abused by many not eligible to take out this license for there was a considerable drop in resident license sales that year, coincident with the great increase in farmer licenses. It is probable that warning publicity and court action was responsible for the reverse trend to be seen in the 1953 and 1954 figures. The high level of prosperity in Ontario may have been responsible for the record sales of licenses to Ontario hunters in 1955.

Hunter Distribution:

Deer occupy two separate areas in the province in huntable densities. The extent of these areas is limited primarily by climatic factors but lumbering and forest fires also play a part in that they can extend or reduce them and affect their quality.

The most important area from the point of view of numbers of hunters lies in the southern part of Sault Ste. Marie and Sudbury Districts, most

of the North Bay District and in the forested country lying south of the French and Mattawa rivers to Midland, Lindsay, Tweed, Perth and Arnprior. These hunting grounds cover an area of about 27,850 square miles exclusive of Algonquin Park. Deer also occupy the farm lands lying south of this primary deer range and provide a certain amount of hunting on an irregular basis. There is approximately 28,000 square miles of this secondary deer range in Erie, Huron, Simcoe and the southern parts of Lindsay, Tweed and Rideau Districts.

The second important deer area in the province lies west of Lake Superior and covers the south-western corner of Patricia west, western Sioux Lookout, Kenora, Fort Frances and a small part of southern Port Arthur Districts. These hunting grounds cover an area of about 12,600 square miles.

The highway checking stations indicate that very few resident hunters live in one of these areas and hunt in the other so that the number of licenses issued to residents in each area should approximate the number of sportsmen hunting there. License issuers were asked for the number of each kind of deer license they issued in 1955. Returns were received from 65% of the 2,475 issuers operating throughout the province. These were used as a basis for computing hunter distribution in the two segments of deer range. Certain biases in the sample received suggest that the number of non-residents in the western deer range may be slightly underestimated while the number of residents and farmers may be slightly overestimated.

The following table gives the results of this survey.

<u>1955</u>	<u>Eastern Deer Range</u>		<u>Western Deer Range</u>		<u>Known Total License Sales</u>
	<u>Reported</u>	<u>Computed</u>	<u>Reported</u>	<u>Computed</u>	
Residents	60,049	79,153	5,911	7,997	87,150
Farmers	12,033	15,207	1,501	1,953	17,160
Non-residents	3,635	4,994	2,026	3,106	8,100
Camps	<u>481</u>	<u>703</u>	<u>5</u>	<u>7</u>	<u>710</u>
Total	76,198	100,057	9,443	13,063	113,120
Dog Licenses	8,770	11,155	106	135	11,290

The western segment of primary deer range therefore must support an average density of about one hunter per square mile. Distribution, however is not even so that some areas support much higher concentration than this while

others accommodate less. The eastern segment of primary deer range averages about 3.6 hunters per square mile. As in the west there is variation and some areas such as the 46 square mile South Canonto deer study area supports an average of about six hunters per square mile all of whom are of course not operating at any one time. Hunter densities may build up locally much higher than this but precise measurements are lacking.

Hunters Success:

Information collected in recent years indicates that many factors influence success rates of hunters and that abundance of deer is not necessarily the most important.

Analysis of information from highway checking stations and field observations have indicated that success rates vary greatly with hunting methods. The most successful hunters are those who hunt with guides or in well organized parties in familiar country each year. They often use dogs and operate from a camp or summer cottage. The least successful are those who drive out for a day's hunt in unfamiliar country.

It was possible to analyse the data from the 1955 highway checking stations in the eastern segment of deer range to give a comparison of the success rates for these two groups. The differences are quite striking and should provide strong encouragement for those keen hunters who do not at present belong to an organized group with a camp to join one or form a new group.

1955	Guided and Organized Camp Hunters			Local and Casual Hunters		
	Total Checked	Man Days Per Deer	Percent Success	Total Checked	Man Days Per Deer	Percent Success
Lindsay	-	-	58%	-	-	11%
Tweed	1,895	-	30%	509	-	13%
Pembroke	670	12.8	48%	334	22.6	20%
Parry						
Sound	1,398	-	49%	472	-	25%
North Bay	724	20.4	24%	1,100	31.8	5%

Additional information on the success rates of organized parties of hunters is available from a mail survey of camps situated on crown land and authorized by a land use permit. Some of these figures include parties operating from summer cottages.

The following table gives the results of this survey for 1955.

	<u>No. of Hunters</u>	<u>No. of Deer Killed</u>	<u>Hunters Success</u>
Lindsay	293	170	58%
Tweed	1,477	741	50%
Pembroke	646	374	58%
North Bay	<u>843</u>	<u>384</u>	<u>46%</u>
Total	3,259	1,669	51%

The success rates for the highway checking stations for each district invariably lie between the rates given for these two groups of hunters. This checking method samples both groups but not in a random manner so that the results are biased to an unknown extent.

Table 4 gives the summaries for the 1955 highway checking stations. There was a marked improvement in hunter success on Manitoulin Island. The 1955 hunter success percentages for the North Bay and Sudbury checking stations are not comparable with previous years because of changes in checking procedure. These Districts made a special effort to contact local and casual hunters in 1955. Sudbury ran a mobile station throughout the season, while North Bay ran four checking stations on different highways on weekends only. Their figures probably include some sportsmen who had not finished hunting and this may have had some influence on the low success reported.

TABLE 4

DEER CHECKING STATION SUMMARY

	<u>Lindsay</u>	<u>Tweed</u>	<u>Pembroke</u>	<u>Parry Sound</u>	<u>North Bay</u>	<u>Sudbury</u>	<u>Manitoulin</u>	<u>Sault Ste. Marie</u>	<u>Western Region</u>	<u>Huron</u>
1 9 5 5										
Resident Hunters	2555	2892	957	2570	1960	2195	880	96	-	5211
Non-residents	136	135	57	192	214	183	213	304	-	30
Total	2691	3027	1014	2762	2174	2378	1093	400	990	5241
Deer shot by residents	617	820	368	797	236	298	431	20	-	754
Deer shot by non-residents	73	49	28	79	93	55	131	137	-	4
Total deer checked	690	869	396	876	329	353	562	157	758	758
% success residents	24.0	28.3	38.5	31.0	12.0	13.6	49.0	20.9	-	14.4
% success non-residents	54.0	36.2	49.1	41.2	43.5	30.1	61.5	45.1	-	.5
% success all hunters	25.6	28.7	39.1	31.6	15.1	14.8	51.4	39.3	76.6	14.4
Total days hunting	13323	16890	5411	14310	6761	6449	4645	2126	5104	11233
Days per hunter per deer	19.1	19.4	13.7	16.5	20.5	18.3	8.3	13.5	6.7	14
Total Hunters Checked 21,770										
Total Deer Checked 5,748										

Age and Sex Composition of the Kill:

Summaries of the age and sex data collected in 1955 are presented in table 5.

In his 1955 report for North Bay, Mr. C.O. Bartlett draws attention to a shortage of $1\frac{1}{2}$ year old deer in the kill from the Marten River and Timagami areas. He points out that this shortage was not apparent in the samples obtained in the southeastern and southwestern portions of the District adjoining the French and Mattawa Rivers. He concludes that they suggest a more than normal mortality in the 1954 fawn class and that a more thorough analysis of the data by townships and an analysis of snow conditions in the District during the winter of 1954-55 should help to isolate the factor or factors responsible for this increased mortality. A similar situation existed in seven townships in northeastern Tweed District where hunters success was well below that of 1954 and neighbouring areas in 1955. Mr. P.A. Thompson reporting on this situation wrote that snow depths recorded at the Dacre snow station show an average of 28.7 inches of snow with a "B" crust on the ground from 24 January to 28 March, 1955. Over the same period the average snow depth at Bancroft was 24.8 inches. When data from the checking stations of the area are compared we find that the Dacre area had a 28% hunters success, a fawn:doe ratio of 66:100 and a 22% fawn kill, while the Bancroft area had a 32% hunters success, a fawn:doe ratio of 110:100 and a 36% fawn kill.

TABLE 5

AGE AND SEX COMPOSITION OF THE KILL

1955

Age	Lindsay	Tweed	Pembroke	Parry Sound	North Bay	Sudbury	Manitoulin	Sault Ste. Marie	Western Region	Huron
1½	40.6	34.1	43.4	40.5	34.0	27.3	39.5	43	28.3	28.0
2½	30.8	27.4	21.2	29.9	32.5	24.5	26.2	28	29.6	35.9
3½	20.3	19.3	14.6	17.5	23.3	26.8	12.9	14	21.8	19.1
4½	6.1	10.7	11.8	5.3	6.6	9.9	7.1	7	10.1	12.3
5½		5.8	2.4	4.7	1.0	4.3	6.2	8	3.7	
6½	2.2	1.7	2.8	1.3		4.0	3.1	0	2.6	4.6
7½		1.0	1.9	.2	2.5	2.8	2.5	0	2.6	
8½		0	.9	0		.4	2.5	0	1.3	
9½		0	.9	.6		0	0	0	0	
Total adults aged	315	481	212	452	197	253	324	169	615	89
Total fawns checked	217	252	104	281	96	74	173	74	159	35
Total not aged	158	112	77	147	48	26	65	19	125	634
Grand Total	690	845	393	880	341	353	562	262	899	758
% Bucks	44	38.6	42.0	36.8	43.4	41.4	39.3	44.0	42.5	30.4
% Does	33	27.0	31.5	31.3	27.4	37.7	29.8	25.2	36.9	35.9
% Fawns	23	34.4	26.5	32.0	29.2	20.9	30.7	30.8	20.6	24.6

The forms returned by owners of hunt camps gave information on hunter success on each day of the season. These figures indicate that success may vary considerably from day to day and that no set pattern of kill, such as has been described for upland game birds, exists.

With the increase in hunting pressure since the war an element of competition has been growing so that opening day assumes greater importance in the hunters calendar. While hunters success is usually high on opening day these kill distribution figures indicate that it may sometimes rise even higher later in the season. Indeed the North Bay figures show the highest success occurring during the last week of the season. The hunters' success averages for each week in North Bay for 1955 were 9.9%, 14.6%, 14.7% and 22.2%. These daily hunter success figures have been summarized in the form of graphs. North Bay, Pembroke, Lindsay and Tweed for 1955 and Tweed for 1954 have been reproduced here.

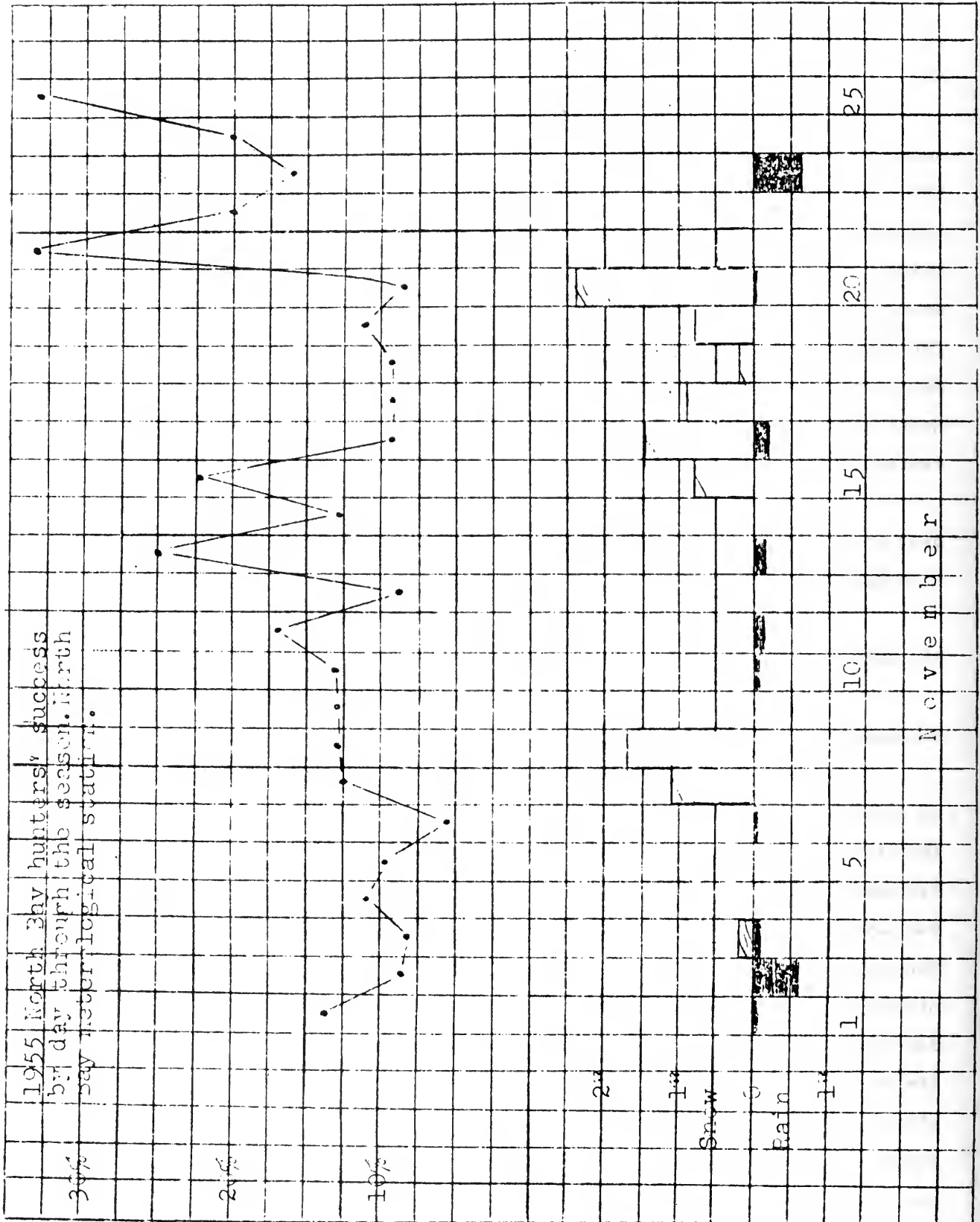
The effects of weather on hunting is always a topic of discussion in deer hunting camps. Before this can be properly understood many factors must be considered.

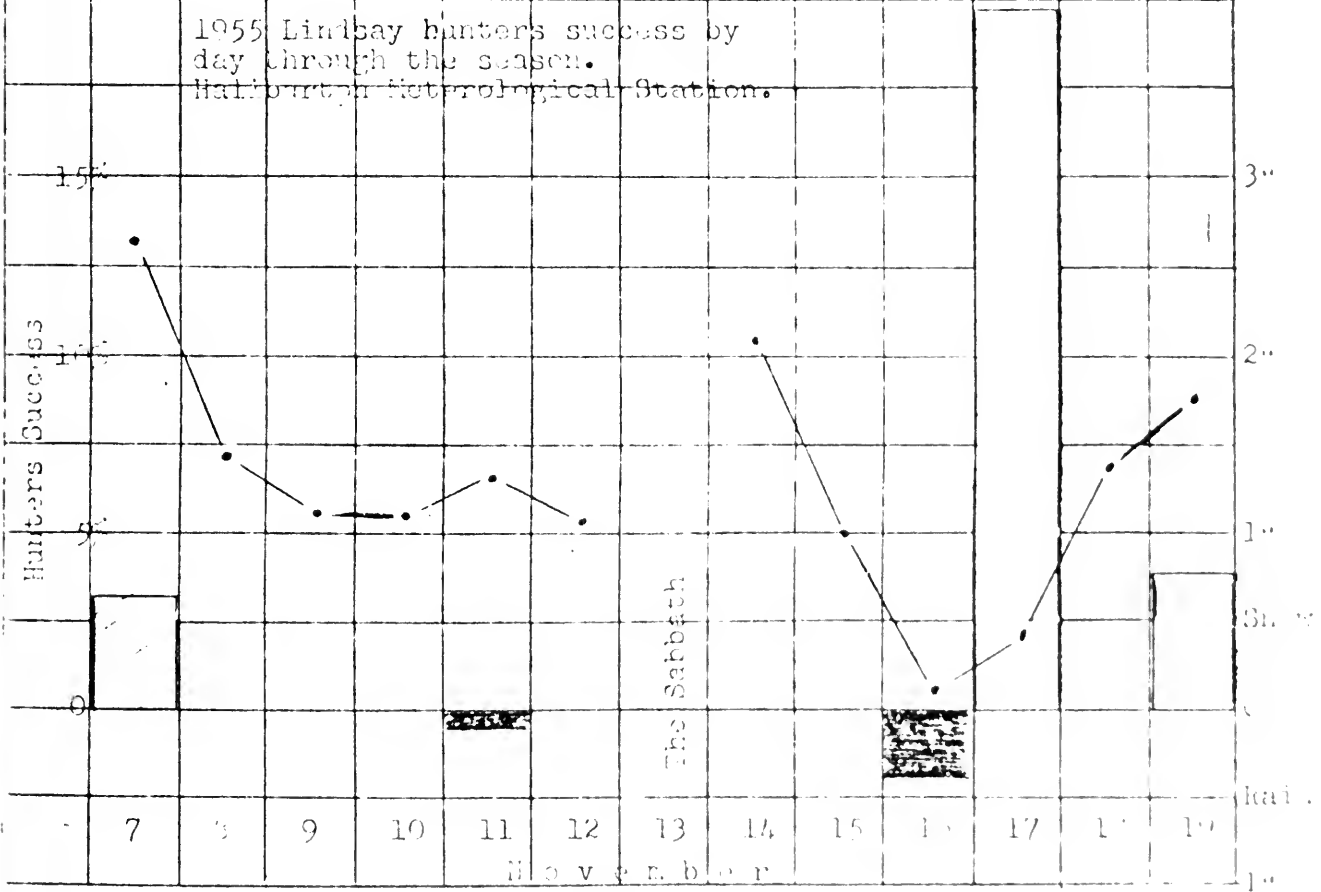
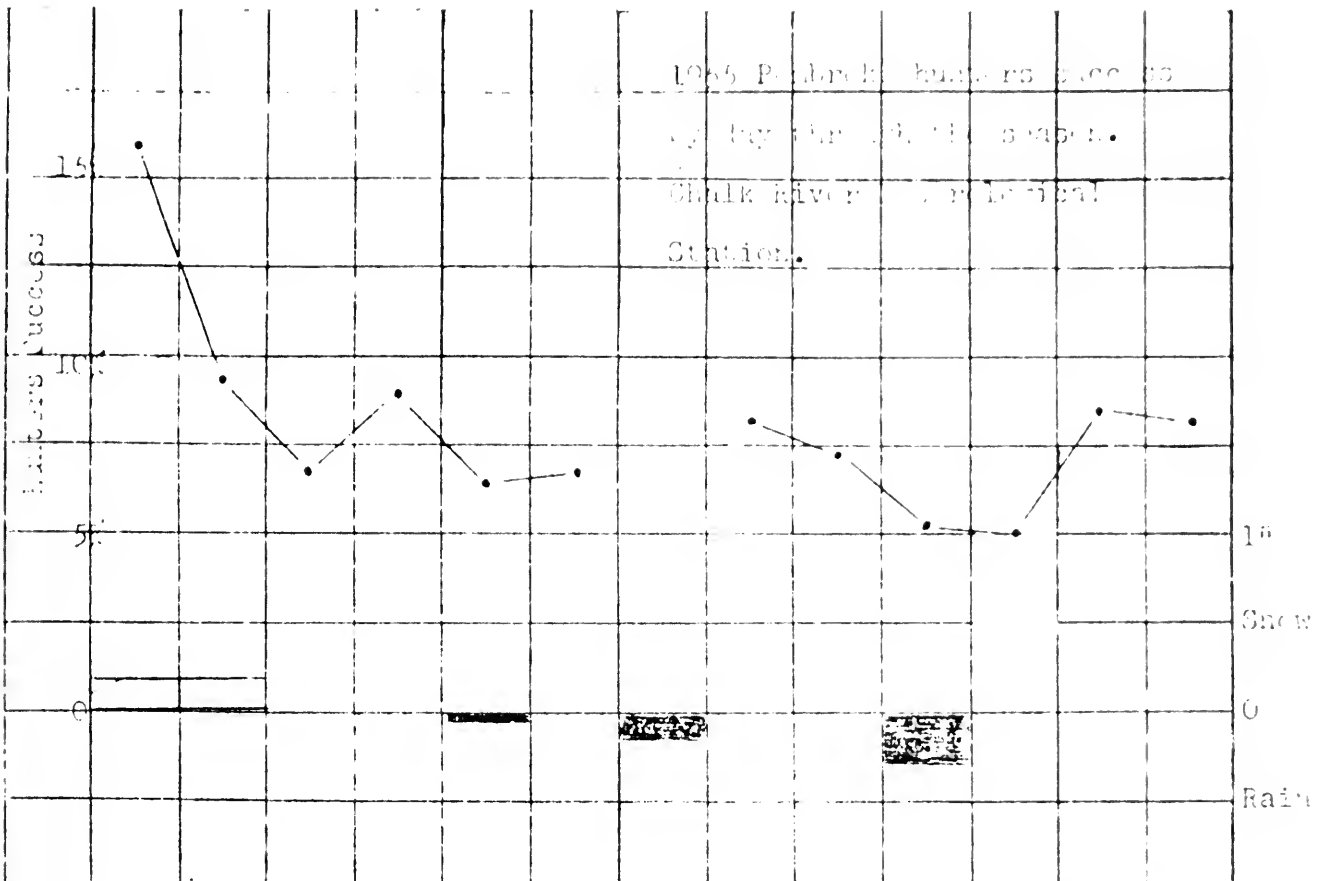
Temperature, wind, times and amounts of rain and snowfall, whether the ground is frozen, waterlogged, dry or snow covered all affect the hunt.

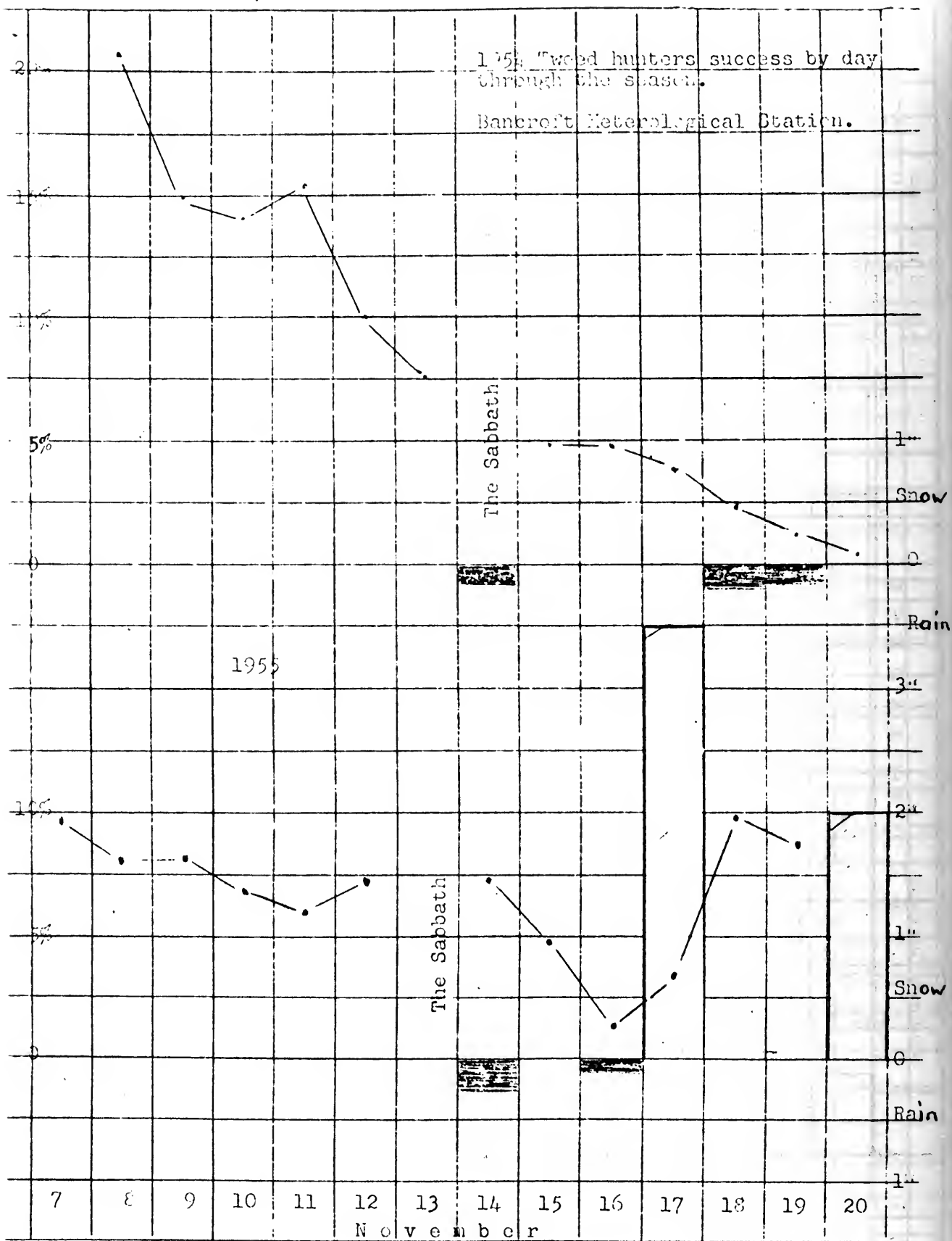
We lack measurements of most of these factors at this time so that no complete evaluation of the effects of each or their combination is possible.

The rain and snowfall figures from a single meteorological station in each District plotted as histograms on the hunter success graphs do suggest that hunting deteriorates on rainy days. On all the graphs combined rain is recorded as having fallen on 21 occasions. In 17 cases it is possible to compare the success rates on the day of rain with that of the previous day. Hunting success deteriorated in 11 cases, improved in 3 and no appreciable change is apparent three times. In Lindsay, Tweed and Pembroke hunters' success improved on the day after snow except when it fell on the opening two days of the hunt. In North Bay the figures are not as clear cut as this but the snow which lay on the ground during the last week of the season may have been responsible for the fact that hunting success was more than twice as high than during the first week when the ground was bare.

Hunters Success







The snow measuring stations operated in the Western Region gave ample warning during the winter that severe conditions might cause mortality of deer. Field staff were able to check wintering areas while the snow was present and again in the late spring. Indications are that mortality particularly of fawns has occurred and sportsmen can expect fewer deer and poorer hunting in the fall of 1956 in western Ontario.

Caribou

Estimates of caribou numbers were again made by the staff of the districts in 1955. The results are presented in table 6.

TABLE 6 ESTIMATES OF WOODLAND CARIBOU

Forest District	Estimated Population	
	<u>1954</u>	<u>1955</u>
Cochrane	44	45
Kapuskasing	388	375
White River	100	150
Geraldton	181	95
Port Arthur	60	87
Sioux Lookout	5	0
Patricia East	-	1415
Patricia Central - Sioux Lookout	2975	2893
Patricia Central - Geraldton	525	1017
Patricia West - Sioux Lookout	2030	2225
Patricia West - Kenora	<u>175</u>	<u>129</u>
Total	6483*	8431

*Patricia East missing.

Fur Management

The catch of fur-bearers for 1955 - 56 for Ontario is presented in table 7.

Beaver

The quality of late spring caught beaver pelts has given concern, therefore, the closing date of the season was advanced in 1956. It is not possible to say whether this shorter season was responsible for the reduced catch in some of the northern Districts. There was little change in the overall catch for the Province because some of the southern Districts made up for the deficiency in the north. The Fort Frances, Parry Sound, Lindsay, and Tweed Districts have become high producers of beaver.

House counts from many Districts are indicating that beaver populations have ceased to increase and in some cases are declining.

Muskrats

The catch of muskrats declined still further in the 1955-56 season. An outbreak of tularemia was reported on Walpole Island in the St. Clair River one of the most important producing areas in the province. The presence of the tularemia organism was demonstrated in specimens sent to the Department of Health in Toronto.

Mink

A further reduction in the catch of mink was evident in 1955 - 56. Deep snow coming early at the height of the season may have been responsible for reducing the catch of many trappers.

Marten

The catch of marten was a little below that of 1954 - 55 but still remained at a high level. The live trapping and stocking programme was continued and resulted in the release of twenty-four marten at Upper Windigo Lake in Patricia West and seventeen on the Attawapiskat River in Patricia East.

Fisher

The catch of fisher was only slightly below that of 1954 -55 and still above any year since 1928 - 29. Fisher are continuing to spread into the unoccupied areas of north-eastern Ontario.

SUMMARY OF FUR RETURNS BY ONTARIO GAME MANAGEMENT DISTRICTS

COMPILED FROM DISTRICTS FORM G-224 FOR YEAR 1955-56

	NO. OF AREAS	NO. OF TRAP.	NO. OF RETS. MADE	BEAV. QUOTA	FISH QUOTA	MAR QUOTA	BEAVER BOB CATCH	FISH CAT	ARC FOX	COL FOX	LYNX	MART	MIK	MUSKRAT	OTT.	PAC SKUNK	SQU.	WEAS.	BR. VOL.	714 VOL.	
CHAULEAU	123	97	97	2007	-	-	1207	-	-	6	22	159	424	712	114	-	-	161	-	-	
COCHRANE	69	74	74	2339	349	322	1252	-	2	2	58	284	336	1117	64	-	66	966	-	-	
FORT FRANCES	126	126	116	9921	330	31	5010	10	21	1	12	33	961	4605	116	-	116	18	7	14	
GENALTON	116	83	83	5981	247	631	1440	9	-	-	-	-	65	1082	-	-	114	369	2	4	
GOOLWA	111	108	108	3310	369	446	1573	-	15	15	22	283	350	901	104	-	54	178	1	-	
LA-PURCHASE	109	109	95	5949	494	1107	2123	3	8	8	11	219	504	1648	137	-	184	278	11	-	
KENORA	267	17	3	11925	-	-	11	-	-	-	2	7	7	-	-	-	21	179	-	-	
LAKE ERIC	64	13	13	20	-	-	3974	6	11	11	13	7	962	10279	63	-	991	667	4	4	
LAKE HURON	908	45	45	-	-	-	25	-	6	6	-	-	126	500	-	-	40	6	-	-	
LAKE SIMCOE	117	117	117	594	-	-	4	-	215	-	-	-	478	97336	-	104	327	7	-	-	
LINGSBAY	129	144	144	4978	77	39	3708	-	-	-	-	-	178	60164	-	3636	40	6	1	-	
NORTH BAY	152	161	161	5689	37	188	3203	-	319	-	-	-	11	2271	2	5341	210	59	6	-	
PARRY SOUND	136	124	124	4388	65	-	25	-	58	-	-	-	27	32625	2	60	4	2	-	-	
PATRICIA CENTRAL	269	477	240	32939	587	586	1749	-	23	-	-	-	179	806	27	27	36	13	-	-	
PATRICIA EAST	233	457	420	20097	320	824	542	-	285	-	-	-	912	1361	12	111	128	168	3	-	
PATRICIA WEST	328	790	544	24717	2060	58	677	-	-	-	-	-	24265	1470	18	-	109	-	-	-	
PENBROKE	60	60	60	3123	352	141	77	-	15	-	-	-	745	6875	80	78	129	109	-	-	
PORT ARTHUR	178	192	178	8765	742	261	3708	-	153	-	-	11	794	20105	47	927	58	130	5	4	
RIDEAU	224	224	224	2097	520	824	3203	-	68	-	-	-	811	4434	124	10	245	2	15	-	
SALT STE. MARIE	252	211	211	10103	209	59	1749	-	34	-	-	89	906	5228	136	70	289	369	3	50	
STICKS LOCKOUT	89	101	86	1010	326	283	1358	-	61	-	-	205	3741	14987	59	158	5	297	4	13	
SUDBURY	206	205	181	14974	178	62	9643	-	508	-	-	428	2054	7509	1089	-	23	3508	3454	1	
SWASTIKA	148	148	146	4170	300	7	2778	-	71	-	-	76	2022	24361	724	-	9	3430	-	-	
TWEEED	182	179	151	6578	38	-	533	-	80	-	-	-	599	4046	103	40	56	154	1	15	
WHITE RIVER	139	104	98	8152	486	920	2293	2	24	-	-	-	242	2432	2	42	20	65	-	-	
TOTALS	9655	19924	9363	6204	4693	6204	96084	46	2619	183	645	2909	27510	400111	6401	13135	615	13661	20180	167	276

RTA REGISTERED TRAPPING AREAS 49.0 PER. OF BEAVER QUOTA CAUGHT
 RES RESIDENT TRAPPING LICENCES 36.3 FISHER
 FAR FARMER TRAPPER 547 FAR 46.9 MARTIN

Experimental Traplines

The experimental traplines were operated for their fifth and final year during the 1955 - 56 winter.

The catch is presented in table 8. Analysis of the data from this important project is now being carried out.

TABLE 8 EXPERIMENTAL TRAPLINE CATCH 1951 - 1956

<u>Chapleau</u>	<u>Beaver</u>	<u>Marten</u>	<u>Fisher</u>	<u>Mink</u>	<u>Otter</u>	<u>Fox</u>	<u>Weasel</u>	<u>Lynx</u>
1951 - 2	79	64	9	15	14	4	5	0
1952 - 3	7	67	6	14	8	9	13	0
1953 - 4	0*	74	4	10	6	7	22	0
1954 - 5	0*	25	1	1	3	0	1	0
1955 - 6	41	14	3	4	3	1	0	1
<u>Gogama</u>								
1951 - 2	28	19	4	6	1	3	21	0
1952 - 3	6	17	5	6	2	2	49	1
1953 - 4	0*	21	6	7	1	3	8	0
1954 - 5	0*	6	7	5	0	1	0	0
1955 - 6	24	3	5	4	0	0	0	0

*No beaver trapping undertaken.

TABLE 9

WILD FUR SEALED DURING THE 1955-56 SEASON
BY FUR MANAGEMENT DISTRICTS OF ONTARIO

	<u>Beaver</u>	<u>Fisher</u>	<u>Lynx</u>	<u>Marten</u>	<u>Mink</u>	<u>Otter</u>
Chapleau	1192	116	25	153	437	113
Cochrane	2886	176	110	518	614	151
Fort Frances	6296	137	8	36	1223	145
Geraldton	2117	102	24	414	486	138
Gogama	1607	132	11	268	608	152
Kapuskasig	6027	241	169	659	1333	230
Kenora	8651	176	16	7	1860	162
Lake Erie	9	-	-	-	737	-
Lake Huron	24	-	-	-	1696	2
Lake Simcoe	1160	-	-	-	1109	28
Lindsay	6176	92	-	10	1583	136
North Bay	3533	53	14	6	943	119
Parry Sound	6711	148	3	92	1765	205
Patricia Central West	27152	642	278	344	7467	3189
Patricia East	5553	45	51	84	1449	933
Pembroke	3379	243	-	79	800	103
Port Arthur	4932	335	32	209	617	156
Rideau	863	-	-	-	548	14
Sault Ste. Marie	2813	150	11	74	1208	181
Sioux Lookout*						
Sudbury	8424	138	28	1	1990	254
Swastika	1626	105	82	18	537	73
Tweed	8779	21	-	-	1957	126
White River	<u>2137</u>	<u>75</u>	<u>44</u>	<u>159</u>	<u>638</u>	<u>155</u>
Totals	112,047	3,127	906	3,131	31,605	6,765

*Included in Patricia Central

Waterfowl

The Department cooperated with the Canadian Wildlife Service, Department of Northern Affairs and National Resources, Ottawa, in waterfowl surveys and banding activities. A good flight of waterfowl visited the southern part of the Province during the open season.

Upland Game

Hungarian partridge were at a very low ebb in the Kemptville and Swastika Districts. Flocks of strong young birds were reported, and although numbers were as low as they had been in recent years hope is held out for an increase next year. The open season was greatly reduced. In the Niagara District the birds were plentiful only on the fringe of their range, and it became evident that the cyclic decline had occurred this year as well.

Ruffed grouse were generally scarce but the first sign of increase was to be found in the eastern part of the Province. This year presumably marks the last part of the natural population cycle.

A low survival from last year's planting of wild turkeys was indicated by very few reports of birds seen this year. However, the planting made in 1949 in Lambton County has expanded, and a new flock is reported some distance away from any previously seen.

Bob-white quail have increased, and an experimental trapping was undertaken in cooperation with the New York State Conservation Department. It is hoped that northern birds from native stocks in Ontario will give a hardier strain when propagated in the New York State quail farm. This Province does not operate a quail farm but will have an opportunity of sharing the results of any success achieved with Ontario stock at the New York State farm.

Pheasants were more abundant than in any recent year part of this being the result of an excellent winter survival in grain fields which could not be harvested because of "Hurricane Hazel".

Pelee Island Pheasant Shoot

Licences sold - Non-Resident	1409
Resident	<u>200</u>
Total	1609
Average bag per hunter (28.27 percent sample)	
Cocks	4.4
Hens	<u>3.7</u>
Total	8.1
Cock kill -	
Bagged	7128
Net crippling loss	1190
Illegal kill	<u>1000</u> (estimated)
Total	9318
Hen kill -	
Bagged	5969
Net crippling loss	315
Illegal kill	<u>500</u> (estimated)
Total	6784
Total kill	16102

Sex Ratios

Pre-season (October 25)	1.4 hens/cock
Post-season (November 9-10)	12.5 hens/cock

Age ratios (October 26 - 27)

Cocks	6.0 Juv./Adult
Hens	1.67 Juv./Adult

Population Estimates (Kelker Index)

Number of birds before the hunt		Number of birds after the hunt	
Cocks	9,882	Cocks	564
Hens	13,834	Hens	7,050

Pelee Island Pheasants

The annual census was carried out from July 13 - 28 inclusive by means of the brood count method, as in previous years. Statistics of the brood count and the shoot on October 26 and 27 follow:

Pelee Island Pheasant Estimate, July 1955

Total population surviving to October 31 -	Cocks	12,500
	Hens	<u>18,500</u>
	Total	31,000

DEDUCTIONS

Cocks Total	12,500
Less	<u>1,000</u> stock
	11,500
Less	<u>500</u> loss and illegal kill
	11,000 actual bag available
Hens total	18,500
Less	<u>10,000</u> stock
	8,500
Less	<u>3,000</u> loss and illegal kill
	5,500 actual bag available
Bag for 1100 hunters - Cocks	10
	Hens 5
Bag for 1500 hunters - Cocks	7
	Hens 4

Bag set by Pelee Island Township Council, presented to Pelee Council on August, 1955. Cocks 8 and Hens 4

Stocking of Pheasants on Pelee Island

In March, 1956, approximately 1850 pheasants, cocks and hens, were imported from the McFarlane Pheasant Farm in Janesville, Wisconsin. The birds were banded before release by this Department. Survival studies will be carried out during the autumn open season.

Investigations of Parasitism in Pelee Island Pheasants

Twenty-one fecal samples and viscera from twenty-four were examined by Doctor J. K. McGregor of the Ontario Veterinary College, Guelph; the results indicated that the pheasant population was in a healthy condition.

Hunter Success

All Departmental birds released in Kent County were banded. Bag checks of 199 birds taken in the field revealed that 25% were banded. The total number of birds released and banded is not known since various organizations purchase and release pheasants. These are additional to the Departmental birds.

Distribution of Pheasants in Lake Erie District

The hatchery at Normandale distributed 9,250 poults, 18,300 chicks and 738 stock birds throughout the district. The distribution of these pheasants was as follows:

<u>Conservation Officer</u>	<u>Chicks</u>	<u>Poults</u>
J. W. Allan	0	545
R. Arbuthnot	1950	850
D. Bailey	2500	700
T. L. Beck	200	760
T. A. Carter	2500	625
R. W. Finch	800	530
G. T. Greenwood	2200	650
B. E. Howell	600	525
D. C. Martin	600	200
A. McIntyre	300	450
C. R. McKeown	0	875
O. L. Mellick	3100	850
A. R. Muma	2950	750
D. Neill	300	790
E. A. Roberts	<u>500</u>	<u>150</u>
	18300	9250

The Natural Hatch

Weather during the brood season was exceptionally favourable. The anticipated good hatch was reflected in reports of hunters in the fall. Generally birds were plentiful although cocks were somewhat difficult to flush.

Hunting Season

For the first time the season was extended to seven days, throughout the district, October 26th to November 2nd, with a bag limit of three cocks per day. There was some apprehension to the larger season as many feared the population would be seriously reduced. However, hunting pressure was reduced throughout the entire season. Reports indicate that there was an adequate supply of cocks after the shoot and that hens were plentiful. The general feeling now favours the longer season; some recommend an extension to two weeks. In Elgin County, hunter reports indicated a cock to hen ratio of one to five.

Post Season Mortality in Essex County

Conservation Officer G. T. Greenwood reports that from February 1st to May 11th, 1956, at least one hundred and eighty pheasants were killed on the roads, the majority being hen birds. The mortality occurred in all townships but was particularly heavy in Sandwich West, a restricted area. In the township, Mr. Greenwood personally counted three hundred pheasants feeding in one corn field one morning during the first week in May.

Distribution of Pheasants in Lake Huron District

During 1955, 7,000 pheasant poults; 300 old birds; and 10,700 day-old chicks were purchased by this district and placed in areas where the annual snowfall was light and reasonable survival could be expected. The distribution was as follows:

<u>County</u>	<u>Township</u>	<u>Poults</u>	<u>Chicks</u>	<u>Old Birds</u>
Brant	Burford	400	600	25
	Dumfries South	200	500	25
Halton	Nelson	200	Nil	25
	Esquesing	100	Nil	Nil
	Trafalgar	300	600	25
Huron	Hay and Stanley	600	600	Nil
	Stephen	300	600	Nil
Oxford	Blenheim	350	600	10
	Dereham	280	600	10
	Nissouri East	300	500	10
	Norwich North	550	1,500	10
	Norwich South	430	400	10
	Oxford East	455	800	10
	Oxford North	325	600	10
	Oxford West	400	400	10
Waterloo	Wilmot	400	600	40
Wellington	Puslinch	200	400	25
Wentworth	Ancaster	200	400	10
	Beverly	200	Nil	10
	Flamborough East	105	400	10
	Flamborough West	405	600	10
	Glanford	Nil	Nil	10
	Saltfleet	200	Nil	10
Miscellaneous Gun Clubs and Unregulated Areas.		<u>100</u>	<u>50</u>	<u> </u>
		7,000	10,700	305

Distribution of Pheasants in Lake Simcoe District

The following table shows the distribution of pheasants, chicks, poults and adults by townships during the 1955 season:

<u>County</u>	<u>Township</u>	<u>Adults</u>	<u>Poults</u>	<u>Chicks</u>	<u>Total</u>
York	Markham	60	800		860
	Vaughan	60	800	800	1660
	King	60	800	600	1460
	Whitchurch	60	1000	1000	2060
	East Gwillimbury	30	200		230
	North Gwillimbury	20	100		120
				Total	<u>6390</u>
Ontario	Whitby	60	800	600	1460
	East Whitby	60	1000	1100	2160
	Pickering	60	1000	800	1860
	Scugog Island			400	400
				Total	<u>5880</u>
Simcoe	Adjala	30	100		130
	Tecumseh	30	300		330
	West Gwillimbury	30	200		230
				500	500
				Total	<u>1190</u>
Peel		40	1000	1200	<u>2240</u>
				100	<u>100</u>
SUMMARY		Adults	600		
		Chicks	7,100		
		Poults	<u>8,100</u>		
TOTAL			<u>15,800</u>		

In addition to the above distribution by Provincial authorities, the Peel County Pheasant Farm raised and released a few thousand poults in Peel County, and 900 poults purchased by the Toronto Anglers and Hunters with the help of Department officials were released in the townships of Markham, Whitchurch, Pickering and Uxbridge.

Distribution of Pheasants in Lindsay District

<u>County</u>	<u>Township</u>	<u>Adults</u>	<u>Poults</u>	<u>Chicks</u>
Durham	Darlington		250	3500
	Clarke		250	2700
Northumberland	Hamilton			400
	Brighton	500		
Total		500	500	6600

Regulated Townships

Sale of Township Licences in Lake Huron District

During the year ending March 31st, 1956, a survey was made of licences sold and disposition of monies collected from the sale of Regulated Township licences in each of the Regulated Townships in the Huron District. All of this information was turned over to the Regional Office with the result that meetings were held with Head Office and the three Districts in this Region.

A draft letter outlining the position of the Department and the responsibilities of the regulated townships relative to the sale of township licences, was forwarded by Head Office to each township this year. We feel that this action will alleviate much of the confusion that exists in some of the regulated townships.

Table 10 gives a summary of the number of rabbit and pheasant licences sold in the Lake Huron District for the fall and winter of 1955 - 56.

TABLE 10

SALE OF TOWNSHIP LICENCES IN LAKE HURON DISTRICT

<u>County</u>	<u>Township</u>	<u>Resident Licences</u>	<u>Non-Resident Licences</u>
Brant	Burford	291	250
	South Dumfries	132	302
	Onondaga	35	100
Halton	Nelson	406	563
	Nassagaweya	56	32
	Esquesing	445	108
	Trafalgar	514	364
Huron	Hay and Stanley	230	N11
	Stephen	174	59
Oxford	South Norwich	155	94
	West Oxford	153	458
	West Zorra	95	33
	Blenheim	162	178
	East Nissouri	143	43
	East Oxford	113	89
	Dereham	211	131
	North Norwich	156	226
	North Oxford	43	312
Blandford	35	36	
Waterloo	Wilmot	229	391
Wellington	Puslinch	92	536
Wentworth	Ancaster	225	390
	Binbrook	65	185
	West Flamboro	194	808
	East Flamboro	400	400
	Saltfleet	533	2,393
	Beverly	98	321
	Barton	N11	N11
	Glanford	61	129
		<u>5,457</u>	<u>8,931</u>

TABLE 11

SALE OF TOWNSHIP LICENCES IN LAKE SIMCOE DISTRICT

<u>County</u>	<u>Township</u>	<u>Resident Licences</u>	<u>Non-Resident Licences</u>
York	Pickering	286	400
	Markham	416	352
	Whitchurch	127	400
	Vaughan	246	1,000
	King	220	500
	East Gwillimbury	93	348
Ontario	Whitby	171	200
	East Whitby	Nil	Nil
Peel	Albion	131	Nil
	Caledon	20	174
	Chinguacousy	198	200
	Toronto	269	37
	Toronto Gore	16	60
Simcoe	Adjala	48	100
	Tecumseth	129	122
	West Gwillimbury	78	108
		<u>2,448</u>	<u>4,001</u>

Sale of Township Licences in Lake Simcoe District

Of the seventeen Regulated Townships in this district all sold resident and non-resident licences during the year except the Township of Albion in Peel County which did not offer for sale any non-resident licences. (One township, East Whitby, no record.)

Resident township licence fees during the open season ranged from 25¢ to \$3.00, those after the open season, 25¢ to \$3.00. Non-resident township licence fees during the open season ranged from \$1.00 to \$10.00, after the open season, \$1.00 to \$10.00. Seven townships charged conservation fees besides the normal price of the licence which is included in the above rates. Depending on the township these conservation fees ran, 25¢, 75¢ and in one township, \$2.75.

In connection with hunter's success, a survey was made during the open season for pheasants to determine, if possible, the number of pheasants seen and shot by hunters in certain townships. A total of 487 hunters were checked during the open season. They reported having seen 348 cock pheasants, 544 hen pheasants and had shot 125 cock pheasants. Of the total hunters checked only 74 were hunting with dogs. Percentage per hunter averaged out to 0.25 birds.

Sale of Township Licences in Lindsay District

Regulated Township - Darlington - Durham County.

Pheasant Resident Licences	263
Pheasant Non-resident Licences	526
Estimated number of pheasants killed (Data from 608 census cards)	429

Regulated Township - Clarke - Durham County.

Pheasant Resident Licences	135
Pheasant Non-resident Licences	82
Estimated number of pheasants killed (Data from 125 Census cards)	103

FISH AND WILDLIFE DIVISION

WOLF BOUNTY

1955 - 1956.

Under authority of The Wolf and Bear Bounty Act, the Department pays a \$25.00 bounty on a timber or brush wolf three months of age or over, and a \$15.00 bounty on a timber or brush wolf under three months of age.

The Department pays the whole bounty on wolves killed in the provisional judicial districts, but on wolves killed in the counties, 40% of the bounty is paid by the Department and the remaining 60% is paid by the respective county.

The whole pelt of the wolf must be presented as evidence, on wolves killed in the counties and the provisional judicial district of Manitoulin. However, the whole unskinned head may be presented in lieu of the whole pelt on wolves killed in the provisional judicial districts, excepting Manitoulin.

The following table shows the number and species of wolves killed and the amount of bounty paid during the past five years.

PERIOD	TIMBER	BRUSH	PUPS	TOTAL	BOUNTY
For year ending Mar.31,1952	1198	634	63	1895	\$41,803.00
For year ending Mar.31,1953	1313	739	68	2120	\$46,550.00
For year ending Mar.31,1954	1101	720	70	1891	\$41,853.00
For year ending Mar.31,1955	1075	620	41	1736	\$38,703.00
For year ending Mar.31,1956	1088	559	28	1672	\$37,550.00

During the year under review, 1,193 claims were considered by the Department. Of these, 14 claims representing 7 wolves, 6 dogs and 2 foxes were refused.

Unusual snow conditions existed in some northern districts of the Province during January and February. The snow was deep and in the absence of the usual thaws, remained fluffy. These conditions made it difficult for the wolves to move around and several instances have been reported where trappers on showshoes were able to run down a pack of wolves and shoot them at close range.

The following is a summary of the number of wolves killed in each of the counties and districts on which claims for bounty were received.

COUNTY	TIMBER	BRUSH	PUPS	TOTAL
Bruce		2		2
Carleton		1		1
Durham		9		9
Elgin		2		2
Essex			4	4
Frontenac	2	13		15
Grey		3		3
Haldimand		4		4
Hastings	1	19		20
Huron	1	8		9
Kent		3	3	6
Lambton		3	3	6
Lanark		23		23
Leeds & Grenville		6		6
Lennox & Add.	1	15		16
Middlesex		2		2
Norfolk		2		2
Northumberland		7		7
Lincoln	0	0		0
Ontario		1		1
Peterborough	1	13		14
Prince Edward		1		1
Renfrew	13	38		51
Russell		1		1
Simcoe		39		39
Victoria		6		6
Welland		7		7
Wellington		6		6
Wentworth		1		1
York		2		2
TOTAL -	19	237	10	266

DISTRICT	TIMBER	BRUSH	PUPS	TOTAL
Algoma	52	56		108
Cochrane	77	4	6	87
Haliburton	19	1		20
Kenora	388	34		422
Manitoulin	13	70		83
Muskoka	7	9		16
Nipissing	124	5		129
Parry Sound	55	5	6	66
Rainy River	49	64	4	117
Sudbury	101	43	2	146
Timiskaming	23			23
Thunder Bay	161	31		192
<hr/>				
TOTAL FOR DISTRICTS	1069	322	18	1409
TOTAL FOR COUNTIES	19	237	10	266
<u>GRAND TOTAL</u>	1088	559	28	1675

FISH AND WILDLIFE DIVISION.

BEAR BOUNTY

1955 - 1956.

Under the provisions of The Wolf and Bear Bounty Act, a \$10.00 bounty is paid on any bear 12 months of age or over, and a \$5.00 bounty is paid on any bear under 12 months of age. The bear must be killed between April 15th and November 30th in a township of which 25% of the total area is devoted to agriculture and which is located in a district, or one of the counties, described in the Regulations. The Act also requires that the bear must be killed in defence of preservation of livestock or property by a bona fide resident of the township.

The following table shows the number of bears killed and the amount of bounty paid during the past five years, including the year covered by this report.

PERIOD	ADULTS	CUBS	BOUNTY
For year ending Mar.31,1952	408	29	\$ 4,180.00
For year ending Mar.31,1953	662	57	\$ 6,805.00
For year ending Mar.31,1954	947	145	\$10,000.00
For year ending Mar.31,1955	1126	99	\$11,590.00
For year ending Mar.31,1956	614	50	\$ 6,210.00

During the year a total of 512 claims representing 614 bears and 50 cubs, were considered by the Department. 15 claims representing 17 bears and 2 cubs, were refused for various reasons.

As there have been no scientific studies conducted on bear and our bounty statistics go back only a relatively short time, we are unable to explain the sharp decrease in the bear kill this year as compared with that of last year, which we believe was the peak in the bear cycle.

The following table shows the number of bears killed in each county and district on which claims for bounty were received. The figures do not include however, the number of bears hunted and killed by sportsmen, on which bounty is not applicable.

County or District	Bear 12 months or over	Cubs Under 12 months
Algoma	18	4
Carleton	1	
Cochrane	173	16
Frontenac	1	
Haliburton	9	
Hastings	36	3
Kenora	7	
Lennox & Add.	5	
Manitoulin	2	
Muskoka	4	
Nipissing	24	2
Parry Sound	37	2
Peterborough	5	1
Rainy River	35	
Renfrew	41	6
Sudbury	49	8
Timiskaming	128	4
Thunder Bay	37	2
Victoria	2	2
TOTAL -	614	50

FISH AND WILDLIFE DIVISION.

FUR FARMING

1955.

The mink pelt market opened strongly in December at prices generally 10% to 15% above the same period last year. By the end of March, it was estimated that approximately 70% of the Canadian production of ranch-raised mink was sold. European purchases, particularly from Italy, have been a strong influence in maintaining the high price structure.

For the first time and under the direction of the Marketing Board of Canada Mink Breeders, a successful series of sponsored sales were held at four Canadian auction companies. The mutation pelts carried the EMBA tags and Dark Mink were sold under the label 'Magnificent "Majestic" Canada Dark Mink'. It is interesting to note that pelts sold on these sponsored sales brought from 10% to 20% more than similar quality pelts on independent sales.

Canada Mink Breeders held their Annual Meeting for the first time in Toronto in July of this year. This afforded the ranchers of Ontario a convenient opportunity to attend the meetings and see, at first hand, their Association at work on their behalf.

Virus Enteritis which has been present in the Province for the past seven or eight years in varying degrees of virulence, broke out in the St. Marys area this year for the first time. Some seventeen mink ranches were affected. About 1,200 deaths were attributed to this disease. Further research has been undertaken at the Ontario Veterinary College and preparations have been made for a mass inoculation of all the affected ranches.

There was a total of 533 Licences issued in 1955. 476 were renewals, 53 were new and 4 Licences were issued with retroactive provisions to legalize the operations of the ranch during the previous year. This represents a net decrease of 18 ranches, compared to the previous year.

The following table shows the number and location by county or district of licensed fur farms for 1955.

<u>County or District</u>	<u>Number</u>
Algoma	3
Brant	6
Bruce	25
Carleton	3
Cochrane	1
Dufferin	2
Durham	5
Elgin	9
Essex	12
Frontenac	5
Glengarry	1
Grenville	1
Grey	28
Haldimand	11
Halton	19
Hastings	1
Huron	14
Kenora	9
Kent	14
Lambton	6
Lanark	10
Leeds	3
Lennox & Add.	1
Lincoln	18
Manitoulin	8
Muskoka	3
Middlesex	19
Nipissing	3
Norfolk	3
Northumberland	4
Ontario	12
Oxford	17
Parry Sound	11
Peel	11
Perth	41
Peterborough	2
Rainy River	8
Renfrew	8
Simcoe	30
Sudbury	1
Timiskaming	1
Thunder Bay	23
Victoria	3
Waterloo	21
Welland	5
Wellington	18
Wentworth	28
York	42
<hr/>	
TOTAL -	529

SUMMARY OF BREEDING STOCK
 Licensed Fur Farms
January 1st.

	1951	1952	1953	1954	1955
<u>OTHER ANIMALS</u>					
Beaver (Pens)	16	8	3	0	0
Beaver (S.C.)	6	8	12	26	16
Fisher	21	13	10	9	11
Marten	35	36	54	62	70
Muskrat (Pens)	4	2	6	2	2
Muskrat (S.C.)	95	190	258	705	80
Raccoon	46	47	68	57	47
Skunk	6	2	0	0	0
<u>FOX</u>					
Blue	200	75	56	68	70
Cross	2	1	1	1	1
Red	11	6	1	3	4
Standard Silver	2813	1567	760	583	456
Platinum	559	267	159	136	136
Pearl Platinum	449	349	294	230	251
White Marked	225	110	50	26	16
<u>MINK</u>					
Standard & dark half-blood	#73034	40691	27727	22315	21693
Silverblu		15798	17710	20443	21053
Pastel		12381	16926	22869	29100
Other Mink		4665	7797	9713	13486

Breakdown for Mink not available for 1951.

REVENUE RECEIVED FROM EXPORT PERMITS
JULY 1st, 1955 to JUNE 30th, 1956.

	<u>Total amount of pelts</u>	<u>Total amount of revenue</u>
Beaver	112,663	112,663.00
Fisher	3,226	3,226.00
Cross fox	129	1.50
Red fox	15,454	4.20
Fox (silver, black or blue)	24	.40
Fox (white)	34	25.50
Fox (not specified)	2	
Lynx	890	133.50
Marten	3,096	3,096.00
Mink	29,902	29,902.00
Muskrat	376,331	37,633.10
Otter	6,980	8,725.00
Raccoon	23,488	.70
Skunk	979	
Weasel	30,875	1,543.75
Wolverine	4	1.60
TOTAL REVENUE		<u>\$ 196,956.25</u>

REVENUE RECEIVED FROM TANNERS PERMITS
JULY 1st, 1955 to JUNE 30th, 1956.

	<u>Total amount of pelts</u>	<u>Total amount of revenue</u>
Beaver	537	537.00
Fisher	14	14.00
Fox (cross)	25	1.20
Fox (red)	622	7.50
Fox (silver, black or blue)	4	-
Fox (white)	20	15.00
Fox (not specified)	-	-
Lynx	28	4.20
Marten	43	43.00
Mink	3,052	3,052.00
Muskrat	170,135	17,013.50
Otter	52	65.00
Raccoon	7,858	8.40
Skunk	53	.95
Weasel	87	4.35
Wolverine	1	.40
TOTAL REVENUE	-	<u><u>\$ 20,766.50</u></u>

STATEMENT OF WILD PELTS EXPORTED OR TANNED
SHOWING NUMBER AND VALUE OF PELTS AND ROYALTY
RECEIVED FROM JULY 1st, 1955 to JUNE 30th, 1956.

	<u>Pelts Exported</u>	<u>Pelts Tanned</u>	<u>Total Pelts</u>	<u>Value of Pelts</u>
Beaver	112,663	537	113,200	1,386,700.00
Fisher	3,226	14	3,240	73,062.00
Fox (cross)	129	25	154	207.90
Fox (red)	15,454	622	16,076	8,038.00
Fox (silver, black or blue)	24	4	28	112.00
Fox (white)	34	20	54	243.00
Fox (not specified)	2	-	2	1.00
Lynx	890	28	918	4,222.80
Marten	3,096	43	3,139	23,228.60
Mink	29,902	3,052	32,954	616,239.80
Muskrat	376,331	170,135	546,466	595,647.94
Otter	6,980	52	7,032	184,238.40
Raccoon	23,488	7,858	31,346	68,961.20
Skunk	979	53	1,032	670.80
Weasel	30,875	87	30,962	27,865.80
Wolverine	4	1	5	82.50
	<u>604,077</u>	<u>182,531</u>	<u>786,608</u>	<u>2,989,521.74</u>

Revenue received from Export Permits	-	196,956.25
Revenue received from Tanner's Permits	-	20,766.50
TOTAL REVENUE	-	<u>\$ 217,722.75</u>

STATEMENT OF RANCH RAISED PELTS EXPORTED OR
TANNED SHOWING NUMBER AND VALUE OF PELTS FROM
JULY 1st, 1955 to JUNE 30th, 1956.

	<u>Exported</u>	<u>Tanned</u>	<u>Total pelts</u>	<u>Value of pelts</u>
Fox (silver, black or blue)	1,233	29	1,262	8,203.00
Mink	163,717	8,006	171,723	4,121,352.00
	<u>164,950</u>	<u>8,035</u>	<u>172,985</u>	<u>\$ 4,129,555.00</u>

TOURIST OUTFITTERS

With the exception of Tourist Establishments operated exclusively for transient tourists and the travelling public, most camps and resorts catering to the tourist trade outfit patrons in some form or another for fishing or hunting or camping.

In that part of the Province lying North and West of the Canadian National Railway line from Parry Sound easterly to Pembroke, such a business is designated in Section 21 of the Game and Fisheries Act as a Tourist Outfitters' Camp, subject to regulation and control by a system of licencing in accordance with the Departmental Land Use and Recreational Zoning Plan.

General prosperity continued to create a constant although seasonal demand for accommodation which encouraged some further expansion in the industry; Although the net annual gain of licenced camps was only just over 1% there were 53 new camps completed and licenced during the year, while 34 authorized camps were either closed temporarily for repairs and reorganization or converted to private or other purposes.

Tourist Outfitters' Franchise.

<u>Applications:</u>	Received or under consideration	105
	Granted	79
	Refused, Withdrawn or Pending	26
		<hr/>
		105 105
		<hr/>
<u>Recapitulation:</u>	Permits in force April 1, 1955	155
	Issued during the year	79
	Camps completed and licenced	53
	Authorities lapsed or surrendered	15
	Potential camps at March 31, 1956	166
		<hr/>
		234 234
		<hr/>

Annual Tourist Outfitters' Camp Licences ISSUED

<u>DISTRICT</u>	<u>Resident Fee</u> <u>\$10.00</u>	<u>Non-Resident</u> <u>Fee \$25.00</u>	<u>Total</u>
Algoma	161	34	195
Cochrane	28	1	29
Kenora	287	109	396
Manitoulin	97	12	109
Nipissing	201	17	218
Parry Sound	289	24	313
Rainy River	52	15	67
Sudbury	132	18	150
Temiskaming	41	8	49
Thunder Bay	66	10	76
Renfrew County	23	2	25
	<u>1377</u>	<u>250</u>	<u>1627</u>

Yearly Summary By Districts.

<u>DISTRICT</u>	<u>1936</u>	<u>1941</u>	<u>1946</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>
ALGOMA	66	92	120	203	200	200	202	195
COCHRANE	0	7	11	26	27	26	34	29
KENORA	85	160	201	380	395	396	409	396
MANITOULIN	32	56	73	94	100	110	105	109
NIPISSING	79	93	120	221	217	216	226	218
PARRY SOUND	74	109	164	261	280	291	304	313
RAINY RIVER	27	37	35	52	52	55	53	67
RENFREW COUNTY	7	14	15	24	24	24	20	25
SUDBURY	38	59	78	129	128	126	137	150
TEMISKAMING	0	6	12	46	50	49	47	49
THUNDER BAY	19	32	27	64	70	76	71	76
TOTAL	427	665	856	1500	1543	1569	1608	1627

GAME FISH SECTION

With the ever-increasing growth in the population of the Province, which is reported to be 5,180,000 an increase of 1,180,000 since 1945, and the growing interest in the utilization of the fishery resource as is demonstrated by the increase sale of non-resident fishing licenses from 126,367 in 1945 to 377,220 in 1955, it is evident that Ontario's game fish fishery is an industry of major importance, socially and economically.

The management of this resource is administered by a field staff of trained personnel operating in twenty-two forest districts of the Province. Eighteen biologists are permanently employed to study and investigate existing problems relative to the management of the fish and wildlife resource.

The game fish management operations undertaken in 1955 were in many respects similar to the general programme of recent years. Twenty-five hatcheries and rearing stations were operated during the year for the production of game and commercial fish species for introduction and re-stocking of suitable public waters. Lake and stream inventory studies were continued for the assessment of water quality, and evaluations and analyses were made on the composition, age and growth rates of the fish populations. - Two relatively important changes were made in the Fishery Regulations during the current year as a result of investigations conducted on pickerel and rainbow trout waters.

Other significant operations undertaken during the year included, fish tagging and census studies. Netting operations were conducted for the harvest of bass from overpopulated waters and the removal of coarse fish species. A number of mechanical trap weirs were also operated for the sampling and trapping of sea lamprey.

In addition to these projects which are described in greater detail later in this report, the Department also undertook to provide considerable assistance to private individuals and organized associations

in the reclamation of a number of lakes by poisoning and the development and management of farm fish ponds, particularly in the South Western Region of Ontario.

HATCHERIES

The fish cultural programme was carried out this year by twenty-five Provincial hatcheries and rearing stations. One trout rearing station, located at Waring's Creek (Glenora), was closed due to the deterioration of the water supply. The Sault Ste. Marie trout rearing station which was closed for renovation in September, 1953, was re-opened when the initial transfer of 100,000 speckled trout fingerlings was made from the Hills Lake rearing station at Charlton. Preliminary planning was started on a major renovating programme for the Chatsworth rearing station. However, the fish cultural operations will be continued, at least in part, through much of the construction period which is expected to commence in 1956.

In addition to these major projects, improvements of considerable importance were made at the Warton, Port Arthur, Glenora and White Lake stations.

Production and Distribution

The fish cultural programme was altered somewhat this year and the number of hatchery fish produced for distribution was reduced appreciably from previous operations. See Table 1, included as Appendix 1) The major contributing factor to the decrease in the overall production was the abandoning of the pickerel operations at the Glenora hatchery and the generally poor season for the collection of spawn at other pickerel stations. The harvest of lake trout spawn continued at a low level in the fall of 1954 as a result of the decrease in the lake trout population in Lake Superior. Another contributing factor, although not particularly evident in the distribution figures, is the present trend to produce fewer, larger size fish for re-stocking purposes. This practice will reduce considerably the number of fish that can be produced.

Exotic and Hybrid Species

(a) Pacific Chum Salmon

This year approximately 1,000,000 chum salmon eyed eggs were secured from the Fisheries Department of the State of Washington in November, 1954, and cultured at the Port Arthur hatchery prior to subsequent transfer and planting in the eyed egg stage in the Mishamattawa and the Winisk Rivers of the Hudson Bay drainage and, in the fingerling stage, in the Attawapiskat River of the James Bay watershed.

The eyed egg plantings were made in mid-January. The stock was planted in artificial gravel redds through large holes cut through ice.

Both plantings of approximately 211,500 eggs each were completed without mishap and sample lots, examined eighteen days after planting, showed the stock to be in excellent condition and to be developing normally.

The fingerling transfer and planting was completed in four trips using the Department's Otter aircraft fitted with four aircraft fish tanks and dropping equipment. The transfers were made during the latter part of May and early June and the entire stock, of approximately 449,550 fish, were dropped from the air at two sites on the Attawapiskat River. No positive check on the survival of this stock was possible at the time of planting. However, close examination of the waters during and after each planting showed that the fish did disperse and disappear into deeper water immediately on landing.

The conclusion of this experiment will not be known before the fall of 1957 at the earliest when the first of the adult chum salmon may be expected to return to the stream in which they were planted. However, the salt water phase of the life cycle of the chum salmon is not specifically defined and the period of development to maturity, in its natural environment, may extend from three to five years or more. Furthermore, the behaviour of the fish introduced to the more frigid environment of Hudson and James Bay, is unknown, and, can only be determined if and when the experiment is successfully completed and the fish are found on their return to freshwater to spawn.

(b) Pink Salmon

This fall a second step was taken towards the experimental introduction of Pacific salmon to Northern Ontario waters. Arrangements were made through the co-operation of the Fisheries Research Board of Canada and the Department of Fisheries at Ottawa to collect pink salmon eggs from the Skeena River run in British Columbia for transfer to Ontario. The International Salmon Commission also assisted in the procurement of this stock by providing the facilities at their Horsefly Lake hatchery for the care and incubation of the eggs to the eyed stage, prior to their transfer to the Port Arthur hatchery in November.

The consignment of approximately 787,000 eyed eggs was received in Ontario in excellent condition. The stock was cultured at the Port Arthur hatchery for subsequent transfer and planting in the eyed egg and fingerling stages in Goose Creek, a tributary to Hudson Bay.

The pink salmon is noted particularly for its keen homing instinct and its consistent behaviour of maturing and returning to spawn in a two year cycle. Both characteristics will be of particular value in the assessment of the results of this introduction.

(c) Splake

The culture and planting of the hybrid splake, produced by the cross-breeding of female lake trout with male speckled trout, was continued and further developed this year on an experimental basis. The stock, which was collected in the fall of 1954 from an experimental lot of first generation hybrids at the Dorion trout rearing station was transferred to the Hill Lake trout rearing station in the eyed egg stage for further experimentation.

The distribution and planting of yearling hybrid stock this year was made from the Codrington and White Lake hatcheries. The waters stocked, their location and the number of fish planted were as follows:

<u>Waters</u>	<u>County</u>	<u>Township</u>	<u>(Yearlings) Planting</u>
Opeongo Lake	Nipissing	Jones-Dickens	4,000
Redrock Lake	Nipissing	Bower	4,000
McGee Lake	Peterborough	Burleigh	1,200
V Lake	Hastings	Mayo	1,200
Romes Pond	Northumberland	Brighton	50

Nutritional Studies

The experimental feeding studies initiated at the Dorion trout rearing station, in 1954 were continued. The experiment involving the use of feeding charts and the feeding of prescribed amounts of food on the basis of the size and weight of the fish, and the mean water temperature, was further expanded this year to include the experimental use and assessment of a pelleted type food as a substitute for the regular mixed diet.

Initial results from the study have been very favourable. Fish fed on the pelleted food at a 50 to 60 percent level of the prescribed chart rate have been found to have a greater rate of growth at less cost per pound of fish produced than fish fed on the regular mixed diet. The use of pelleted food greatly reduces the amount of time normally required in preparation and the feeding of a mixed diet and no refrigeration is necessary for storage. Fish fed on the pelleted food were also found to be of a more uniform size, requiring less sorting of the stock. The amount of cleaning required in the maintenance of the hatchery ponds is reduced considerably with the elimination of the ground meat in the mixed diet which tends to pollute the ponds and collect on the screens at the outlet of the raceways and ponds.

Although the current study is still in the experimental stage the use of the pelleted type food would seem to be a valuable innovation to the fish cultural methods presently employed by the Department. The experiment will be continued in 1956 and, if the current results are maintained and the diet is proven to be nutritionally adequate, the pelleted type food will be introduced for use at all the fish rearing stations in Ontario.

REGULATIONS

Two major changes were made in the Ontario Fishery Regulations during the year. The size limit on yellow pickerel taken by angling was rescinded, and a fall season was provided for the taking of rainbow trout in the Lower Great Lakes, a number of tributary waters, and Lake Simcoe.

Both amendments were based on the results of intensive investigations and the recommendations of the Department's field staff. The results from numerous lake surveys and age and growth studies carried out on existing pickerel populations scattered throughout the Province demonstrated the general abundance of the species and the overcrowded and stunted condition

of the fish in some waters which was resulting in a lowering of the overall growth rate and production of the species in a number of areas. Therefore, to alleviate the problem of harvesting undersize fish and to realize some of the potential production of the species, the size limit on pickerel was revoked.

The extension of the open season for the taking of rainbow trout was introduced to facilitate a more liberal harvest of this species. The rainbow trout (steelhead) commonly migrate from the lake habitat to suitable tributary streams in the fall, winter and early spring, prior to spawning in April or May. The species is commonly taken by the angler during the fall migration. The extended open season therefore provides for a more liberal harvest of this prized game fish species, which is seldom taken at other times.

FIELD MANAGEMENT PROJECTS

Lake and Stream Surveys

Basic information on the physical, chemical and biological condition of waters is a prerequisite to any sound management programme. For this reason, much of the field work undertaken by the Department continues to be directed to this and related phases of study.

Marking and Census Studies

An important adjunct to any lake and stream survey is the marking and tagging of fish, and the creel census study. Both of these studies are frequently included with the survey operations and provide valuable data on the composition, distribution and abundance of the fish populations which are of paramount importance in the management of a fishery.

Excellent progress in this work is reported from a number of districts, particularly in Central and North Western Ontario.

Bass Harvesting

Bass harvesting operations were undertaken on fifteen lakes in the forest districts of Tweed, Quinte, Pembroke, Parry Sound, Swastika and Cochrane.

The operations were conducted on lakes which, on examination, were found to be supporting an over-population of bass. When a bass population becomes out of balance with the carrying capacity of the waters

stunting often occurs, usually as a result of over-crowding and/or an inadequate food supply to support the normal growth of the fish. This unsatisfactory condition is alleviated by reducing the population by means of netting operations.

The name and location of the waters harvested and the number of fish removed from each is shown in Table 2.

TABLE II
Bass Harvest Operations - 1955

NAME OF WATERS	DISTRICT	NO. BASS REMOVED
Big Cedar Lake	Frontenac	1,335
Lake Charlotte	Renfrew	2,566
Clement Lake	Haliburton	302
Elexo Lake	Cochrane	195
Green Lake	Renfrew	2,945
Little Gull Lake	Frontenac	1,790
Island Lake	Renfrew	2,314
Leech Lake	Parry Sound	90
Long Lake	Frontenac	5,433
Lovells Lake	Cochrane	65
Moore Lake	Renfrew	3,380
Nogies Creek	Peterborough	1,844
Ottisse Lake	Timiskaming	617
Thirty Island Lake	Lennox and Addington	3,753
Wileys Lake	Haliburton	<u>1,262</u>
		<u>27,891</u>

The bass harvested were transferred and planted in the following waters.

Cochrane District - MacDonald Lake, Poole's Lake, Ice Chest Lake, Wilson Lake; Frontenac County - Leggate Lake, Norcan Lake; Haliburton County - Big Gull Lake, Bob Lake, Coleman Lake, Dark Lake,

Davis Lake, Deer Lake, Drag Lake, Elephant Lake, Grace Lake, Hall's Lake, Koshlong Lake, Moore Lake, Paudash Lake, South Lake; Hastings County - Baptiste Lake, Kamminiskeg Lake, Paudash Lake; Lennox and Addington County - Buckshot Lake, Cedar Lake, Mazinaw Lake, McEvoy Lake, Fringle Lake, Skootamatta Lake; Parry Sound District - Deer Lake, Eagle Lake, Wah-Wash-Kesh Lake; Peterborough County - Jack's Lake, Lovesick Lake, Pigeon Lake, Stoney Lake; Renfrew County - Barry Bay (Madawaska River), Blackfish Bay (Madawaska River), Bonnechere River, Calabogie Lake, Carson Lake, Clear Lake, Kamaniskeg Lake, LaFleur's Bay, McFee Bay (Madawaska River), Madawaska River, Paugh Lake, Stevenson's Lake, Trout Lake, Wadsworth Lake, White Lake, Whitefish Lake; Simcoe County - Severn Lake, Tea Lake; Timiskaming District - Barber-Larder Lake, Long Lake, Long Point Lake, Mistinikon Lake, Wendigo Lake; Victoria County - Sturgeon Lake.

Coarse Fish Removal

Periodically, investigations of important game fish waters show that the waters contain excessive numbers of various coarse fish species such as carp, suckers, sunfish, rock bass and ling which adversely affect the production of more desirable game fish species. To alleviate this problem the Department has in recent years undertaken to remove undesirable species by short term netting operations.

In 1955, netting operations were conducted in a number of areas for the removal of ling. The waters netted and the number of fish taken are described in Table 3.

TABLE III

Ling Removal Operations - 1955

FORESTRY DISTRICT	NAME OF WATERS	NUMBER TAKEN
RIDEAU	Charleston Lake	3,361
	Otter Lake	640
	Otty Lake	629
	Sand Lake	40
	Wolfe Lake	<u>397</u>
		5,067
PEMBROKE	Madawaska River (Bells Rapids)	<u>598</u>
		598
LAKE SIMCOE	Talbot River	470
	Whitefish River	71
	Sutton River	517
	Pefferlaw River	<u>622</u>
		1,680
		<u>7,345</u>

Four additional projects were undertaken for the removal of excessive numbers of coarse fish. These operations were conducted in conjunction with more intensive management studies carried out on Papineau Lake, Hastings County; Leggate Lake, Frontenac County; Lake Scugog, Ontario, Victoria and Durham Counties; and the Trent River in Northumberland county.

Sea Lamprey Control

In 1955 the Department co-operated with the Federal-Provincial Research Committee on the sea lamprey control programme initiated on Lake Superior.

Personnel from the Sault Ste. Marie District undertook the supervision of the installation of the electrical barrier on the Thessalon River where mechanical trap weirs were used by the Department in previous years.

Four mechanical trap weirs were also operated this year on tributary streams flowing into Lake Huron, the North Channel, and Lake

Ontario waters. The detailed results from these operations are described in Table 4.

TABLE IV
Sea Lamprey Catch in 1955

NAME OF STREAM	LOCATION	NO. OF LAMPREYS CAUGHT
Milford Haven Creek	North Channel (Algoma District)	375
Saugeen River	Lake Huron (Bruce County)	4,687
Beaver River	Georgian Bay (Grey County)	1,464
Bronte Creek (12 Mile Creek)	Lake Ontario (Halton County)	3,153
Saugeen River (Denny's Bridge)	Lake Huron (Bruce County)	3,630
		<u>13,309</u>

Following the ratification of an International treaty between Canada and United States the Great Lakes Fisheries Commission was established with the appointment of six commissioners, three of whom were representatives from each country.

TABLE I

Fish Distribution from 1951 to 1955

SPECIES OF FISH	NUMBER OF FISH PLANTED				
	1951	1952	1953	1954	1955
Black Bass, Largemouth Fry	825,500	544,000	330,000	720,000	282,000
Fingerling	144,750	97,450	328,250	279,495	343,300
Yearling and Adult	601	962	1,419	119	3,522
Black Bass, Smallmouth Fry	935,000	357,500	720,000	820,000	209,000
Fingerling	402,250	384,965	623,220	452,200	529,135
Yearling and Adult	13,910	14,688	17,763	13,654	25,080
Bluegills	--	--	--	--	1,600
Fingerlings	--	--	--	175	--
Adults	--	--	--	--	--
Charr, French Alpine Yearling	--	--	--	1,000	--
Adults	--	--	--	--	50
Charr, Pennsylvania Fingerling	--	--	--	1,700	--
Herring Eggs	8,100,000	1,100,000	3,600,000	900,000	398,000
Fry	--	--	--	2,717,000	3,400,000
Maskinonge Fry	2,360,000	3,750,000	2,740,000	3,550,000	3,711,500
Fingerling	21,940	62,257	42,966	39,563	50,900
Adult	--	156	143	--	--
Ouananiche Yearling	--	24,250	--	--	--
Adult	--	--	--	1,700	1,000
Pickereel Eggs	234,610,000	176,285,000	270,975,000	227,000,000	91,800,000
Fry	--	--	--	6,000,000	8,310,000
Fingerlings	--	--	--	--	360
Adult	--	--	2,245	684	204

Salmon, Atlantic Fingerling	--	72,000	--	--	--	--	--
Salmon, Chum Eggs	--	--	--	--	--	423,000	--
Fingerling	--	--	--	--	--	449,450	--
Splake Fingerling	--	--	24,500	--	--	--	--
Yearling	--	--	--	17,200	--	10,450	--
Adult	--	--	--	2,190	--	--	--
Trout, Brown Fingerling	282,700	107,500	92,000	100,000	100,800	100,800	
Yearling	54,900	140,400	103,100	177,950	233,800	233,800	
Adult	--	--	--	--	220	220	
Trout, Kamloops Eggs	--	--	--	2,000 (1)	2,000	2,000	
Fingerling	--	1,000	--	500	3,000	3,000	
Yearling	34,600	73,350	107,800	140,950	82,640	82,640	
Adult	--	--	--	--	750	750	
Trout, Lake Fry	1,775,000	1,849,000	250,000	--	28,000	28,000	
Fingerling	3,146,600	3,499,210	6,985,015	2,605,750	2,611,900	2,611,900	
Yearling	133,677	230,775	171,765	414,950	241,060	241,060	
Trout, Rainbow Fingerling	9,500	1,500	25,000	--	--	--	
Yearling	--	--	1,190	--	(2)	--	
Trout, Speckled Eggs	--	--	--	720,000	50,000	50,000	
Fingerling	944,900	536,500	1,962,835	165,850	841,500	841,500	
Yearling	3,087,350	2,720,755	3,250,910	2,055,748	1,991,332	1,991,332	
Legal Size	12,230	19,020	13,960	4,295	16,447	16,447	
Whitefish Eggs	--	--	--	42,665,000	67,165,000	67,165,000	
Fry	121,185,000	200,400,000	186,700,000	139,210,000	102,950,000	102,950,000	
TOTAL	378,080,408	392,272,238	479,069,081	430,779,673	286,267,000	286,267,000	

N.B. Figures up to and including 1952 were compiled on a fiscal year basis. Those for 1953, 1954, 1955 are based on a calendar year.

f.f. (1) Figures for 1954, 1955 include Rainbow trout. (2) Figures for 1954, 1955 are included in the Kamloops trout plantings.

THE COMMERCIAL FISHING INDUSTRY

The commercial fishermen of Ontario landed a near record catch of fish during the year 1955. The catch of 45,636,375 pounds was just two million pounds below the highest recorded landing, that of 1954, and nearly a million pounds greater than in 1953. For the ten year period 1946-1955 the average annual landing was thirty-six million pounds and for the five year period 1951-1955 the average annual landing was over forty-one million pounds. The 1955 catch exceeded these averages by over nine million pounds and over four million pounds respectively.

The average price per pound, based on all reported landed fish, was 14.9 cents. This average price shows only a slight increase over the 1954 average of 14.7 cents, but is 2.5 cents below the average for the five year period 1951 to 1955 and is much below the highest average price for that period (22.7 cents in 1951). The fifth of a cent increase over the 1954 price is dependent upon better average prices received for perch, whitefish and white bass, counterbalanced by lower values in both yellow pickerel and blue pickerel. The industry received \$230,000. less in the year 1955 for the catch than in the year previous and, at the same time, the total value of the equipment increased by Fifty Thousand Dollars.

Ontario fishermen showed continuing interest in improvement of quality of fishery products. The trend toward quick frozen packages of fish products followed generally the changes in marketing observed in other food products. Marketing of fish in a ready cleaned and dressed, or filleted condition, usually fast frozen, and in a size of package most acceptable to the individual retail purchaser, is most apparent in species where very high production and consequent lower price exists. Perch, white bass and blue pickerel are notable examples. Whitefish and lake trout, as well as yellow pickerel to a certain extent, are usually sold fresh and in the round, and in this condition command comparatively high prices on the export market. This is especially true of those periods of the year when religious fast days cause prices of fish to rise greatly. These

species can well be considered as high quality luxury products.

The rapid and wide fluctuation from year to year in production of several species makes it difficult for the industry to maintain a good market price. Deterioration in quality during lengthy storage conditions prevents the fishery from holding supplies for a sufficiently long period to even out the periods of low production. Research carried out by the Department, as well as by industry itself, is seeking techniques for providing more constant supply of fish. One of the interesting aspects of this research is the attempt to find methods of harvesting smelt on a year round basis rather than taking almost all of the year's production during the spring fishing.

The use of cotton and linen for gill-netting has been almost wholly discontinued. Nylon and other similar synthetic fibres are being used to a greater extent for side lines to nets and in trap-net and pound-net manufacture. It seems probable that the greater efficiency of "nylon" as a gill-net material has contributed significantly to the marked increase in total catch during the past ten year period.

On March 22nd, 1955 the fishery experienced one of the most severe storms in its history. Very great damage was inflicted by waves and currents both to shore installations and to set nets in Lake Erie and Lake St. Clair. Most unfortunate was the death by drowning of one fisherman who was swept off his boat during the storm. Five boats were lost or very severely damaged in the storm and only the extraordinary endurance and skill of the fishery boat crews and captains prevented very much greater loss of life and equipment. Loss of nets was made greater because the storm occurred during a period when cold water conditions, as well as very high market prices, had encouraged the fishermen to set a large percentage of their nets. Damage and loss of equipment and loss of fish was estimated at well over one million dollars. Rapid recovery of the industry was accomplished during the year, being assisted by a high production of fish in Lake Erie.

Employment within the industry continued to be quite stable. The number of persons engaged in fishing was reduced by 174 to 3,483 men. This

total does not include personnel engaged in packing, filleting or other shore operators, so that the total number earning their living in the commercial fishery was considerably greater. Increases in the number of licences issued during the year was due largely to an increased interest in bait-fish. Over one hundred and fifty additional bait-fish licences were issued in 1955. This increase was due also to the introduction of bait-fish dealer's licences, which permit the purchase and re-sale of the live fish.

In Lake Erie a sharp increase in both blue pickerel and yellow pickerel production occurred during the year. One-third of the entire commercial fish production of the province consisted of pickerel from this lake. The production in Lake Erie was up over the year previous by one and one-third million pounds, even though there was a noticeable reduction in perch and white bass landings.

Production in Lake Ontario also was up slightly for the year but with these two exceptions all the other fishing regions showed decreased landings. Georgian Bay whitefish continued the downward trend to a more nearly average production of just over one and one-half million pounds. The fisheries in Lake St. Clair, Lake Huron and North Channel all show decreases in catch. The production of Lake Superior trout dropped off somewhat under the continuing attack of the sea lamprey. The fishery in this lake is looking to the united research and lamprey control measures of the Province of Ontario, Canada and the United States to eventually reduce the parasite and so allow the lake trout population to be built up again.

Production of goldeyes in the interesting, almost wholly Indian fishery in the northern part of the Province, was drastically reduced, largely due to the poor market conditions which prevailed for this species.

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES

IN THE PROVINCE OF ONTARIO, BY SPECIES, IN POUNDS

<u>SPECIES</u>	<u>1954</u>	<u>1955</u>	<u>INCREASE</u>	<u>DECREASE</u>
Bullheads	836,643	823,603		13,040
Carp	1,427,787	1,317,931		109,856
Catfish	331,787	285,438		46,349
Caviar	2,144	2,929	785	
Dogfish; Alewives & Gar Pike	100,568	82,608		17,960
Eels	80,115	70,836		9,279
Gold Eyes	87,076	5,506		81,570
Herring	1,374,917	935,567		439,350
Ling	426,228	505,701	79,473	
Menominee	12,703	17,587	4,884	
Perch	8,202,567	5,180,676		3,021,891
Pickereel, Blue	8,209,830	12,070,406	3,860,576	
Pickereel, Yellow	5,195,933	6,883,415	1,687,482	
Pike	1,148,116	913,418		234,698
Rock Bass; Crappies	65,871	61,153		4,718
Saugers	212,399	167,826		44,573
Sheepshead	853,494	840,014		13,480
Smelt	1,549,923	2,327,976	778,053	
Sturgeon	171,843	159,996		11,847
Suckers	1,484,694	1,395,196		89,498
Sunfish	376,426	369,651		6,775
Trout, Lake	1,561,922	1,189,543		372,379
Tullibee	920,042	988,361	68,319	
White Bass	6,202,235	4,589,014		1,613,221
Whitefish	<u>6,843,640</u>	<u>4,452,024</u>		<u>2,391,616</u>
TOTAL	47,678,903	45,636,375	6,479,572	8,522,100
NET DECREASE				2,042,528

COMPARATIVE STATEMENT OF THE YIELD OF THE FISHERIES

IN THE PROVINCE OF ONTARIO, BY LAKE, IN POUNDS

<u>LAKE</u>	<u>1954</u>	<u>1955</u>	<u>INCREASE</u>	<u>DECREASE</u>
Ontario	1,914,153	1,943,123	28,970	
Erie	28,912,056	30,285,209	1,373,153	
St. Clair	1,020,590	822,491		198,099
Huron	1,463,394	1,261,863		201,531
Georgian Bay	4,291,881	2,297,879		1,994,002
North Channel	394,626	243,580		151,046
Superior	2,890,194	2,540,355		349,839
Northern Inland	6,080,193	5,626,996		453,197
Southern Inland	<u>711,816</u>	<u>614,879</u>		<u>96,937</u>
TOTALS	47,678,903	45,636,375	1,402,123	3,444,651
Net Decrease				2,042,528

COMPARATIVE STATEMENT OF THE NUMBER OF COMMERCIAL FISHING LICENCES ISSUED

<u>TYPE OF LICENCE</u>	<u>1954</u>	<u>1955</u>	<u>INCREASE</u>	<u>DECREASE</u>
Gill Net	1,045	1,066	21	
Pound & Trap Nets	185	182		3
Hoop Nets	293	285		8
Coarse Fish Seines	168	189	21	
Baited Hooks	202	189		13
Dip Nets	32	33	1	
Trolling	26	28	2	
Trammel Nets	1	1	-	
Minnow Seines, Dip Nets, and Traps for Taking Minnows for Sale to Anglers	1,248	1,374	126	
Bait-Fish Dealers	-	32	32	
TOTALS	3,200	3,379	203	24
Net Increase			179	

STATISTICS OF THE FISHING INDUSTRY IN THE PUBLIC WATERS OF ONTARIO, FOR THE YEAR ENDING DECEMBER 31st, 1955.

	QUANTITIES OF FISH TAKEN (in pounds taken)										TOTAL	VALUE
	NORTHERN INLAND WATERS		LAKE SUPERIOR	NORTH CHANNEL	LAKE HURON	GEORGIAN BAY	LAKE ST. CLAIR	LAKE ERIE	LAKE ONTARIO	SOUTHERN INLAND WATERS		
BLUE PICKEREL	-	-	-	-	-	-	-	12,037,390	33,016	-	12,070,406	\$1,448,448.72
BULLHEADS	71,078	-	499	683	-	443	16,582	186,123	357,291	190,904	823,603	114,271.24
CARP	4,842	-	14,437	37,434	-	110,185	429,536	207,262	317,661	196,574	1,317,931	79,221.73
CATFISH	-	-	198	23,103	-	8,127	68,804	148,263	29,079	7,766	285,438	52,376.71
CHUB or TULLIBEE	191,839	311,940	-	209,875	-	270,820	-	-	3,887	-	988,361	112,621.54
EELS	-	-	-	-	-	-	-	12	-	2,842	70,836	7,083.84
GOLD EYES	5,506	-	-	-	-	-	-	-	-	-	5,506	275.30
HERRING	36,181	707,967	-	54,053	-	12,238	-	96,034	29,094	-	935,567	69,253.29
LAKE TROUT	109,699	1,003,176	2,353	-	-	70,665	-	27	3,623	-	1,189,543	413,224.45
LIMO	485,914	10,115	3,660	600	-	316	1,000	-	33	4,063	505,701	2,429.57
NORTH'N PIKE	824,343	2,607	36,303	225	-	18,840	10,287	1,238	19,336	239	913,418	69,432.37
PERCH	10,672	2,447	1,915	323,164	-	968	14,055	4,752,791	72,734	1,930	5,180,676	661,197.40
MINOWS	-	6,239	3,552	3,455	-	2,386	-	-	1,955	-	17,587	1,756.00
SUCKERS	764,876	56,135	70,201	110,755	-	29,812	91,929	174,641	55,609	41,238	1,395,196	24,208.61
ROCK BASS & CRAPPIES	6,395	-	324	96	-	-	10,408	16,754	18,962	8,214	61,153	6,321.92
SAUOERS	43,620	49,195	11	1,745	-	-	10,253	62,339	663	-	167,826	21,452.10
SHEEPSHEAD	22,562	-	-	9,818	-	-	19,082	785,991	1,383	1,178	840,014	12,763.77
SMELT	40,109	25	-	124	-	-	-	2,039,913	238,455	9,350	2,327,976	108,008.33
STURGEON	69,946	5,853	14,826	6,155	-	4,295	12,760	21,946	8,739	15,476	159,996	156,120.30
SUNFISH	-	-	-	-	-	1,083	33,756	40,278	171,893	122,641	369,651	34,091.58
WHITE BASS	1,913	-	-	11,538	-	-	32,271	4,505,135	35,704	2,453	4,589,014	457,772.30
WHITEFISH	1,496,901	254,409	57,323	257,827	-	1,646,129	-	399,021	340,414	-	4,452,024	1,624,083.18
YELLOW PICKEREL	1,437,184	130,149	37,636	210,967	-	116,701	54,250	4,773,000	123,528	-	6,883,415	1,298,316.01
CAVIAR	1,068	-	342	246	-	116	316	405	10	426	2,929	6,655.00
DOGFISH, GAR & ALEWIVES	2,348	-	-	-	-	4,755	17,202	36,646	12,072	9,585	82,608	1,781.60
TOTALS	5,626,996	2,540,355	243,580	1,261,863	2,297,879	822,491	30,285,209	1,943,123	614,879	45,636,375	45,636,375	
VALUE	\$732,227.84	523,322.16	56,378.18	292,890.95	882,406.15	76,941.87	3,841,515.75	313,017.59	64,466.54		\$6,783,167.06	

STATISTICS OF THE FISHING INDUSTRY IN THE PUBLIC WATERS OF ONTARIO, FOR THE YEAR ENDING DECEMBER 31st, 1955.

E. Q. U. I. P. M. E. N. T.

	E. Q. U. I. P. M. E. N. T.										TOTALS
	NUMBER OF MEN	NORTHERN INLAND WATERS	LAKE SUPERIOR	NORTH CHANNEL	LAKE HURON	GEOGLIAN BAY	LAKE ST. CLAIR	LAKE ERIE	LAKE ONTARIO	SOUTHERN INLAND WATERS	
FISHING BOATS											
40 feet and over											
No.	14	17	3	56	22	105	7	187			
Tons	118	475	83	890	325	1,993	67	3,257			
Value	\$92,500	\$239,700	\$34,500	\$671,468	\$204,500	\$1,350,980	\$22,800	\$2,616,446			
20 to 39 feet											
No.	113	77	14	55	26	121	70	492			
Value	\$131,959	\$147,150	\$28,250	\$152,275	\$47,300	\$332,188	\$81,750	\$938,872			
Under 20 feet											
No.	292	48	13	41	11	79	233	846			
Value	\$66,605	\$16,210	\$2,159	\$8,245	\$2,225	\$15,175	\$43,216	\$173,947			
FISHING GEAR											
Gill Nets											
Yards	641,426	1,313,360	310,952	1,678,565	525,238	3,938,823	888,004	9,303,838			
Value	\$160,113	\$311,217	\$55,910	\$433,092	\$146,285	\$1,094,970	\$204,933	\$2,409,320			
Pound Nets											
No.	45	19	41	88	8	342	-	787			
Value	\$33,650	\$16,500	\$22,600	\$169,500	\$6,750	\$201,600	-	\$507,875			
Trap Nets											
No.	9	-	2	-	123	688	-	822			
Value	\$2,450	-	\$500	-	\$117,600	\$501,633	-	\$622,183			
Hoop Nets											
No.	95	-	-	35	-	45	931	439			
Value	\$6,390	-	-	\$2,090	-	\$3,705	\$61,590	\$30,730			
Seine Nets											
No.	-	-	-	3	1	64	25	27			
Yards	-	-	-	300	200	8,511	1,751	1,780			
Value	-	-	-	\$435	\$1,000	\$3,675	\$3,145	\$4,305			
Night Lines											
Hooks	6,700	150	-	600	150	8,900	13,600	3,900			
Value	\$380	\$100	-	\$145	\$100	\$2,387	\$1,566	\$332			
Dip & Roll Nets											
No.	1	-	-	-	-	6	3	15			
Value	\$10	-	-	-	-	\$63	\$18	\$193			
Trotling Lines											
No.	-	8	-	-	-	-	28	-			
Value	-	100	-	-	-	-	\$364	-			
Trammel Nets											
No.	-	-	-	1	-	-	-	-			
Value	-	-	-	\$220	-	-	-	-			

SHORE INSTALLATIONS											
Freezers and Ice Houses	No.	186	59	18	23	49	9	60	30	8	442
Value	\$79,483	\$49,955	\$14,800	\$37,000	\$85,975	\$7,600	\$486,675	\$10,575	\$5,275	\$779,338	
Piers and Wharves	No.	155	81	12	13	57	10	82	27	10	447
Value	\$44,029	\$27,565	\$6,550	\$5,350	\$55,105	\$3,305	\$81,300	\$4,605	\$540	\$228,349	
Net Sheds	No.	133	99	18	44	65	21	188	172	19	759
Value	\$43,278	\$50,930	\$10,100	\$55,850	\$108,400	\$28,900	\$440,100	\$54,395	\$5,250	\$806,293	
TOTAL VALUE		\$661,547	\$858,427	\$175,369	\$623,960	\$1,686,950	\$131,720	\$4,531,082	\$498,949	\$58,534	\$9,226,538

WATER POLLUTION CONTROL

Stream pollution studies, now an integral part of modern fish and wildlife management, were continued through 1955-56 by the Department in cooperation with the Department of Health and other agencies concerned with water-use.

Forty-five field investigations, ranging from routine examinations to detailed industrial waste and water studies, were made throughout the Province. Close liaison with the Sanitary Engineering Division of the Department of Health made it possible to rely solely on that Department for the study of numerous other cases in which the fish and wildlife considerations were of secondary importance. This division of responsibility made it possible for the Department to direct much of its attention to Northern Ontario where pulp and paper and mining wastes were of prime importance.

Control of industrial pollution continues to be a long-range objective in most cases. The tremendous costs of waste treatment and disposal equipment, and the lack of the technical knowledge necessary to make control measures feasible or recovery and utilization of wastes possible, are the major obstacles to be overcome. Control of sewage pollution, on the other hand, is primarily a financial problem and is being studied as such by other Departments.

The advice and active participation of field personnel in the Forest Districts continues to form the basis for many investigations. The first-hand knowledge which is applied in this way is an important contribution when pollution control is considered in terms of Fish and Wildlife management, and is a necessity when an evaluation of the effectiveness of pollution control measures is to be made.

ENFORCEMENT

The game laws enacted by the Province of Ontario and the Regulations promulgated in accordance therewith, and the Ontario Fishery Regulations, and Migratory Birds Convention Act and Regulations approved by the Canadian federal authorities are designed primarily for the protection and conservation of our wildlife. To ensure that the legislation and regulations are properly complied with, the department has some 190 conservation officers strategically placed throughout the province. In addition to this enforcement work these officers also assist in many phases of conservation and management work, plant fish, lecture and show films in conjunction with educational work among school children, etc. Excellent cooperation in enforcement is supplied to our officers by some 1450 Deputy Game Wardens and members of the Ontario Provincial Police.

When an officer apprehends a person for a violation of the Game and Fisheries Act and Regulations, all the equipment being used is required to be seized. Upon conviction the articles become the property of the Crown, to be disposed of by the department. Where infractions of a minor nature are involved, the persons concerned, following disposition of the informations which were laid and subsequent receipt of inquiries from them, have been provided with an opportunity to redeem the seized articles on payment of a specified fee assessed by the department for the return of such articles. This arrangement applies primarily to firearms and fishing tackle.

However, there is a percentage of violations in which the circumstances are sufficiently serious to warrant the definite confiscation to the Crown of the seized articles. These confiscated articles are disposed of by the department at annual public sales (fishing tackle and miscellaneous items in the spring and firearms in the fall), and which sales were conducted in the respective areas in which the offences had occurred.

Two sales of confiscated articles were held during the year now under review. The receipts obtained, from the fishing tackle sale

were \$2,397.89; and from the gun sale were \$5,016.45.

SEIZURES

In the year under review, there was a total of 2,929 cases in which equipment was seized by reason of the fact that the articles were being used in various ways responsible for infractions of the legislation and regulations. Following are the details of the officers responsible for these seizures,-

Conservation Officers		2,232 cases
Provincial Police Officers		6 "
Joint Action:		
Conservation Officers and O.P.P.	88	
Conservation Officers and Deputy Game Wardens	582	
Conservation Officers and R.C.M.P.	7	
Conservation Officers and City Police	<u>14</u>	<u>691</u> "
		2,929 "

Included in these figures are 71 cases in which the seizures were made from persons unknown, mostly fishing equipment and traps which had been set and left in an unlawful manner. The officers found it impossible to develop sufficient evidence to enable them to establish actual ownership of these articles and therefore they were confiscated.

It is always astonishing to note the variety in the articles seized. The items, this year, run from a 5¢ ice pick to an almost new automobile. Listed below are the most numerous seized articles:

Angling equipment	in	751 cases
Fish		271 "
Nets		149 "
Game (animals and birds)		140 "
Firearms		1,602 pieces
Pelts, skins, hides		507 "
Traps and snares		400 "
Spears		80 "

Tackle boxes	73 pieces
Lights	70 "
Duck decoys	60 "
Cars and trucks	33 "
Boats	25 "
Outboard Motors	23 "
Haversacks	19 "
Minnow pails and traps	19 "
Landing nets	14 "

Details relating to some of these seized articles are enumerated below,-

Firearms

Shotguns	720
Smallbore rifles	601
Largebore rifles	249
Combination	16
Air weapons	9
Pistols	7

Pelts, skins and hides

Beaver	284
Muskrat	150
Marten	21
Raccoon	17
Mink	16
Weasel	6
Lynx	4
Otter	3
Fisher	2
Fox	2
Deer	2

Miscellaneous items

Living items seized - 13 ferrets, 14 buckets of minnows and 51 frogs.
Sundry items of hardware - 13 axes, 4 ammunition belts, 2 batteries,
1 cooler, 4 fish stringers, 5 gas cans, 8 hunting knives, 7 ice chisels,

2 bows, 1 anchor, 2 shovels, 1 saw, 1 pair pliers and 1 pair climbing spurs. In the camping supplies - 5 sleeping bags, 4 pair waders, 1 life jacket, 1 blanket, 2 cameras, 1 tent, 2 stoves, 1 ground sheet, 1 suitcase and a mallet. Also a small supply of illegal articles such as snaggers, dynamite and spring gaffs.

PROSECUTIONS

The following tables emphasize the efficiency of the enforcement staff, and the diligence pursued by them in conducting this important phase of wildlife management.

INFORMATIONS LAID

By Whom	With Seizures	Non-seizure Investigations	Total
Conservation Officers	2,902	271	3,173
Ontario Provincial Police	6	-	6
	2,908	271	3,179

RESULT OF PROSECUTION

By Whom	Conviction	Dismissed	Withdrawn	Total
Conservation Officers	2,961	87	125	3,173
Ontario Provincial Police	6	-	-	6
	2,967	87	125	3,179

From the informations laid, convictions were obtained in a very satisfactory proportion. The lack of sufficient evidence was the main cause resulting in dismissals. Most of the withdrawals were made for two reasons. First, when juveniles are involved in minor infractions; and second when they were one of two or more charges laid against the respective violators, to assure the registration of a conviction and the imposition of an adequate penalty under one of these multiple informations.

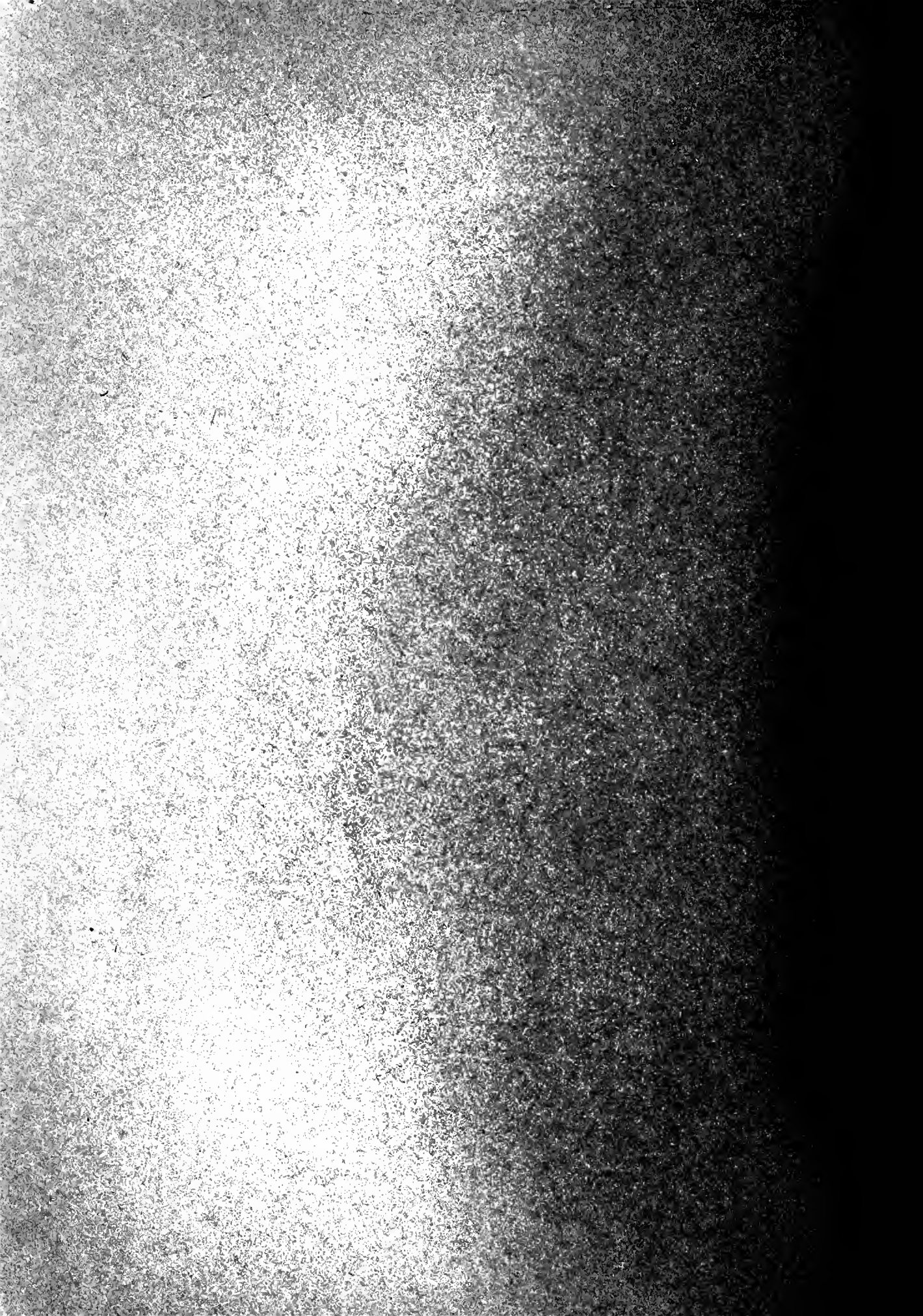
In quite a number of these cases the violations were of a minor

nature, but in a noticeable percentage of the cases they were violations of a deliberate and flagrant nature in which heavy penalties were imposed and subsequent confiscation of the seized articles involved. Listed below in order of frequency are some of the most serious infractions,-

- (a) Hunting in closed season
- (b) Hunting in Preserves and Parks
- (c) Illegal netting of fish
- (d) Spearing and snagging fish
- (e) Angling in sanctuary waters
- (f) Illegal possession of fur
- (g) Jacklighting deer and moose
- (h) Obstructing an officer
- (i) Transfer of a licence
- (j) Selling game and fish
- (k) Jacklighting fish
- (l) Shooting fish
- (m) Dynamiting fish

SECTION NO. 4

DIVISION of FOREST PROTECTION



DIVISION OF FOREST PROTECTION

The 1955 fire season will long be remembered as one of the most sustained and severe on record. The early disappearance of snow and rapid run-off, coupled with abnormally high temperatures and periods of low humidity, set the stage for a very serious early spring hazard. This period, usually extending from about May 15th to June 30th, was not terminated by normal precipitation and green growth. On the contrary, the severe fire danger conditions continued throughout the months of June, July and August, creating conditions of extreme drought. Water levels dropped steadily and many streams with normal year-round flow dried up completely. Swamps, usually wet and almost a sure source of water became dry and burned vigorously whereas they could as a rule be depended upon to constitute a fire break.

The situation was further aggravated by a series of dry lightning storms during July and August, the seriousness of which may be realized by the fact that during the period July 15th to August 25th an average of twenty fires per day were started by lightning. This in addition to several fires from other causes presented a major fire suppression problem.

The Fire Record

A total of 2,252 fires occurred spreading over an area of 396,423 acres or about 600 square miles.

Following is a comparison with previous records:

<u>Year</u>	<u>Number of Fires</u>	<u>Acres Burned</u>
1936 (worst year on record)	2264	1,264,433
1948 (2nd worst year on record)	2036	1,017,389
1954	881	56,693
10-year average (1946-55)	1463	189,862

The burned-over area has been classified as follows:

Mature growth	-	103,246 acres or 27%
Young growth	-	89,051 acres or 24%
Burn, blowdown and non-forested	-	204,126 acres or 49%

The volume of damaged timber was estimated at 267 million cubic feet. Salvage operations, where feasible, were commenced immediately following the fires.

846 fires or 37% were extinguished before reaching a size of $\frac{1}{2}$ acre. 2,142 or 94% were less than 500 acres in size. 16 fires were between 500 and 1000 acres. 26 fires exceeded 1000 acres.

The largest fire spread over 120,000 acres or 30% of the total fire area and was caused by lightning.

Lightning started 928 fires or 41% and burned 272,126 acres or 70% of the total area. Fires by other causes in order of importance are: Campers - 390; Smokers - 298; Railways - 189; Settlers - 148; Miscellaneous - 148; Logging Operations - 53; Unknown - 32; Incendiary - 31; Road Construction - 13; Mining Operations - 11 and Prospectors - 11.

Fires occurred during eight months of the year, April to November inclusive. July was the heaviest month when 709 fires burned 266,799 acres, being 67% of the total area.

Forest Fire Suppression

Forest Fire suppression consisted of a supreme effort to combine every available resource of manpower and equipment into an organization geared to expansion in keeping with rapidly changing requirements. The organization of the complete field staff including Fish and Wildlife, Timber Management, Lands men and others, together with Protection personnel into an effective fire fighting machine proved most effective.

A system of complete flexibility throughout the service proved its worth. Experienced supervisory personnel, aircraft and fire fighting equipment were funnelled into the areas of heavy fire load thus deriving the maximum benefit from the entire organization.

The province's fleet of thirty-eight Beaver and three Otter aircraft did a tremendous job without accident.

Two small helicopters were under contract for the period May 1st to October 31st. These machines, capable of carrying up to 600 pounds were used mainly for transporting small crews and equipment to newly discovered lightning fires in inaccessible locations and provided the rapid transportation essential to suppressing many fires at discovery size.

Two large helicopters supplied by the Royal Canadian Air Force provided general transportation for larger fires and eliminated a tremendous job of ground packing and difficult transportation.

Cargo dropping from 200 to 300 feet, both free and using eleven and sixteen foot parachutes, was extensively employed.

Water bombing, using three gallon paper containers, was an important factor in holding small fires to discovery size and preventing spread of hot spots in large fires until a ground crew took over.

The carrying of a small equipped crew on aerial fire patrol following lightning storms and during periods of high hazard paid off on several occasions.

A camera carried in each aircraft provided valuable information concerning location and progress of fires.

New types of light crawler units and trailers were employed to good advantage in areas inaccessible to wheel equipment.

Due to the extreme drought, water tankers of various kinds were employed.

Other items employed were pack horses for getting wet hose out from fires, power saws for clearing fire line and helicopter landings, coloured smoke flares as a signalling device and wetting agents to improve the quenching effect of water on deep-seated fires.

The benefits of up-to-date district fire protection plans, pre-fire season meetings with adjoining provinces and bordering states, and general planning for any emergency, were fully realized.

Small stand-by crews instructed and maintained at strategic points proved invaluable as a means of rapid and effective initial attack.

Co-operation Received

Throughout the emergency a very effective and greatly appreciated co-operative effort prevailed.

The Federal Government through the Royal Canadian Air Force provided aircraft and helicopters, permitting much more effective suppression action in inaccessible areas than would otherwise have been possible. The Ontario Provincial Police performed an outstanding service in fire investigation, traffic control and general law enforcement. Commercial aircraft companies did an excellent job of flying and by providing spare relief pilots. The Ontario Hydro Electric Commission loaned their helicopters on several occasions. The Weather Bureau co-operated to the utmost in providing regular and special fire weather forecasts. The press, radio and television stations did a magnificent job of keeping the public fully informed of the actual conditions at all times. The clergy co-operated by informing parishioners, particularly in semi-wooded areas, of the grave danger and the necessity of extreme care with fire. The forest industry in several instances interrupted their operations to provide urgently needed fire fighters and equipment.

To all of these and to many other co-operators not mentioned in the above, the Department is most sincerely grateful.

Training

The 1955 season provided an excellent opportunity to test many types of equipment and procedures.

Two courses of instruction in forest fire in co-operation with industry were scheduled for July. The Western course held at Martin was completed. It was necessary to cancel the Eastern course, which was to be held at the Ranger School, due to the fire situation.

The advantages of instruction in the organization of fire crews and proper use of equipment being given to employees of forest industries, municipal organizations and others, were clearly demonstrated. This important work will be expanded.

Radio Communications

During the year 1955, the Department's Radio Communication System of 119 stations handled a total of 62,738 messages, totalling a word count of 1,701,595. This was an increase of 9% over 1954 totals and resulted, to a large extent, from the increased load of fire traffic.

Six regionally assigned frequencies, 3309, 4460, 4520, 4535, 4580 and 4880 kilocycles, together with 5410 and 9160 kilocycles provided communication within the regions and to main office. Still another frequency, 4775 kilocycles, was used exclusively by the 44 Departmental aircraft.

The change to 46 Megacycle frequencies, for internal district communications, was continued during the year with expansions in the Parry Sound, Sudbury and Sault Ste. Marie districts and preliminary installations in the Kapuskasing, Cochrane and Swastika districts.

Tests of a prototype 10 channel aircraft radio installation were favourably completed during the year in readiness for a scheduled change for all aircraft, commencing in 1956.

The following radio equipment was in use during 1955:

Tower Radio Sets	323
Mobile Radio Stations	38
Marine Radio Stations	11
Portable Ground Sets ($\frac{1}{2}$ watt)	151
Portable Ground Sets ($2\frac{1}{2}$ watts)	111
30 Watt Ground Radio Stations	106
75 Watt Ground Radio Stations	2
100 Watt Ground Radio Stations	3

150 Watt Ground Radio Stations	7
300 Watt Ground Radio Stations	2
500 Watt Ground Radio Stations	8
Aircraft Radio Installations	44
Aircraft Ground Hailer Units	19

Forest Insect and Disease Protection

Continuance surveillance of forest insect and disease conditions is a major responsibility of this Division.

Close co-operation is a requisite if success is to be attained in insect and disease control since the work of several other Divisions, particularly Timber Management and Reforestation, is directly affected. Control programs in connection with white pine blister rust in Lindsay and Tweed districts and European pine sawfly in the Lake Erie and Lake Huron districts were of this nature.

Control of the European pine sawfly is effected by the introduction of a laboratory cultured virus disease to affected plantations. This program was continued in the Lake Erie and Lake Huron districts.

A scheduled control operation to combat the red-headed pine sawfly, a serious pest of red pine, in Kirkwood Forest, Sault St. Marie district, was obviated by the extremely dry weather, which, combined with heavy natural egg parasitism, greatly reduced the sawfly population.

In addition, research projects carried on by Science Service, Department of Agriculture (Canada) received our constant attention; programs in connection with European pine shoot moth carried on at Northumberland County Forest and Elmira, and the spruce budworm investigations at field stations in Kenora and Port Arthur districts, being of particular import.

Field staff of this Department continued to contribute to the Forest Insect and Disease Survey, a project of Science Service, Department of Agriculture (Canada).

The gradual introduction of more intensive management practices throughout the Province is placing ever-increasing emphasis on the biological phase of this Division's activities.

Number of Forest Fires
and Area Burned Over by Months
1951-1955

Month	1955		1954		1953		1952		1951	
	Fires -	Acres	Fires -	Acres	Fires -	Acres	Fires -	Acres	Fires -	Acres
March	-	-	-	-	1	2	-	-	-	-
April	130	1,436	37	1,306	119	6,952	208	3,630	25	230
May	268	90,681	269	5,518	373	33,077	283	4,657	472	98,887
June	334	11,869	101	44,505	104	1,769	163	1,643	102	440
July	709	266,799	313	845	148	603	129	1,256	176	1,333
August	536	23,128	111	86	453	13,542	111	453	83	265
September	246	2,485	29	21	107	239	55	36	30	18
October	28	25	15	23	121	620	115	653	16	70
November	1	-	6	2,389	94	2,005	31	95	-	-
TOTALS	2,252	396,423	881	54,693	1,520	58,809	1,095	12,421	904	101,243

Number of Forest Fires and Area Burned Over

By Causes

1951-1955

Causes	1955		1954		1953		1952		1951	
	Fires - Acres	Fires - Acres	Fires - Acres	Fires - Acres	Fires - Acres	Fires - Acres	Fires - Acres	Fires - Acres	Fires - Acres	Fires - Acres
Settlers	148	3,564	42	536	92	12,479	112	1,266	74	595
Campers	390	91,113	221	3,006	388	17,329	315	1,995	191	1,546
Railways	189	4,858	82	915	188	1,002	131	487	139	934
Lightning	928	272,126	252	34,232	357	13,811	130	2,546	151	84,027
Logging Operations	53	11,733	13	114	24	810	31	969	38	9,051
Mining Operations	11	361	3	13	2	1	5	19	12	9
Smokers	298	6,407	147	14,255	279	9,916	214	1,862	173	4,106
Road Construction	13	59	11	419	13	728	26	67	28	289
Incendiary	31	57	25	40	19	1,458	13	139	16	357
Prospectors	11	5,518	2	202	1	3	-	-	-	-
Miscellaneous	148	423	74	717	143	1,202	108	3,063	74	313
Unknown	32	204	9	244	14	70	10	8	8	16
TOTALS	2,252	396,423	881	54,693	1,520	58,809	1,095	12,421	904	101,243

CLASSIFICATION OF FOREST FIRES

By Size - 1955

Size	1955 No.	1954 No.	1953 No.	1952 No.	1951 No.	1950 No.	1949 No.
1/4 acre and under	846	354	500	391	329	260	574
Over 1/4 to 5 acres	1004	392	719	516	383	426	811
Over 5 to 10 acres	120	36	102	65	45	92	122
Over 10 to 100 acres	188	81	146	103	115	155	242
Over 100 to 500 acres	52	9	33	16	21	43	61
Over 500 to 1,000 acres	16	2	7	3	5	3	16
Over 1,000 to 10,000 acres	18	5	13	1	4	6	7
Over 10,000 acres	8	2	-	-	2	-	1
TOTALS	2,252	881	1,520	1,095	904	985	1,834

CLASSIFICATION OF LAND BURNED OVER

By Ownership - 1955

Classification	1955	1954	1953	1952
Crown Land - Acres	370,948	36,115	44,519	7,264
Private Lands - Acres	25,475	18,578	14,290	5,157
Number of Fires	2,252	881	1,520	1,095
Total Area in Acres	396,423	54,693	58,809	12,421

CLASSIFICATION OF FOREST AREA BURNED OVER - 1955

By Forest Type

No. of Year of Fires	Mature Growth		Young Growth		Reproduction under 3.5" D.B.H.					Logging Clear Cut	Burn Replanting	Non-Forested Land	Total Acres				
	Conif-erous	Mixed wood	Conif-erous	Mixed wood	Conif-erous	Hard-wood	Mixed wood	Blow down	Insect Killed								
1955	2,252	56,496	670	46,080	42,646	7518	38887	14714	378	10927	221	-	13719	139849	12	24306	396,423
1954	881	9,780	5666	9,843	2,093	235	1709	381	132	493	133	-	18217	936	84	4991	54,693
1953	1,520	2,825	3596	6,016	4,156	2838	6934	851	4373	3856	3	1	7488	6464	277	9131	58,809
1952	1,095	832	43	1,344	392	225	903	427	423	193	81	10	2757	1124	9	3658	101,243
1951	904	6,875	242	5,838	2,716	1186	6506	1402	1007	4175	64	35	10969	54721	13	5494	36,780

MEANS OF FIRE DETECTION - 1955

	Towers	Rangers	Public	Aircraft	Total Fires
1955 Totals	891	102	864	395	2,252
1954 Totals	353	46	356	126	881
1953 Totals	528	122	654	216	1,520
1952 Totals	344	82	530	139	1,095

STATEMENT OF FIRE PERMITS ISSUED - 1955

Number of Permits

1955	1954	1953	1952	1951	1950	1949
14,803	12,315	14,189	11,764	9,647	9,357	11,546

STATEMENT OF TRAVEL PERMITS ISSUED - 1955

1955	1954	1953	1952	1951	1950	1949
Permits	211,724	113,971	146,481	124,193	114,998	86,975
Persons	717,542	408,018	506,703	455,979	422,938	323,870
						256,320

NUMBER OF WORK PERMITS ISSUED - 1955-56

District	Mining Operations		Woods Operations		Miscellaneous Operations		Totals	
	No. of Permits	Men Engaged	No. of Permits	Men Engaged	No. of Permits	Men Engaged	No. of Permits	Men Engaged
Sioux Lookout	45	242	52	2032	18	519	115	2793
Kenora	15	64	125	1198	85	288	225	1550
Fort Frances	24	160	55	1222	20	359	99	1741
Port Arthur	50	335	76	24000	73	1129	199	25464
Geraldton	71	393	57	4177	43	919	171	5489
Kapuskasing	17	76	131	4922	15	160	163	5158
Cochrane	95	426	156	5484	98	1347	349	7257
White River	33	830	26	1599	33	576	92	3005
Swastika	115	438	142	2014	20	233	277	2685
Sault Ste. Marie	185	1109	130	1964	28	897	343	3970
Gogama	12	48	10	218	6	74	28	340
Chapleau	15	96	57	2406	2	9	74	2511
Sudbury	141	850	82	1021	31	211	254	2082
North Bay	47	288	378	3729	59	1055	484	5072
Parry Sound	-	-	54	794	3	75	57	869
Pembroke	11	35	174	2310	6	92	191	2437
Tweed	17	78	336	1958	42	501	395	2537
Lindsay	73	520	42	641	24	384	139	1545
Lake Simcoe	-	-	7	57	6	141	13	198
TOTALS	966	5988	2090	61746	612	8969	3668	76703

TOTAL IMPROVEMENTS COMPLETED TO MARCH 31st, 1956

Cabins	511
Storehouses	146
Boathouses	83
Store and Boat Houses	26
Bunk Houses	88
Offices	62
Garage and Carhouses	208
Other Buildings	365
Hose Towers	32
Wooden Towers	18
Steel Towers	288
Telephone Lines (Miles)	2,668.63

REPORT OF MAJOR EQUIPMENT AS OF MARCH 31, 1956

DISTRICTS AND REGIONS	PORT-POWER PUMPS	PORT-HAND PUMPS	FIRE HOSE IN FEET	BLANKETS	TENTS	EIDER DOWNS	BINOCULARS	CANOEES	BOATS OUTBOARD MOTOR	MOTORS OUTBOARD MOTOR	BOATS INBOARD MOTOR	TRUCKS AND AUTOS	TRAILERS	TRACTORS	RAILWAY MOTOR CARS	SNOW-MOBILES
DISTRICTS																
CHAPLEAU	44	308	118,350	706	130	31	24	55	10	23	-	22	4	4	-	-
COCHRANE	60	694	226,802	2072	141	77	31	54	13	33	4	36	5	3	9	1
FORT FRANCES	46	101	152,750	488	55	07	15	54	16	29	2	21	2	3	1	-
GERALDTON	109	602	234,250	1920	186	65	24	68	6	36	1	28	5	1	5	1
GOGAMA	36	325	141,300	1120	77	30	12	47	7	20	4	14	2	4	6	-
KAPUSKASING	47	536	135,100	2048	107	61	81	60	3	25	-	26	1	1	8	2
KEMPTVILLE	12	79	29,250	6	5	7	9	1	17	15	1	25	4	8	-	-
KENORA	72	178	183,500	1772	106	60	27	63	21	62	7	30	5	1	1	-
LAKE ERIE	7	63	7,737	8	-	6	24	4	12	11	5	34	9	8	-	-
LAKE HURON	6	132	19,700	-	4	9	21	2	9	9	-	37	19	7	-	-
LAKE SIMCOE	11	201	37,500	453	9	8	25	3	16	18	1	47	16	16	-	1
LINDSAY	22	175	29,000	761	40	38	29	29	41	30	-	43	11	11	-	-
NORTH BAY	39	225	120,200	1484	113	75	37	65	28	45	4	38	3	3	-	-
PARRY SOUND	50	169	78,400	1287	53	46	34	53	36	52	3	35	8	4	-	-
PEMBROKE	44	341	83,800	1413	100	107	21	99	32	55	8	44	5	9	6	-
PORT ARTHUR	03	348	256,300	1790	146	60	28	56	19	31	2	40	6	6	-	-
SAULT STE. MARIE	66	795	227,140	3731	201	69	25	65	11	32	-	43	6	7	3	-
SIoux LOOKOUT	105	463	275,900	1447	134	60	23	60	11	46	3	25	3	1	3	2
SUDBURY	55	165	159,200	3499	160	55	35	74	22	40	9	44	3	3	2	-
SWASTIKA	45	332	95,400	708	94	07	23	47	9	21	-	25	5	4	-	-
TWEED	20	309	37,500	352	35	54	30	12	54	45	1	31	12	1	1	-
WHITE RIVER	45	266	101,400	1436	96	41	18	62	4	19	1	11	1	-	2	-
REGIONS																
CENTRAL REGION	57	367	343,700	500	66	2	1	-	1	1	-	-	1	1	-	1
SOUTH CENTRAL REG.	32	160	21,000	304	96	3	1	1	-	-	-	-	-	1	-	-
MID-WESTERN REGION	16	137	70,000	140	9	-	-	2	-	-	-	-	-	-	-	-
WESTERN REGION	20	139	74,900	376	14	2	1	-	-	-	-	-	-	1	-	-
NORTHERN REGION	34	239	36,500	236	24	-	-	-	-	-	-	-	-	-	-	-
SOUTH EASTERN REG.	2	24	7,100	60	4	1	-	1	-	2	-	-	-	-	-	-
MISCELLANEOUS																
FST. RANGER SCHOOL	11	34	14,900	964	6	2	3	19	4	3	-	2	-	1	-	-
AIR SERVICE	-	-	-	413	2	120	-	9	13	29	8	6	-	3	-	-
HEAD OFFICE	14	-	-	-	163	243	40	22	19	29	-	43	5	9	-	-
TOTALS	1,218	7,907	3,316,579	31,582	2,376	1,506	642	1,007	434	771	64	706	141	121	47	8

F I R E D A M A G E

(Loss of standing timber calculated)

Districts	CROWN		\$ Protection Charges	PRIVATE	
	Timber Damage Cu.Ft.	\$		Timber Damage Cu. Ft.	\$
Sioux Lookout	512,651	5,126.51	4,114.49	155,700	1,557.00
Kenora	59,560	595.60	704.99	10,725	107.25
Fort Frances	5,023	50.23	45.38	253	2.53
Port Arthur	2,796,825	27,968.25	35,070.72	100	1.00
Geraldton	13,462,680	134,626.80	8,645.50	3,245	32.45
Kapuskasing	18,351,675	183,516.75	88,638.47	8,230	82.30
Cochrane	24,179,438	241,794.38	21,424.79	- -	- -
White River	245,952	2,459.52	2,081.60	14,483	144.83
Swastika	41,214	412.14	2,774.77	11,474	114.74
Sault Ste. Marie	31,321,322	313,213.22	310,000.28	87,147	871.47
Gogama	9,722,884	97,228.84	107,710.80	- -	- -
Chapleau	164,947,600	1,649,476.00	309,476.00	- -	- -
Sudbury	1,131,755	11,317.55	6,277.09	180,225	1,802.25
North Bay	302,262	3,022.62	1,412.42	2,204	22.04
Parry Sound	30,607	306.07	1,057.74	87,902	879.02
Pembroke	18,000	180.00	174.70	640	6.40
Tweed	11,638	116.38	84.62	6,134	61.34
Lindsay	43,656	436.56	484.48	17,154	171.54
Lake Simcoe	1,000	10.00	152.05	1,356	13.56
1955 Totals	267,185,742	2,671,857.42	900,330.89	586,972	5,869.72
1954 Totals	24,824,910	248,249.10	156,361.55	83,787	837.87
1953 Totals	27,933,971	279,339.71	87,811.27	1,688,003	16,880.03

T A B L E - 1 9 5 5

on Value of Crown Dues only)

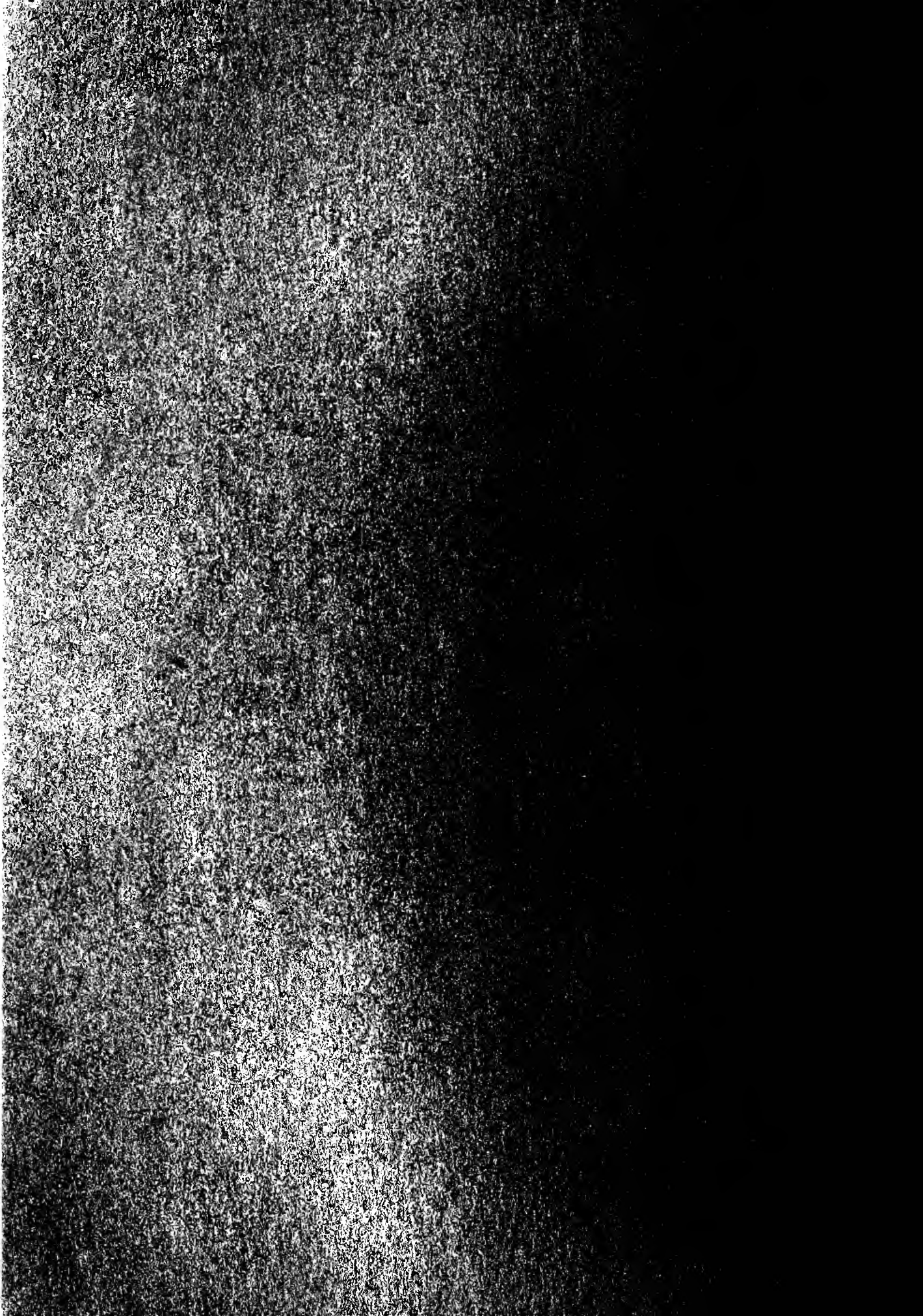
\$ Protection Charges	TOTAL Timber Damage Cu. Ft.	\$	\$ Protection Charges	\$ Total Damage	Private Property Damage
649.80	668,351	6,683.51	4,764.29	11,447.80	- - -
18.52	70,285	702.85	723.51	1,426.36	125.45
7.38	5,276	52.76	52.76	105.52	50.00
608.80	2,796,925	27,969.25	35,679.52	63,648.77	63,300.00
15.60	13,465,925	134,659.25	8,661.10	143,320.35	3,193.00
4.50	18,359,905	183,599.05	88,642.97	272,242.02	42,495.56
- -	24,179,438	241,794.38	21,424.79	263,219.17	31,630.00
179.15	260,435	2,604.35	2,260.75	4,865.10	570.00
727.75	52,688	526.88	3,502.52	4,029.40	1,000.00
9,307.00	31,408,469	314,084.69	319,307.28	633,391.97	300.00
- -	9,722,884	97,228.84	107,710.80	204,939.64	1,500.00
- -	164,947,600	1,649,476.00	309,476.00	1,958,952.00	18,000.00
669.80	1,311,980	13,119.80	6,946.89	20,066.69	11,280.00
176.88	304,466	3,044.66	1,589.30	4,633.96	31.25
1,031.82	118,509	1,185.09	2,089.56	3,274.65	8,239.50
- -	18,640	186.40	174.70	361.10	-
47.88	17,772	177.72	132.50	310.22	725.00
112.00	60,810	608.10	596.48	1,204.58	2,500.00
65.06	2,356	23.56	217.11	240.67	- -
13,621.94	267,772,714	2,677,727.14	913,952.83	3,591,679.97	184,939.76
792.68	24,908,697	249,086.97	157,154.23	406,241.20	15,650.45
9,842.62	29,621,974	296,219.74	97,653.89	393,873.63	81,777.73

Forest Fires and Acreage Burned in Ontario
from 1922 to 1955

<u>Year</u>	<u>Number of Fires</u>	<u>Acres Burned</u>
1922	1,021	346,193
1923	1,343	2,103,148
1924	851	146,017
1925	1,149	189,543
1926	1,110	88,374
1927	924	35,742
1928	536	100,383
1929	1,550	625,643
1930	1,402	711,809
1931	1,851	138,287
1932	2,073	79,021
1933	1,919	349,958
1934	1,568	198,633
1935	1,309	250,662
1936	2,264	1,264,433
1937	1,453	224,746
1938	1,292	138,245
1939	961	29,098
1940	1,014	121,614
1941	1,265	666,547
1942	1,224	113,716
1943	624	52,817
1944	1,137	168,891
1945	966	48,510
1946	1,739	76,769
1947	1,393	84,032
1948	2,036	1,017,389
1949	1,834	60,065
1950	985	36,780
1951	904	101,243
1952	1,095	12,421
1953	1,520	58,809
1954	881	54,693
1955	2,252	396,423

SECTION NO. 5

DIVISION of LANDS



DIVISION of LANDS

Amendments to the Regulations, made under The Public Lands Act, which have been in effect since May 1953, were made during the fiscal year under review as follows:

Regulation 1 to bring it into line with regulations passed by the Department of Mines respecting certain agricultural townships in the clay belt where surface and mineral rights have been severed.

Regulation 6 altering the residence requirements necessary preliminary to the granting of patent and reducing the conditions determining eligibility to purchase.

Regulation 7 amended to correct an error in the 1953 regulations.

Regulation 8 extending to persons participating in military operations undertaken by The United Nations to restore peace in Korea, the privilege of applying for free grants of agricultural land.

Regulation 11 altering the residence requirements necessary to qualify an applicant for patent.

Regulation 17 providing for the issuing of patent in certain circumstances without application.

Regulation 22 establishing the minimum size of islands which may be sold for private and commercial recreational use.

Regulation 25 increasing the price of recreational lands.

Regulation 27 increasing the amount of deposit payable on purchase price and increasing the time allowed to meet building conditions.

Regulation 28 providing for the issuing of patent in certain circumstances without application.

Regulation 28a, which is an entirely new section, establishes the annual rental payable and the amount of land allowed in certain types of land tenure permitted under authority of license of occupation or land use permit.

The above amendments became effective July 4, 1955.

Under an Act cited as The Public Lands Amendment Act, 1955, one section of The Public Lands Act was amended, being Section 61, Subsection 2, and a further amendment was effected by adding Section 21a.

There were no transactions completed during the year under the Ontario Dominion-Provincial Agreement (section 38 The Veterans' Land Act, Canada). However, close cooperation with the Federal Government officials administering the Act continued. Since the Agreement was approved in 1946, 200 veterans have been established on agricultural land and on small holdings. Of this number only six have failed, attributable entirely to the veteran himself. On the whole, the scheme has been perhaps the most successful one designed to place people on Crown Land in which the Province, as represented by this Department, has had an interest. The 10 year period during which patent is withheld will for some be up in 1957, when those veterans having completed their obligations will be entitled to patent.

The following shows the increase or decrease in volume of sales, cancellations and patents compared with last year:

Agricultural Land

Sales decreased, cancellations increased, patents decreased.

Summer Resort Land

Sales decreased slightly, cancellations decreased, patents decreased.

Special Use Land

Sales decreased, cancellations decreased slightly, patents decreased.

Townsite Land

Sales increased, cancellations increased, patents increased.

Free Grant Land

Locations increased, cancellations decreased, patents decreased.

The decrease in agricultural land sales and patents is due to economic conditions, the increase in cancellations to improved inspection facilities.

The decrease in volume of summer resort transactions is largely because Crown Land available is becoming farther away from the larger centres of populations, and it is anticipated that a gradual decrease will continue.

The decrease in the number of special use land transactions is the result of more stringent policy which provides for the granting of land only after careful and full investigation to ensure as far as it is possible to do so that purchasers actually require land for the purpose indicated and are in a position financially and otherwise to meet the Department's requirements.

In connection with townsites, the reason for the increase is that the Department has been concentrating on cleaning up all existing authorized and unauthorized occupations, many of long years standing.

Free Grant Locations, which are made to veterans who qualify (other than veterans established under the veterans land act) increased slightly but cancellations and patents decreased.

PATENTS OFFICE (LANDS DIVISION)

STATEMENT OF PATENTS, ETC. ISSUED DURING THE YEAR ENDING MARCH 31ST, 1956

PUBLIC LAND PATENTS	1532	
FREE GRANT PATENTS	59	
PATENTS & TRANSFERS (TOWN LOTS)	85	
MISCELLANEOUS DOCUMENTS	132	
RELEASE OF PINE	17	1825
CROWN LEASES	3	
ALGONQUIN PARK LEASES	41	
RONDEAU PARK LEASES	9	
TEMAGAMI LEASES		
WATER POWER LEASES	3	
LAKE SUPERIOR PROVINCIAL PARK LEASES	_____	56
LICENSES OF OCCUPATION	59	
LICENSES OF OCCUPATION (RONDEAU)		
LICENSES OF OCCUPATION (ALGONQUIN)	1	
LICENSES OF OCCUPATION (TEMAGAMI)	_____	60
LICENSES OF OCCUPATION CANCELLED	61	
CROWN LEASES CANCELLED	88	

AGRICULTURAL LAND

THE FISCAL YEAR ENDING MARCH 31ST, 1956

ADMINISTRATIVE DISTRICT	DISTRICT FORESTER	No.	SALES		CANCELLATIONS		ASSIGNMENTS		PATENTS	
			ACRES	ACRES	No.	ACRES	No.	ACRES	No.	ACRES
CHAPLEAU	D. WILSON	9	683.238	4941.399	59	345.42	3	2237.320	21	1205.50
COCHRANE	F.L. HALL	4	557.50	810.00	5				9	
FORT FRANCES	R. BOULTBEE			58.4	1					
GERALDTON	J.M. TAYLOR									
GOGAMA	R.B. DICKSON	20	1686.00	4077.25	43	399.00	4	1297.378	12	852.238
KAPUSKASING	F.E. SIDER	12	1443.21	799.245	6	430.71	3		7	
KENORA	L. RINGHAM									
LAKE ERIE	A.B. WHEATLEY									
LAKE HURON	I.C. MARRITT									
LAKE SIMCOE	A. LEMAN									
LINDSAY	W.A.G. THURSTON	1	123.00						1	123.00
NORTH BAY	R.L. SNOW	3	480.00	317.00	2				5	716.62
PARRY SOUND	W.E. GIMBY			254.00	3	464.00	5		2	200.00
PEMBROKE	D.N. OMAND	26	3521.99	2061.50	15				1	100.00
PORT ARTHUR	R. HYSLOP	1	6.00	1078.20	8	160.00	1	5431.27	38	1256.893
SAULT STE MARIE	A.J. HERRIDGE								11	
SIoux LOOKOUT	H. MIDDLETON	12	1577.27	3060.47	29	495.00	4	1673.48	14	2340.992
SUDBURY	W.G. CLEAVELEY	28	2102.005	1056.00	13	166.76	2		24	
SWASTIKA	S.L. SLEEMAN	1	50.00			100.00	1		3	458.00
TWEED	S. RUXTON									
WHITE RIVER	R.H. HAMBLI									
		117	12230.213	18513.464	184	2929.06	25	17892.691	148	17892.691
SWASTIKA, UNIVERSITY ASSIGNMENT						78.977	1			
		117	12230.213	18513.464	184	3008.037	26	17892.691	148	17892.691

SUMMER RESORT.

THE FISCAL YEAR ENDING MARCH 31ST, 1956

ADMINISTRATIVE DISTRICT	DISTRICT FORESTER	SALES		CANCELLATIONS		ASSIGNMENTS		PATENTS	
		No.	ACRES	No.	ACRES	No.	ACRES	No.	ACRES
CHAPLEAU	D. WILSON	7	10.62					7	14.16
COCHRANE	F.L. HALL	6	2.79	1	0.50			34	21.406
FORT FRANCES	R. BOULTBEE	43	92.54	2	3.72			26	53.01
GERALDTON	J.M. TAYLOR	30	30.82	2	5.91	1	0.43	24	25.98
GOGAMA	R.B. DICKSON							2	2.78
KAPUSKASING	F.E. SIDER	7	5.842					3	3.480
KENORA	L. RINGHAM	96	150.960	6	12.40	1	3.68	70	117.239
LAKE ERIE	A.B. WHEATLY								
LAKE HURON	I.C. MARRITT								
LAKE SIMCOE	A. LEMAN	99	99.2422	7	6.83	1	2.03	180	195.521
LINDSAY	W.A.G. THURSTON	220	271.6582	22	32.178	2	2.25	292	393.1727
NORTH BAY	R.L. SNOW	59	83.936	7	11.76	2	2.51	84	127.602
PARRY SOUND	W.E. GIMBY	209	291.861	30	56.091	2	4.38	230	452.949
PEMBROKE	D.N. OMAND	29	53.402	1	2.27			24	56.718
PORT ARTHUR	R. HYSLOP	55	77.56	3	5.77	1	1.1	65	122.09
SAULT STE MARIE	A.J. HERRIDGE	33	48.91	11	12.09	1	0.8	57	92.28
SIoux LOOKOUT	H. MIDDLETON	21	36.631					23	42.637
SUDBURY	W.G. CLEAVELEY	165	249.724	7	23.18			153	232.629
SWASTIKA	S.L. SLEEMAN	16	14.55	4	1.87			31	25.314
TWEED	S. RUXTON	67	75.542	5	8.75	1	0.762	71	95.768
WHITE RIVER	R.H. HAMBLY	14	17.47					8	14.73
TOTALS		1176	1614.0584	108	183.319	12	17.942	1384	2089.4757

LAND FOR SPECIAL USE

THE FISCAL YEAR ENDING MARCH 31ST, 1956

ADMINISTRATIVE DISTRICT	DISTRICT FORESTER	No.	SALES ACRES	CANCELLATIONS No.	ACRES	ASSIGNMENTS No.	ACRES	PATENTS No.	ACRES
CHAPLEAU	D. WILSON	6	196.64					2	5.00
COCHRANE	F.L. HALL	3	4.67					4	5.71
FORT FRANCES	R. BOULTBEE	6	155.82			2	5.48	3	88.72
GERALDTON	J.M. TAYLOR								
GOGAMA	R.B. DICKSON								
KAPUSKASING	F.E. SIDER	1	29.38					1	75.12
KENORA	L. RINGHAM	23	319.596	1	1.33			16	169.69
LAKE ERIE	A.B. WHEATLEY	4	6.659					7	7.962
LAKE HURON	I.C. MARRITT	5	75.662					5	85.55
LAKE SIMCOE	A. LEMAN	4	17.9128					7	177.8028
LINDSAY	W.A.G. THURSTON	1	0.97					4	107.623
NORTH BAY	R.L. SNOW	12	1451.26	1	3.87			12	1477.4975
PARRY SOUND	W.E. GIMBY	12	152.42	1	22.			11	165.32
PEMBROKE	D.N. OMAND	3	15.469	1	0.98			6	17.990
PORT ARTHUR	R. HYSLOP	6	235.62	1	5.00			9	236.14
SAULT STE MARIE	A.J. HERRIDGE	9	643.949					5	634.291
SIOUX LOOKOUT	H. MIDDLETON	6	856.066	1	3.5	1	0.75	6	998.236
SUDBURY	W.G. CLEAVELEY	10	242.849	4	390.65			10	249.339
SWASTIKA	S.L. SLEEMAN	7	796.88					9	662.63
TWEED	S. RUXTON	10	675.746					12	949.61
WHITE RIVER	R.H. HAMBLBY	1	1574.43					3	159.808
TOTALS		129	7451.9988	10	427.33	3	6.23	132	6274.0393

FREE GRANT LAND (INCLUDING SOLDIERS)

THE FISCAL YEAR ENDING MARCH 31ST, 1956

ADMINISTRATIVE DISTRICT	DISTRICT FORESTER	LOCATIONS		CANCELLATIONS		ASSIGNMENTS		PATENTS	
		No.	ACRES	No.	ACRES	No.	ACRES	No.	ACRES
CHAPLEAU	D. WILSON	3	383.50	7	906.26			1	73.00
COCHRANE	F.L. HALL			4	549.75			1	133.875
FORT FRANCES	R. BOULTBEE					1	160.50		
GERALDTON	J.M. TAYLOR								
GOGAMA	R.B. DICKSON								
KAPUSKASING	F.E. SIDER								
KENORA	L. RINGHAM	3	411.00	20	2285.25			4	540.676
LAKE ERIE	A.B. WHEATLEY								
LAKE HURON	I.C. MARRITT								
LAKE SIMCOE	A. LEMAN			6	566.00			1	100.00
LINDSAY	W.A.G. THURSTON			4	478.00				
NORTH BAY	R.L. SNOW			1	100.00			2	319.00
PARRY SOUND	W.E. GIMBY	1	100.00	34	3803.00	2	200.00	18	2101.00
PEMBROKE	D.N. OMAND							1	200.00
PORT ARTHUR	R. HYSLOP	8	1177.75	12	1457.73			15	2123.305
SAULT STE MARIE	A.J. HERRIDGE	2	320.00	3	379.00			2	266.00
SIOUX LOOKOUT	H. MIDOLETON								
SUBBURY	W.G. CLEAVELEY			9	961.00	1	157.00	5	677.049
SWASTIKA	S.L. SLEEMAN	3	316.25	3	228.87			5	459.00
TWEED	S. RUXTON			11	947.00			4	509.00
WHITE RIVER	R.H. HAMBLBY								
TOTALS		20	2708.50	114	1261.86	4	517.50	59	7501.905

CITIES, TOWNS AND TOWNPLOTS

THE FISCAL YEAR ENDING MARCH 31ST, 1956

ADMINISTRATIVE DISTRICT	DISTRICT FORESTER	NO.	SALES ACRES	CANCELLATIONS NO.	CANCELLATIONS ACRES	ASSIGNMENTS NO.	ASSIGNMENTS ACRES	PATENTS NO.	PATENTS ACRES
CHAPLEAU	D. WILSON	2	1.12			1	0.3	2	0.60
COCHRANE	F.L. HALL	2	.27					3	0.715
FORT FRANCES	R. BOULTBEE								
GERALDTON	J.M. TAYLOR	5	0.773	1	0.17	2	0.71	15	4.760
GOGAMA	R.B. DICKSON	2	.434					1	0.184
KAPUSKASING	F.E. SIDER	20	12.583	6	4.65	1	0.19	13	5.408
KENORA	L. RINGHAM	7	1.771					6	1.935
LAKE ERIE	A.B. WHEATLEY	1	4.00					1	2.00
LAKE HURON	I.C. MARRITT	1	4.00					4	7.112
LAKE SIMCOE	A. LEMAN							1	2.00
LINDSAY	W.A.G. THURSTON	1	.5						
NORTH BAY	R.L. SNOW								
PARRY SOUND	W.E. GIMBY								
PEMBROKE	D.N. OMAND								
PORT ARTHUR	R. HYSLOP	6	2.10	2	.29			1	0.227
SAULT STE MARIE	A.J. HERRIDGE							5	0.808
SIoux LOOKOUT	H. MIDDLETON	24	7.93	3	.74	3	.24	18	4.567
SUDBURY	W.G. CLEAVELEY	5	1.999					2	0.979
SWASTIKA	S.L. SLEEMAN	8	6.50	1	.09			9	7.235
TWEED	S. RUXTON								
WHITE RIVER	R.H. HAMBLEY	7	.71	1	.12			4	1574.66
TOTALS		91	44.690	14	6.06	7	1.44	85	1613.190

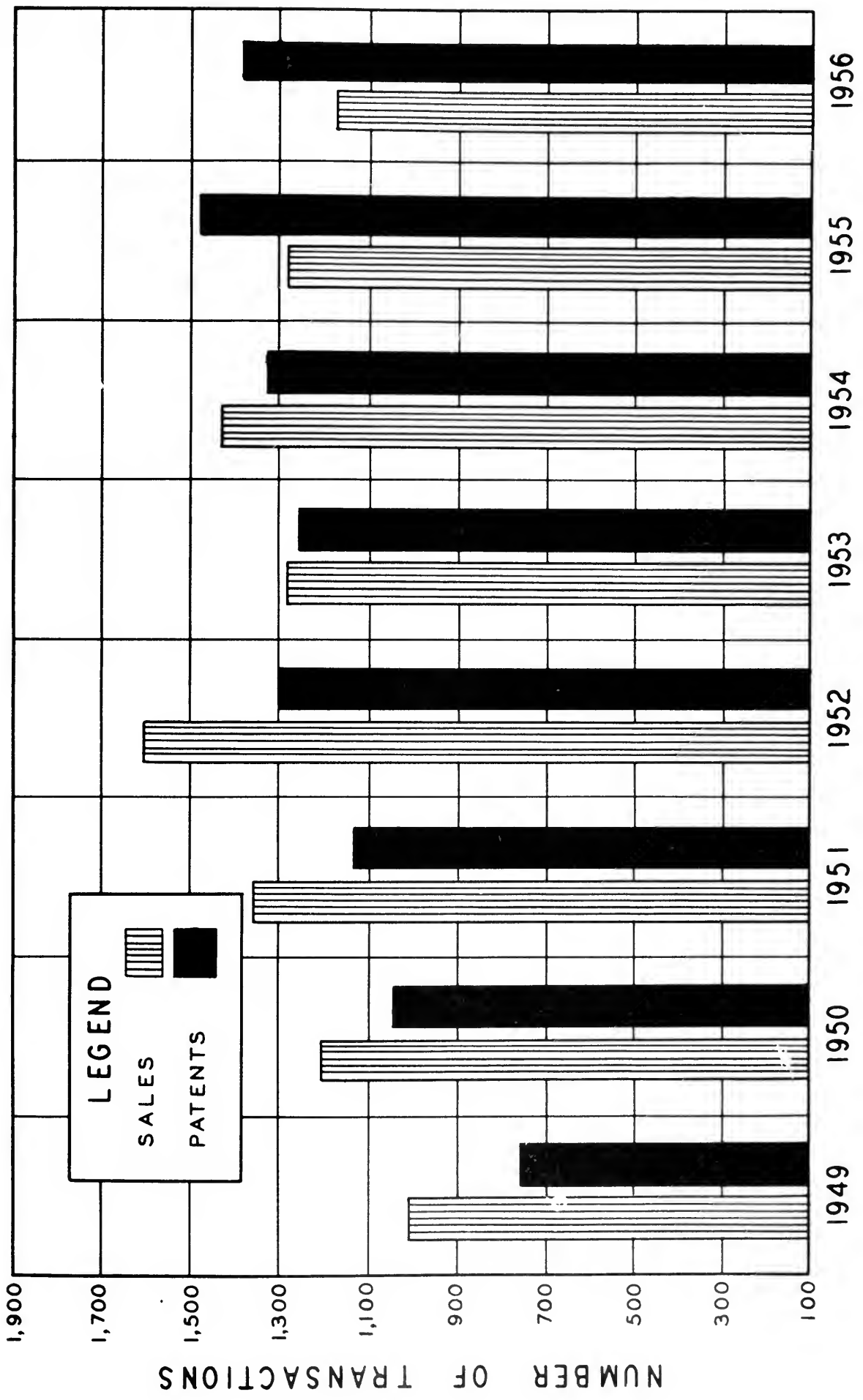
LAND USE PERMITS ISSUED from APRIL 1st, 1955 to MARCH 31st, 1956.

Administrative District	Hunt Camp No.	Hunt Camp Acres	Trapper's Camp No.	Trapper's Camp Acres	Residence No.	Residence Acres	Agricultural No.	Agricultural Acres	Marsh Hay No.	Marsh Hay Acres	Mill Site No.	Mill Site Acres	Sugar Bush No.	Sugar Bush Acres	Boat House No.	Boat House Acres	Miscellaneous No.	Miscellaneous Acres	Dept. Houses No.
Algonquin Park	95	93.00	2	3.00	10	8.50	2	200.00		200.00	13	105.35			30	11.00	130	1197.50	120
Chapleau	3	300.00	9	8.50	25	23.00	3	200.00		200.00	11	156.60					12	1119.50	63
Cochrane	24	22.75	16	16.50	29	34.65	4	55.00	6	600.00	8	40.00					18	1142.00	37
Fort Frances	6	4.25	23	10.60			1	160.00	1	500.00	5	25.00			16	5.75	15	730.25	52
Geraldton	49	49.00	5	5.00	53	35.66	1	5.00		5.00	2	6.00					16	663.25	81
Gogama	2	2.00	7	7.00	19	100.34	8	64.60		64.60	3	68.00			6	1.50	11	438.60	98
Kapuskasing	6	5.50	6	6.00	20	16.16	9	54.25	8	9.00	8	126.17			4	2.00	29	1559.19	172
Kenora	4	4.00	48	39.00	9	5.05	19	1726.00	2	27.00	17	78.00			8	2.82	20	893.95	58
Lake Erie	33	20.75			78	39.00											1	1.00	170
Lake Huron																			133
Lake Simcoe	4	4.00			2	1.50	1	100.00							29	15.00	1	.50	260
Lindsay	115	113.00			16	23.00	1	200.00			2	276.66			3	1.00	1	.50	121
North Bay	127	126.50	7	6.50	30	170.50	11	619.50	2	200.00	26	174.32			39	15.75	25	841.75	110
Parry Sound	227	224.875	3	3.00	33	34.75	5	538.00	2	14.00	7	70.00	4	76.00	23	12.50	20	615.75	36
Port Arthur	7	8.00	2	2.00	10	57.50	2	490.00			49	112.00					34	1759.80	117
Rideau																			74
Sault Ste. Marie	25	25.00	14	13.50	8	29.00					11	126.00					12	337.60	326
Stouffville	11	14.50	34	33.50	45	43.25	15	1030.00			15	89.00			4	5.00	62	2793.00	110
Sudbury	191	191.25	16	21.00	27	89.00	30	2153.50	2	211.00	9	42.00	1	25.00	48	22.25	22	1037.50	88
Swastika	2	2.00	2	2.00	4	162.50	6	231.00	3	40.00	22	123.00			3	1.50	17	471.00	45
Tweed	294	286.00			8	22.50	12	393.50	3	403.00	6	40.00			3	1.00	5	8.25	63
White River	2	2.00	6	6.00	9	8.11					2	15.00					2	6.00	209
TOTALS	1234	1510.725	200	183.10	435	903.97	130	8228.35	29	2004.00	216	1673.10	5	101.00	216	97.07	453	15619.89	2543

TOTAL NUMBER of PERMITS - 2,918 (excluding Departmental Houses)

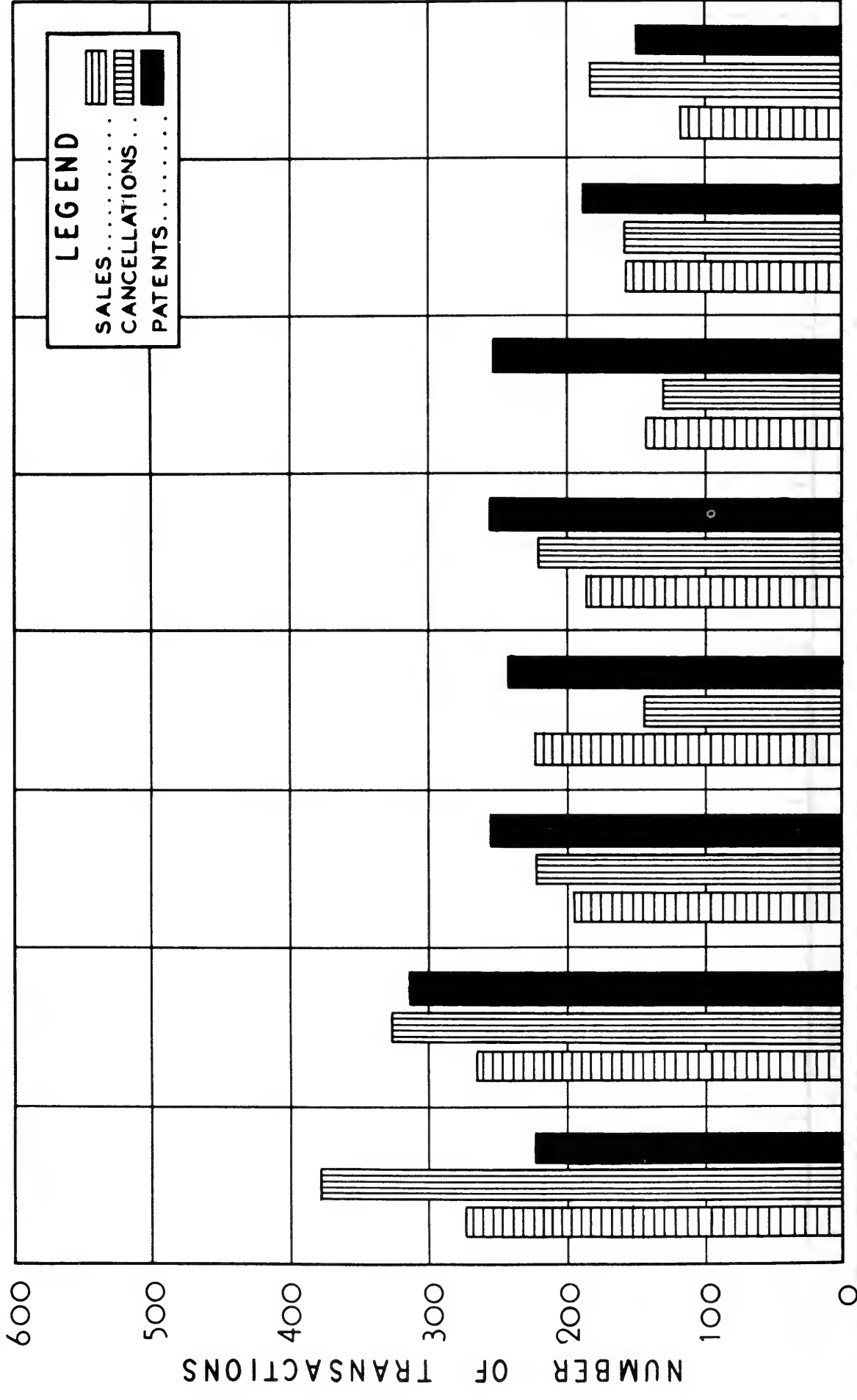
TOTAL NUMBER of ACRES - 30,321.205

SUMMER RESORT LANDS

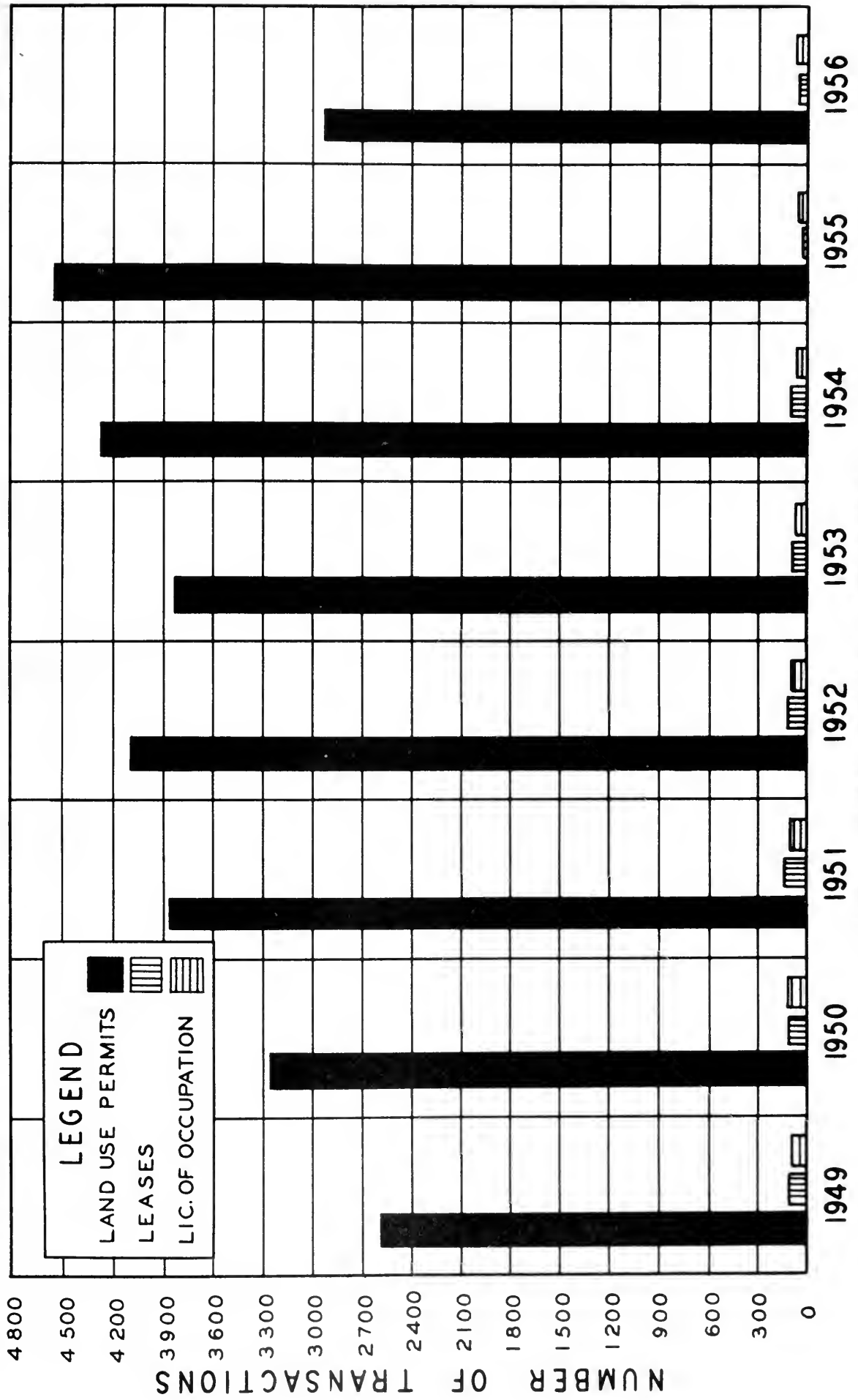


FISCAL YEAR ENDING MARCH 31ST

AGRICULTURAL LANDS IN SALE TOWNSHIPS

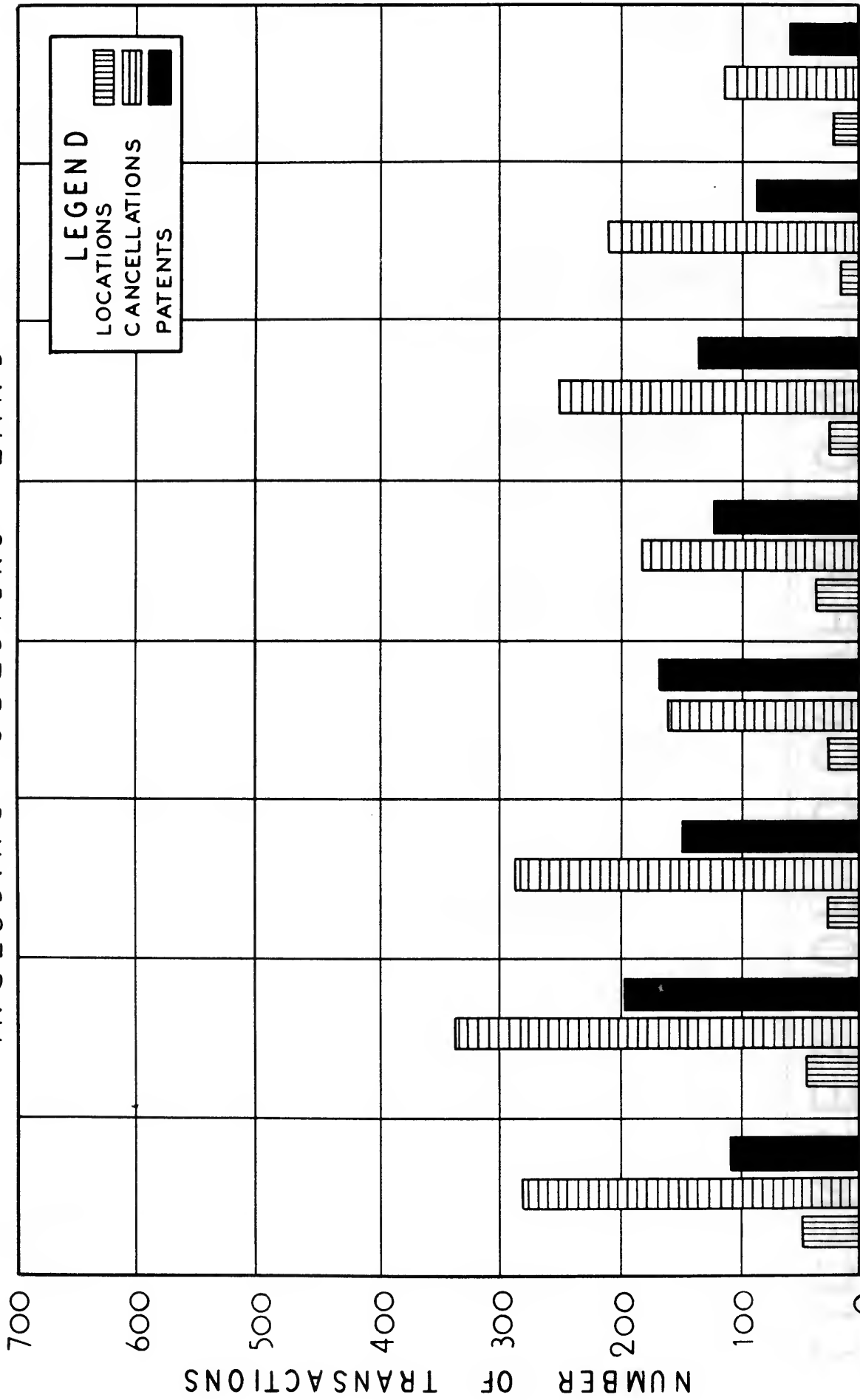


LAND USE PERMITS, LEASES AND LICENCES OF OCCUPATION ISSUED



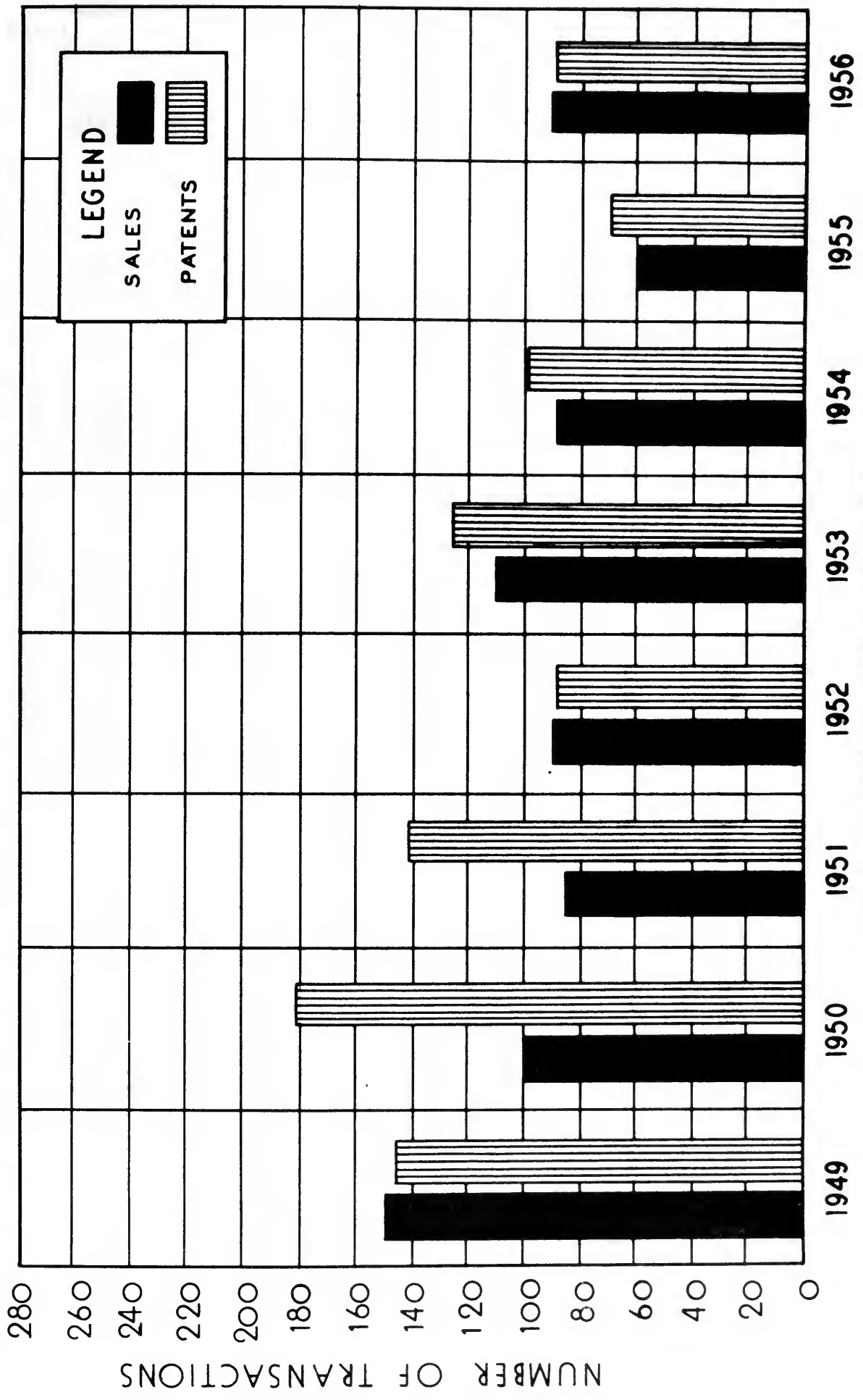
AGRICULTURAL LANDS IN FREE GRANT TOWNSHIPS

INCLUDING SOLDIERS' LAND



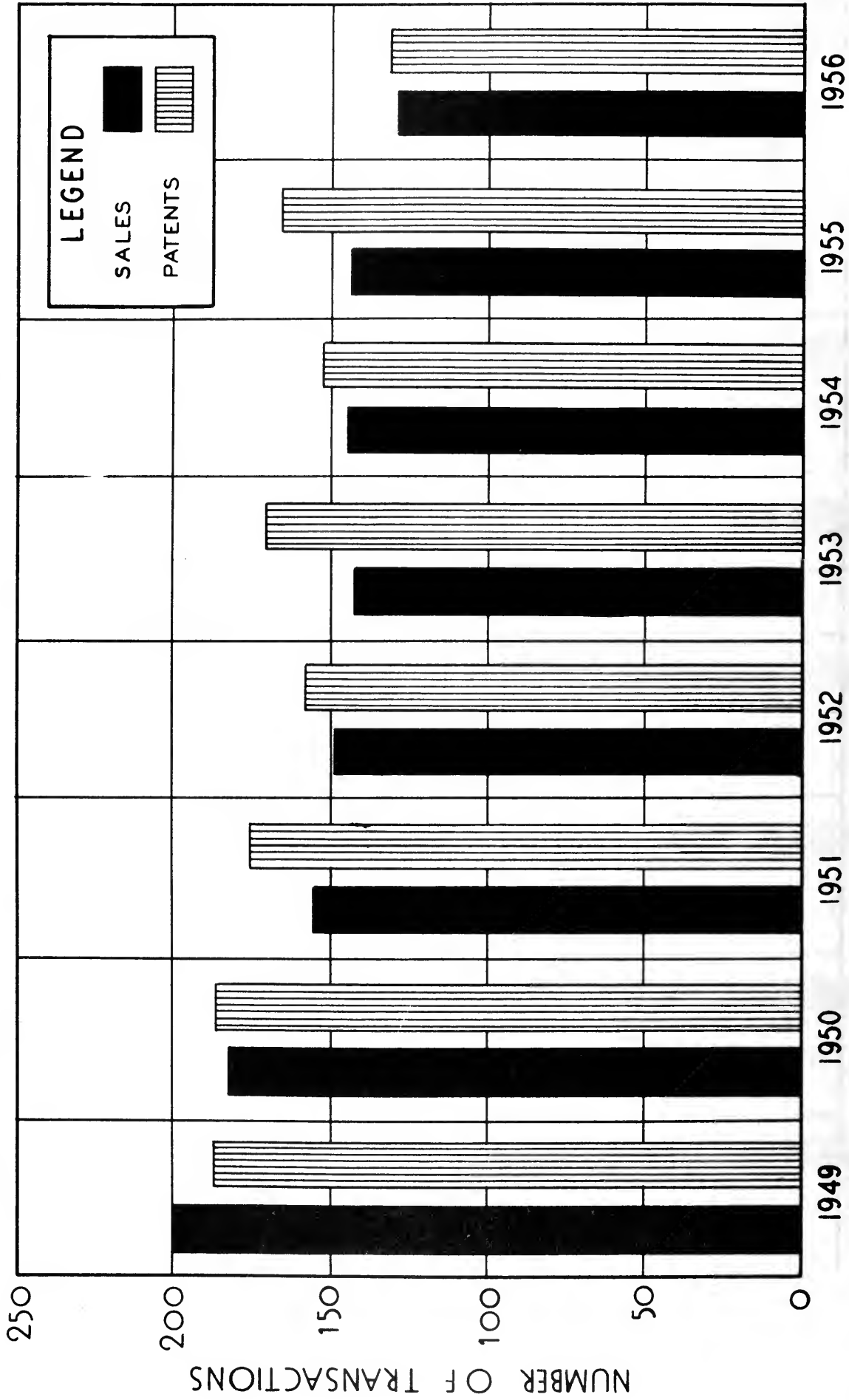
FISCAL YEAR ENDING MARCH 31ST.

CITY TOWN AND TOWNSITE LANDS



FISCAL YEAR ENDING MARCH 31ST.

LANDS FOR SPECIAL USE



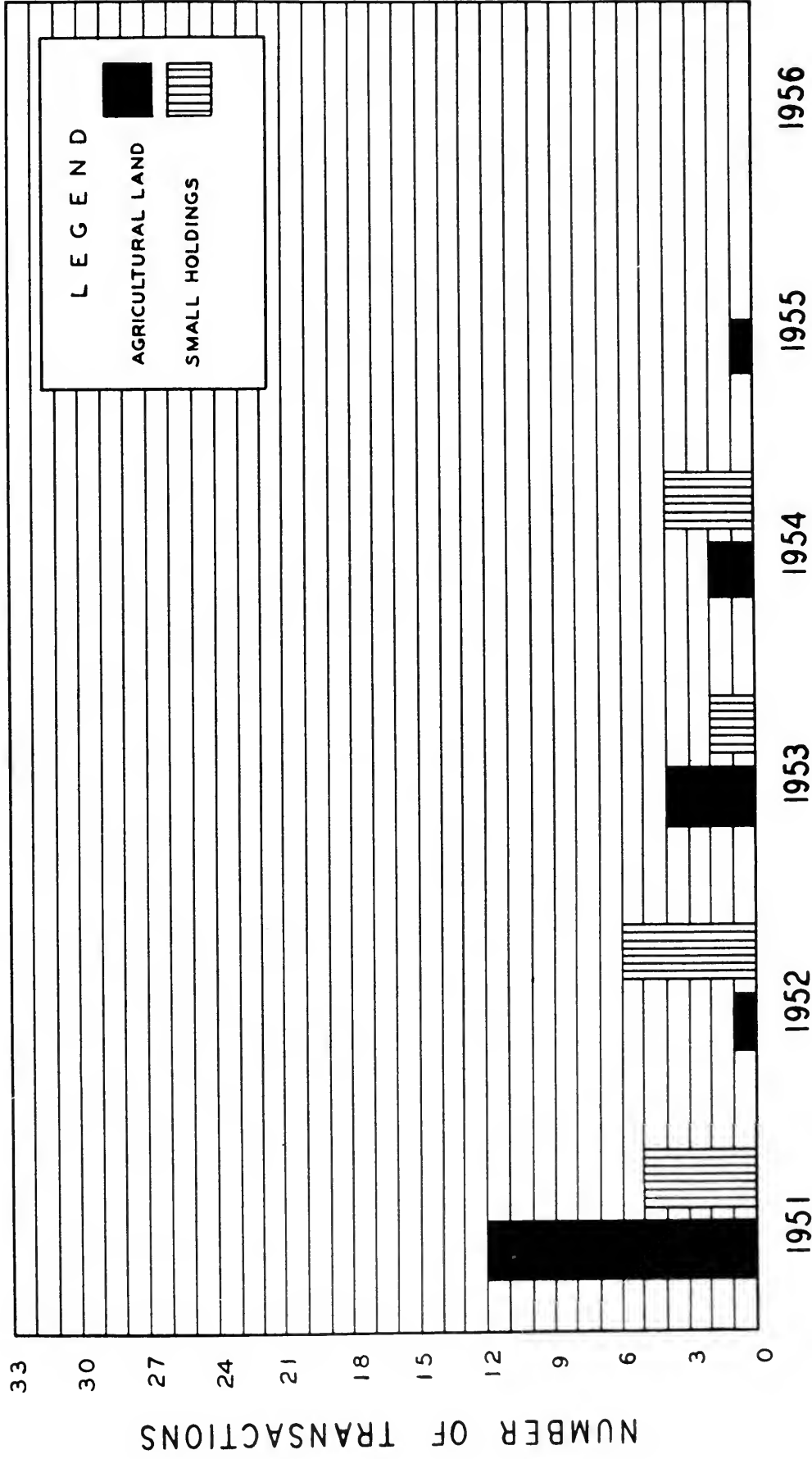
FISCAL YEAR ENDING MARCH 31ST.

CALLAHAN, J. W. LANDS FOR SPECIAL USE - F. W. A. 12

T R A N S A C T I O N S U N D E R

THE ONTARIO DOMINION - PROVINCIAL AGREEMENT

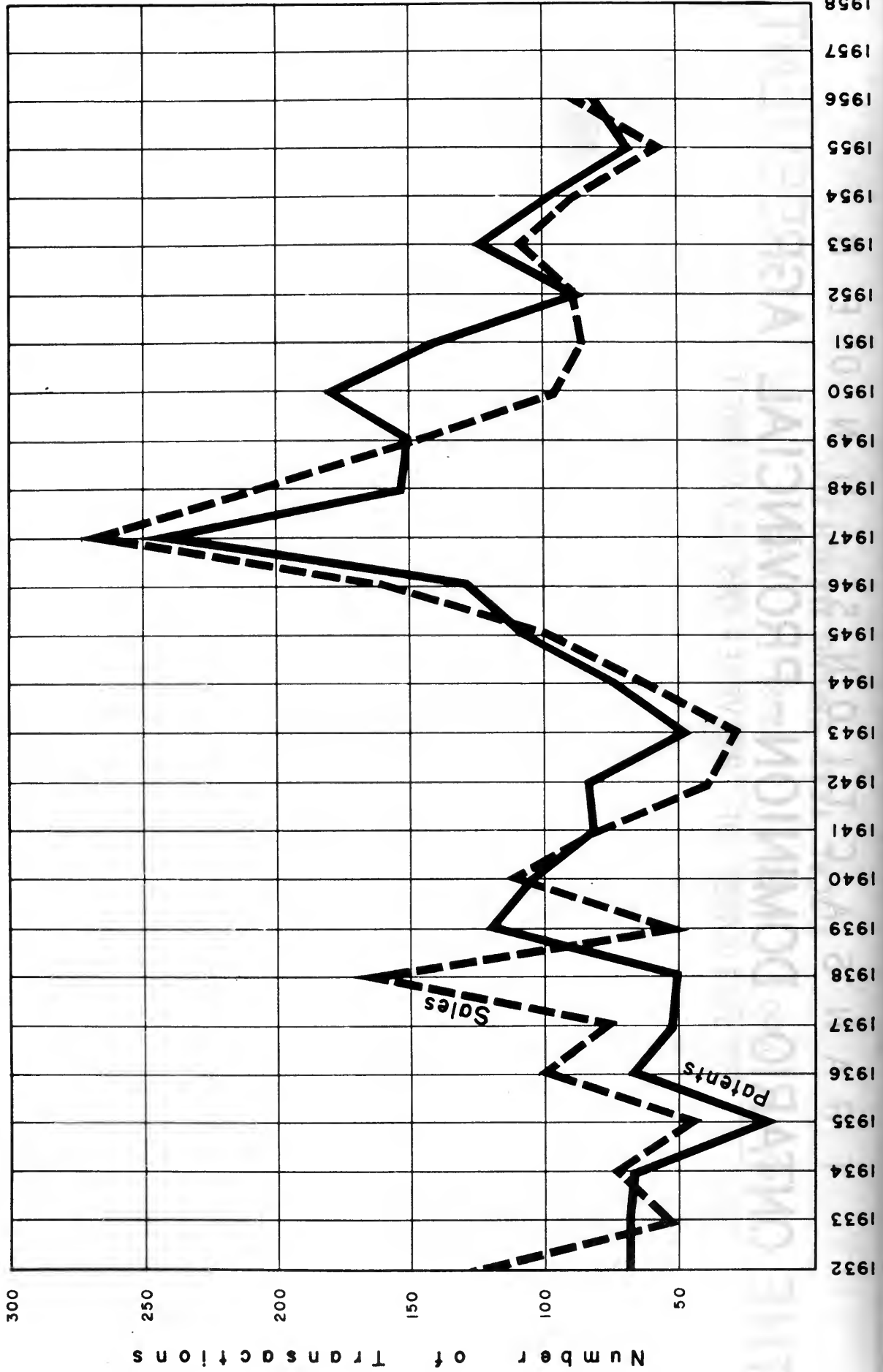
SECTION 35 OF THE VETERANS LAND ACT



FISCAL YEAR ENDING MARCH 31ST.

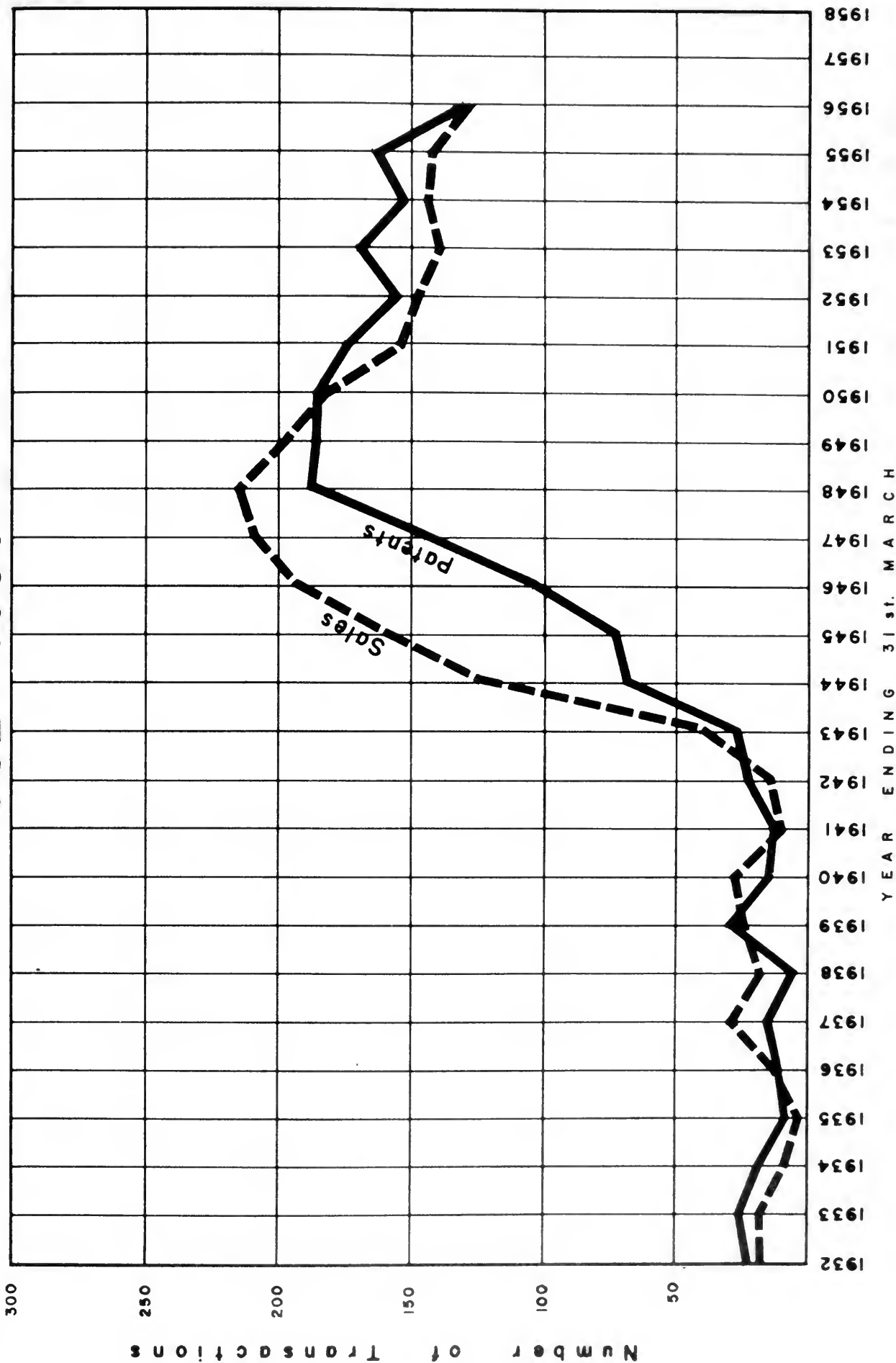
TOWNSITE LOTS, SALES AND PATENTS

1932 - 1956



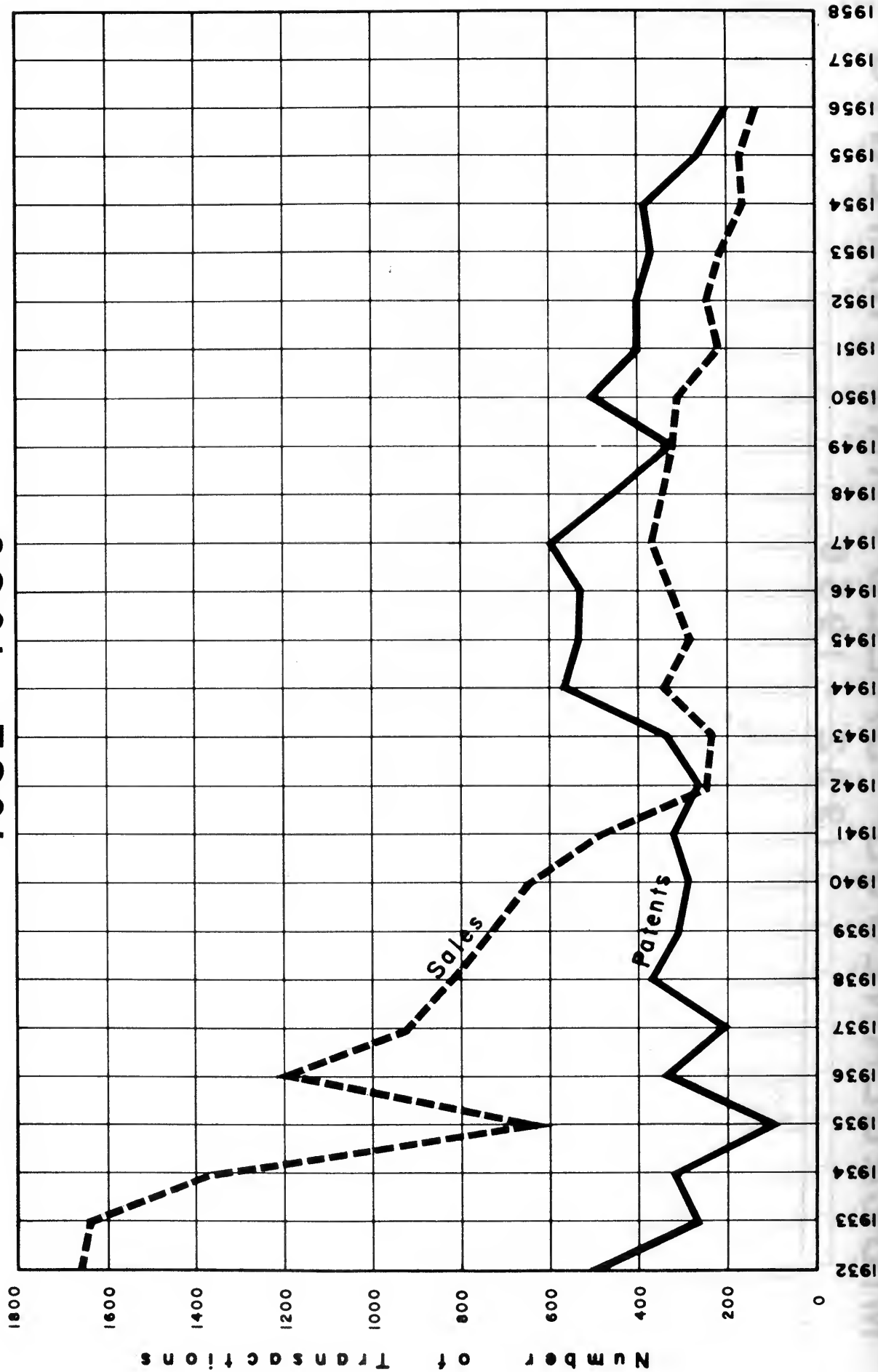
MISCELLANEOUS SALES AND PATENTS

1932 - 1956



AGRICULTURAL LANDS, SALES AND PATENTS

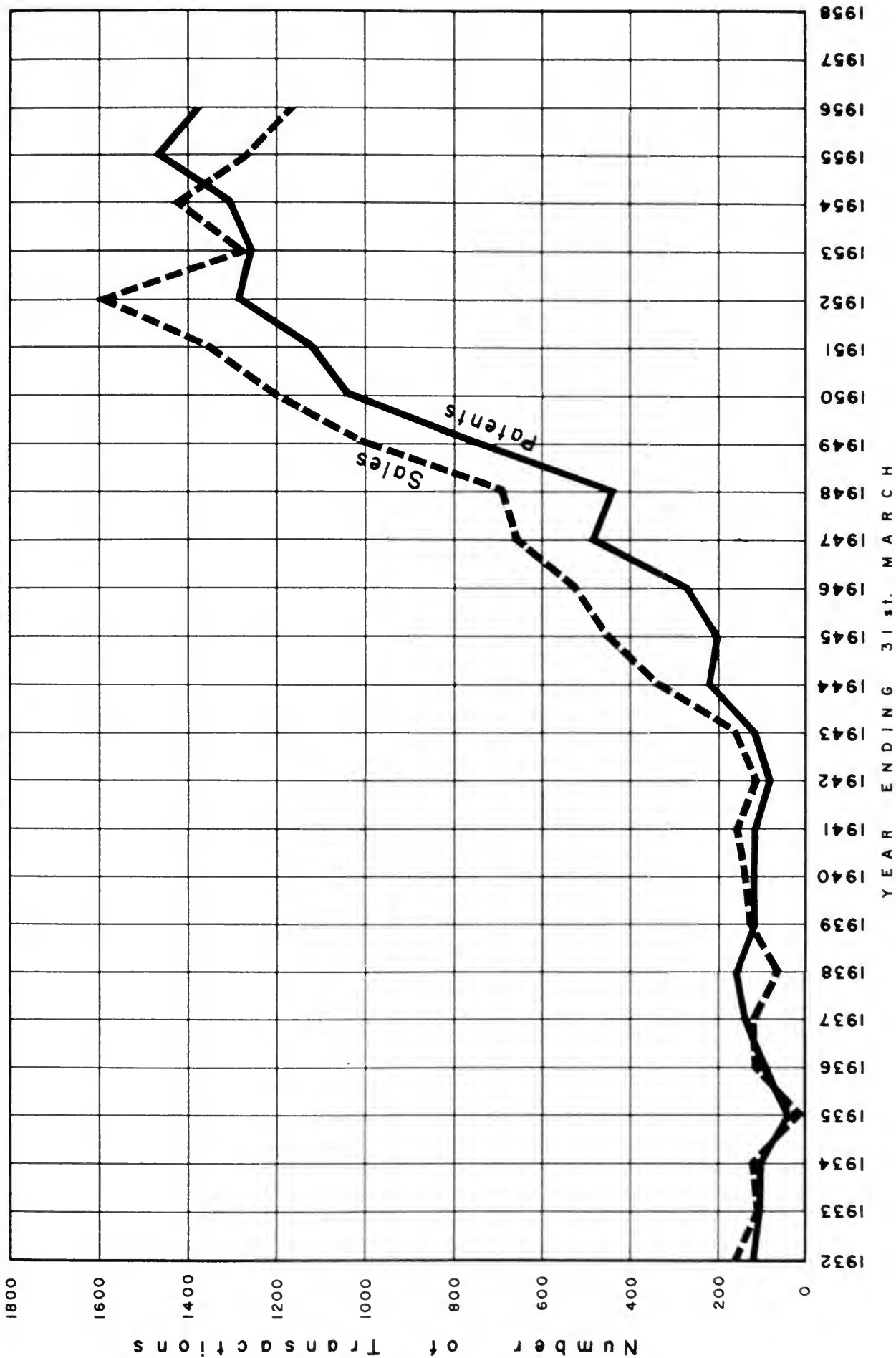
1932 - 1956



YEAR ENDING 31st. MARCH

SUMMER RESORT SALES AND PATENTS

1932 - 1956



1959
1958
1957
1956
1955
1954
1953
1952
1951
1950
1949
1948
1947
1946
1945
1944
1943
1942
1941
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1938
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1936
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1934
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1932

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SECTION NO. 6

DIVISION of LAW

DIVISION OF LAW

LEGISLATION

At the Session of the Legislature which opened on January 31, 1956, amendments to several of the Statutes administered by the Department of Lands and Forests, and amendments to The Land Titles Act, The Mining Act, The Highway Traffic Act, and The Fines and Forfeitures Act of direct concern to the Department, were passed. The Ontario Parks Integration Board Act, 1956 was enacted. The Minister of Lands and Forests is a member of the Board.

Notes on Legislation

The Crown Timber Act, 1952 - Provision is made for setting up Crown management units from which a supply of timber to a mill can be assured, at the same time making timber available from such units for other purposes. The provision as to the making of surveys in connection with licensed areas is extended to unlicensed areas, with the costs of any such survey to be borne by the person responsible for the cutting of Crown timber without authority. Sections dealing with the seizure of timber for the liquidation of overdue accounts are amended.

The Game and Fisheries Act - Provision is made for a combined deer and moose licence at a fee of \$26.00. This licence is for use only in areas designated by the regulations for the purpose. It is confined to resident hunters, who can take one deer or one moose under the licence, but not one of each. Provision is made to prohibit by regulation the use of dogs in hunting caribou, deer or moose in densely-settled parts of Ontario designated as such in the regulations. It is made an offence to hunt on private lands in parties of more than twelve persons without the land-owner's consent. This is designed to give the land-owner protection against large-scale fox, rabbit, and other drives. A new principle is introduced, with the provision that a court is empowered to prohibit a person from acquiring a hunting licence for a period of up to five years where such person is convicted of an offence under The Forest Fires Prevention Act, any one of

certain offences under the Criminal Code relating to injury or damage to persons or property, or under The Game and Fisheries Act while using or possessing a fire-arm for the purpose of hunting.

The Land Surveyors Act - Certain sections relating to procedural matters, the term of apprenticeship, and the educational standing required, are amended.

The Mining Act - Section 39a prohibits prospecting or staking out of mining claims, or the development of mineral interests, or the working of mines in provincial parks, except as provided by the regulations made under The Provincial Parks Act, 1954. Section 56a invalidates any mining claim that is staked out during the time that a fire district is closed under The Forest Fires Prevention Act, subject to certain exceptions therein set out.

The Provincial Land Tax Act - The maximum rate of tax that may be fixed in respect of land in provincial parks is set at 4%, and a different rate may be fixed for land in different provincial parks. Provision is made for fixing the valuation of pipelines for the purposes of the Act.

The Provincial Parks Act, 1954 - The use or occupation of land in provincial parks for any purpose, including mining, is prohibited except as provided under the Act or the regulations, and provision is made that the staker, recorded holder of a mining claim, or the holder of a licence of occupation of a mining claim, does not acquire any right in or to the surface rights. Provision is made for the seizure and confiscation of articles used in violation of the Act or the regulations.

The Public Lands Act - Provision is made to annul in whole or in part original surveys, to lodge amended plans in the proper Registry or Land Titles office, and to cancel letters patent affected by an annulment and to issue letters patent in lieu thereof containing a revised description. Provision is made empowering the Minister to issue a quit claim to a person in possession of land for more than sixty years.

Certain obsolete reservations in letters patent issued over the years are made void by statute, and provision is made to issue a certificate in respect of any such reservation upon payment of a fee of \$15.00.

The Railway Fire Charge Act - Small holdings (fewer than 200 acres) of railway lands as defined by the Act that are subject to tax under The Provincial Land Tax Act are exempt from the payment of the railway fire charge, and in the case of small holdings that are not so exempt the charge is reduced from \$12.80 to \$6.00. Dating, billing and forfeiture procedures are brought into line with those under The Provincial Land Tax Act, and the Land Tax Collector under the latter Act is the collector for the purpose of The Railway Fire Charge Act.

REGULATIONS

A total of 23 regulations were approved and filed during the fiscal year from April 1st, 1955, to March 31st, 1956. The drafting of a complete set of regulations under The Provincial Parks Act, 1954 was commenced. The following are the regulations that were approved and filed:

The Crown Timber Act, 1952

O.Reg. 147/55 - amending O.Reg. 43/53 - Crown charges.

The Forest Fires Prevention Act

O.Reg. 98/55 - Forest closing.
O.Reg. 142/55 - Forest closing.
O.Reg. 143/55 - Replacing O.Reg. 142/55 -
O.Reg. 144/55 - Replacing O.Reg. 143/55 -
O.Reg. 159/55 - Forest closing.

The Game and Fisheries Act

O.Reg. 95/55 - Open season for Fur-bearers.
O.Reg. 110/55 - Open season for Deer, 1955.
O.Reg. 111/55 - Open season for Moose, 1955.
O.Reg. 149/55 - Open season for Game Birds, 1955.
O.Reg. 169/55 - Amending O.Reg. 95/55
O.Reg. 172/55 - Amending O.Reg. 149/55
O.Reg. 185/55 - Amending C.R.O. 129 - Royalties.
O.Reg. 186/55 - Amending C.R.O. 127 - Township licences.
O.Reg. 198/55 - Amending O.Reg. 95/55 -

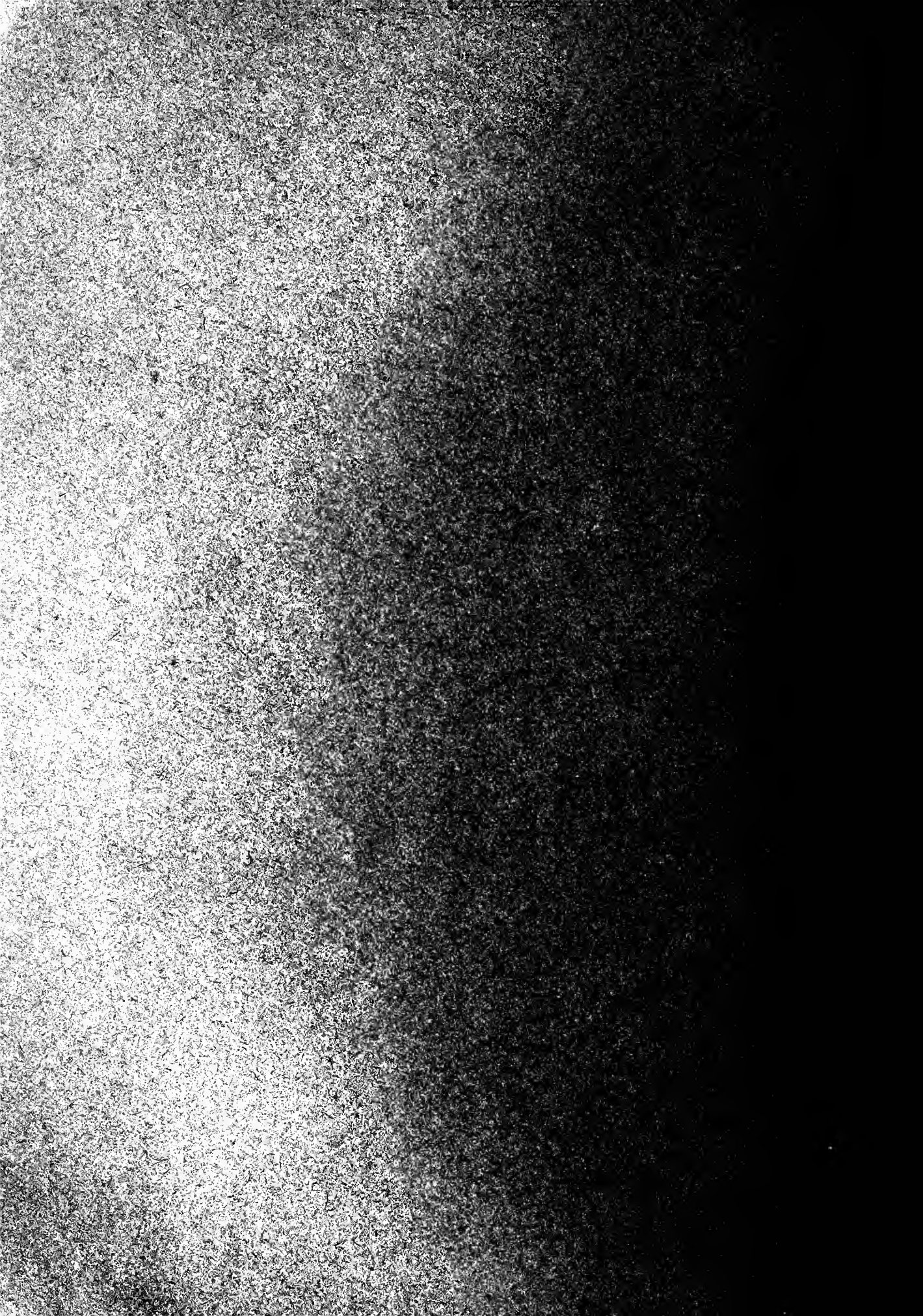
- O.Reg. 199/55 - Amending O.Reg.110/55
- O.Reg. 200/55 - Amending C.R.O. 123 - Crown Game Preserves.
- O.Reg. 208/55 - Amending O.Reg. 95/55
- O.Reg. 209/55 - Hunting on Crown Lands.
- O.Reg. 18/56 - Amending C.R.O. 123 - Crown Game Preserves.
- O.Reg. 34/56 - Amending O.Reg. 80/51 - Waters set apart.
- O.Reg. 35/56 - Amending O.Reg.164/49 - Waters set apart.
- (C.R.O.404)

The Public Lands Act

- O.Reg. 129/55 - Amending O.Reg. 85/53 - General amendments.

SECTION NO. 7

DIVISION of OPERATION and PERSONNEL



1955 - 1956

ANNUAL REPORT

DEPARTMENT OF LANDS AND FORESTS

DIVISION OF OPERATION AND PERSONNEL

PERSONNEL MANAGEMENT SECTION

1955 - 1956

ANNUAL REPORT

DEPARTMENT OF LANDS AND FORESTS

DIVISION OF OPERATION AND PERSONNEL

PERSONNEL MANAGEMENT SECTION

ANNUAL REPORT 1955 - 1956
PERSONNEL MANAGEMENT SECTION

The table shown below indicates the total number of employees on the staff for each month of the fiscal year.

STAFF ATTENDANCE SUMMARY

1955	<u>Head Office</u>				<u>Field Service</u>					<u>Extra Fire Fighting</u>
	<u>Perm.</u>	<u>Cont. Temp.</u>	<u>Cas.</u>	<u>H.O. Total</u>	<u>Perm.</u>	<u>Cont. Temp.</u>	<u>Cas.</u>	<u>F.S. Total</u>	<u>Grand Total</u>	
Apr.	364	85	16	465	1249	87	1610	2946	3411	185
May	365	85	60	510	1259	82	1995	3336	3846	2781
June	366	85	91	542	1259	224	1557	3040	3582	2336
July	366	79	90	535	1264	131	1728	3123	3658	8369
Aug.	366	77	89	532	1267	80	1725	3072	3604	6940
Sept.	365	83	64	512	1266	80	1699	3045	3557	1848
Oct.	362	81	18	461	1277	77	1442	2796	3257	265
Nov.	356	83	19	458	1274	90	1068	2432	2890	5
Dec.	357	84	13	454	1271	86	875	2232	2686	---
<u>1956</u>										
Jan.	350	81	15	446	1275	84	714	2073	2519	1
Feb.	349	86	17	452	1266	84	681	2031	2483	---
Mar.	344	89	18	451	1267	91	637	1995	2446	14
Av.	359	83	43	485	1283	100	1311	2844	3162	1895

The following tables show the numerical strength of the various Administrative Districts, Head Office Divisions, Nurseries and the Ontario Forest Ranger School as of March 31st, 1956.

HEAD OFFICE STAFF

	<u>Perm.</u>	<u>Temp.</u>	<u>Cas.</u>	<u>Total</u>
Minister's Office	5			5
Deputy Minister's Office	3			3
Accounts	51	24	5	80
Fish and Wildlife	49	6	1	56
Forest Protection	19		1	20
Lands	18	3	2	23
Law	4			4
Parks	4		1	5
Operation and Personnel	49	25	3	76
Reforestation	15	4	2	21
Research	41	7		48
Surveys and Engineering	50	15	3	68
Timber Management	36	5		41
Totals	344	89	18	451

FIELD STAFF

	<u>Perm.</u>	<u>Temp.</u>	<u>Cas.</u>	<u>Total</u>
Air Service	90	13		103
Angus	18		1	19
Chapleau	29		20	49
Cochrane	49		39	88
Forest Ranger School	17	1	17	35
Fort Frances	41		19	60
Geraldton	31	7	19	57
Gogama	25		16	41
Kapuskasing	44	1	32	77
Kenora	49	4	15	68
Lake Erie	40	4	18	62
St. Williams Nursery	21	10	29	60
Lake Huron	44	2	23	69
Lake Simcoe	36	6	26	68
Lindsay	57	4	14	75
Midhurst	30		13	43
North Bay	76	3	31	110
South Central Region	3			3
Orono	18		5	23
Parry Sound	55	4	16	75
Pembroke	72	3	61	136
Port Arthur	59	12	45	116
Thunder Bay Nursery	5	6	11	22
Rideau	26	3		29
Rideau Nursery	11	1		12
Sault Ste. Marie	67	3	30	100
Sioux Lookout	47		34	81
Sudbury	62	1	21	84
Central Region	3			3
Swastika	52	1	29	82
Tweed	64	2	33	99
White River	26		20	46
	<u>1,267</u>	<u>91</u>	<u>637</u>	<u>1,995</u>

Total Staff as of March, 1956

Head Office	344	89	18	451
Field	1267	91	637	1995
TOTALS	<u>1611</u>	<u>180</u>	<u>655</u>	<u>2446</u>

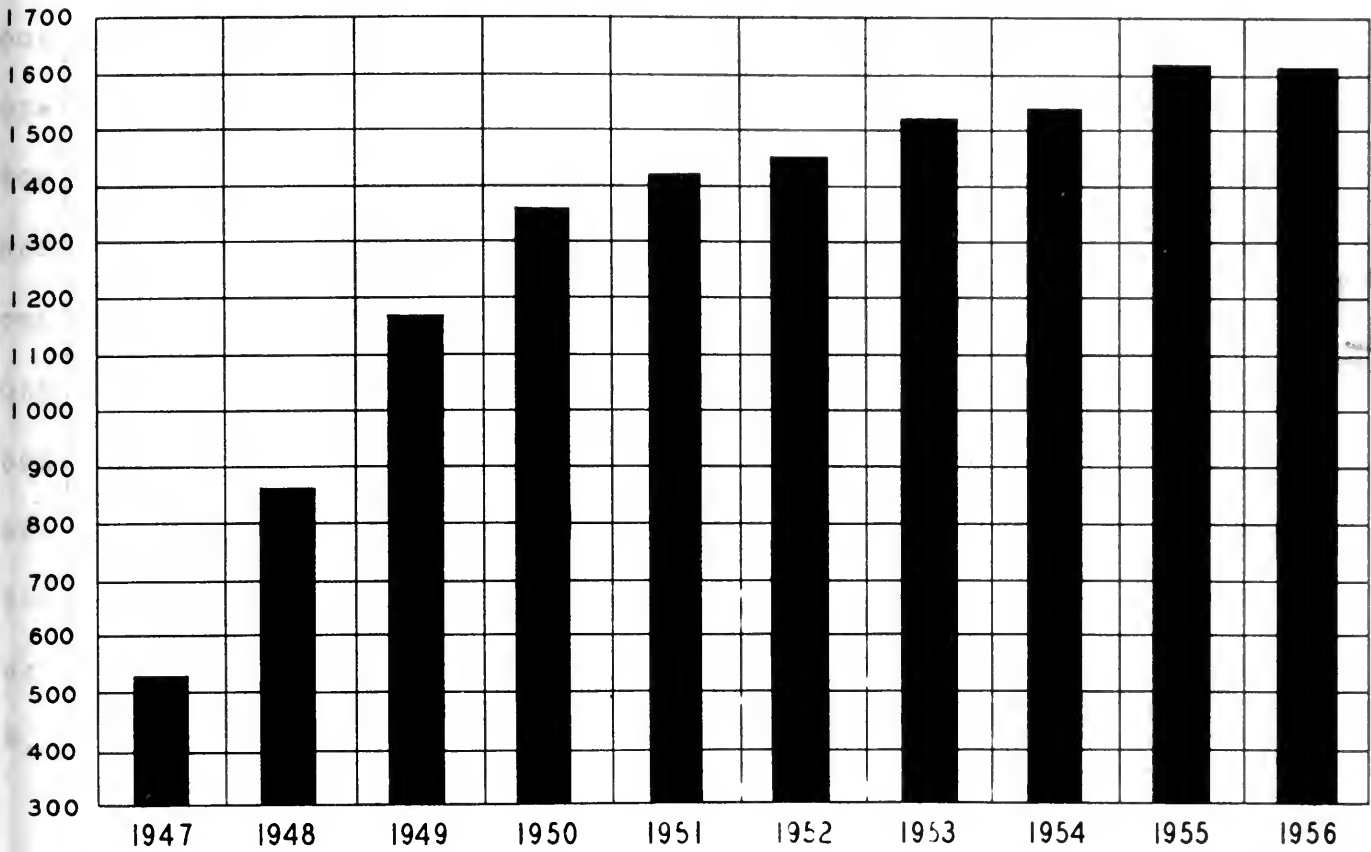
Number of Licensed Scalers on Staff 404

Number of Ranger School Graduates on Staff 425

Number of employees holding University degrees or titles:

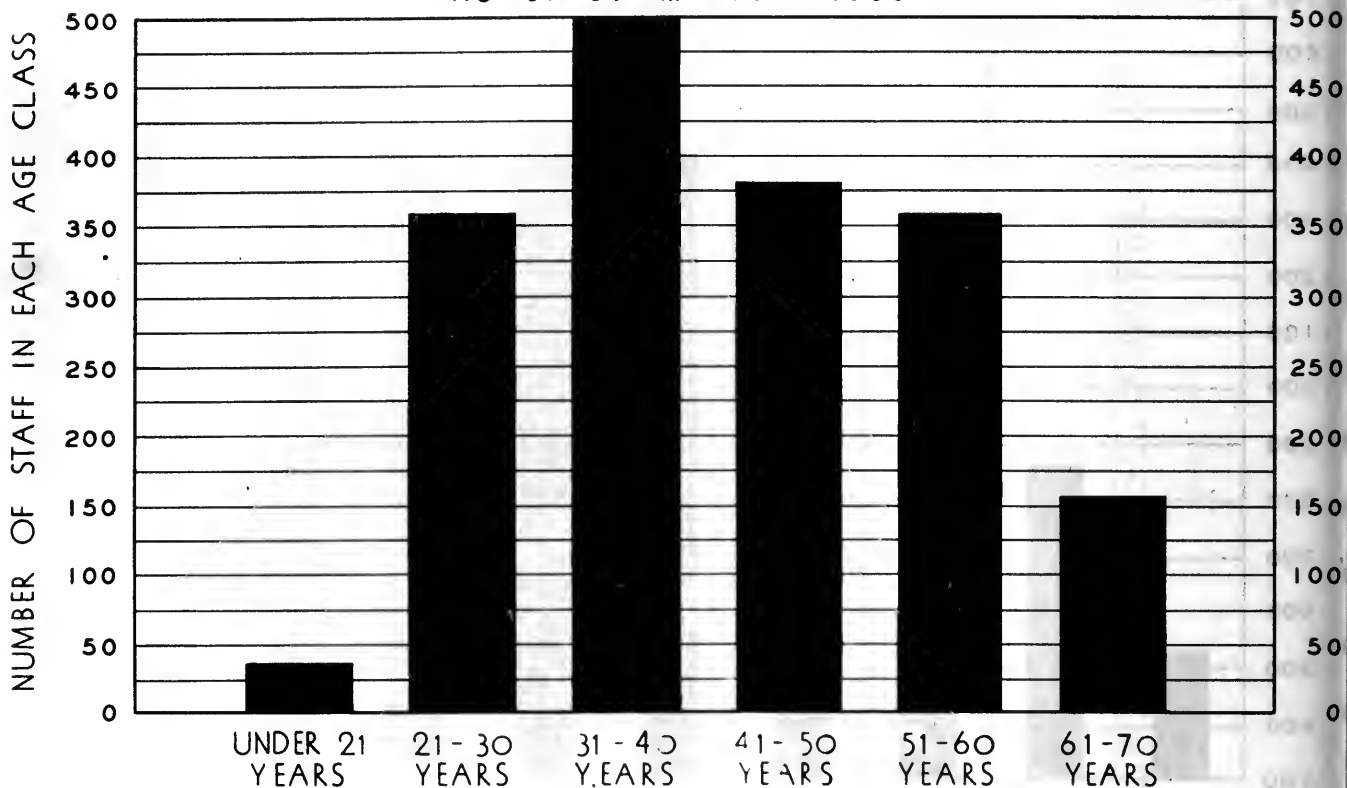
<u>Foresters</u>	<u>Biologists</u>	<u>Civil Engineers</u>	<u>Miscellaneous</u>	<u>Total</u>
139	34	6	27	206

PERMANENT EMPLOYEES AS OF MARCH 31ST EACH YEAR



AGE CLASS CHART FOR PERMANENT AND TEMPORARY EMPLOYEES

AS OF 31ST MARCH 1956



The above is broken down in the table below:

	<u>Under 21</u>	<u>21-30</u>	<u>31-40</u>	<u>41-50</u>	<u>51-60</u>	<u>61-70</u>	<u>Total</u>
Head Office	23	86	128	90	78	28	433
Field	15	272	372	291	280	128	1358
	38	358	500	381	358	156	1791

Distribution of Male and Female Employees at Head Office:

<u>Division</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Accounts	52	23	75
Deputy Minister's Office	1	2	3
Fish and Wildlife	34	21	55
Forest Protection	17	2	19
Lands	10	11	21
Law	2	2	4
Minister's Office	1	4	5
Operation and Personnel	53	21	74
Parks	3	1	4
Reforestation	16	3	19
Research	41	7	48
Surveys and Engineering	57	8	65
Timber Mangement	36	5	41
Totals	323	110	433

Male and Female Employees in the Field:

Male 1279 Female 79 Total 1358

War Veterans in the Department:

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Head Office	161	5	166
Field	602	2	604
Totals	763	7	770

Percentage of Veterans as of Male Staff - 47.6%

Percentage of Female Veterans per
Female Staff - 3.7%

The table shown below lists the number of employees who discontinued their services for various reasons, as indicated, during the fiscal year:

	<u>Resigned</u>	<u>Dismissed</u>	<u>Died</u>	<u>Super-annuated</u>	<u>Retired</u>	<u>Transferred</u>	<u>Total</u>
Head Office	61	---	3	8	1	7	80
Field	59	1	6	11	7	7	91
Totals	120	1	9	19	8	14	171

New Employees:

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Head Office	44	20	64
Field	78	15	93
	<hr/>		
Totals	122	35	157
	<hr/> <hr/>		

The Staff Turnover for this Fiscal Year is: 9.4%

Chart Listing the Number of Applications, Interviews, and Appointments:

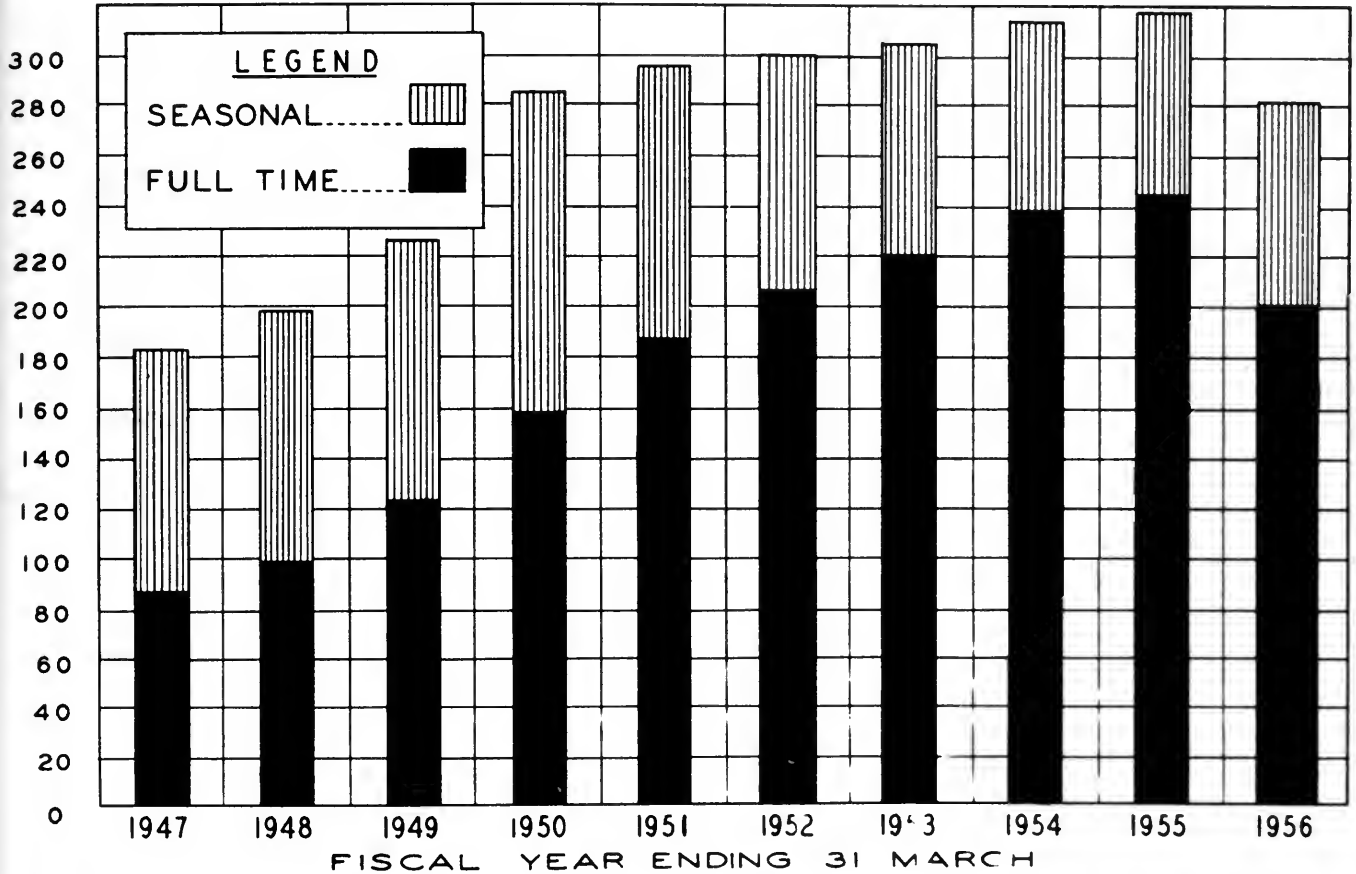
	<u>Applications</u>	<u>Recorded Interviews</u>	<u>Appointments</u>
Full time	485	257	157
University Students	171	---	76
Junior Forest Rangers	1122	---	574
	<hr/>		
Totals	1778	257	807
	<hr/> <hr/>		

The Junior Forest Rangers as shown in the following distribution were employed during the months of July and August.

<u>District</u>	<u>Number of Junior Rangers</u>
Chapleau	46
Cochrane	45
Fort Frances	14
Geraldton	34
Gogama	41
Kapuskasing	43
Lake Simcoe	9
Lindsay	11
North Bay	38
Parry Sound	25
Pembroke	51
Port Arthur	8
Sault Ste. Marie	53
Sudbury	42
Swastika	42
Tweed	26
White River	46
	<hr/>
Totals	574
	<hr/> <hr/>

The comparison of the number of Technical Personnel employed over the past ten years is shown below.

TECHNICAL PERSONNEL EMPLOYED



Staff Transfers and Promotions during the Fiscal Year

Roseborough, J.D. Biologist, Division of Fish and Wildlife to District Biologist, Lake Erie, April 1/55.

Bumstead, F.S. Assistant District Accountant, Lake Erie to District Accountant, White River, April 1/55.

Langford, R.J. District Accountant, Chapleau, to District Accountant, Pembroke, April 1/55.

Bulloch, G.W. Forest Ranger, Swastika, to White River as Chief Ranger at Moberg, April 1/55.

Hamilton, G.A. Forester, Port Arthur, to District Forester, Sioux Lookout, April 1/55.

Tait, J.J.R. Forest Ranger, Pembroke, to Chief Ranger, Whitney, April 1/55.

Sleeman, W.L. Acting District Forester, Swastika, to District Forester, Swastika, April 1/55.

Keddie, J.R. Assistant Management Forester, Kenora, to Management Forester, Kenora, April 1/55.

Colley, J.W. Forest Ranger, Kapuskasing, to Lands Supervisor, Pembroke, May 1/55. (Now Superannuated)

Neundorf, S.E. District Accountant, Sudbury, to Regional Accountant for the Central Region, May 1/55.

Kindness, J.C. District Accountant, Lindsay, to District Accountant, Sault Ste. Marie, June 1/55.

Walter, G. F. District Accountant, Lake Erie, to District Accountant, Lindsay, June 1/55.

Fewings, G.B. Assistant District Accountant to Acting District Accountant, Lake Erie, June 1/55.

Taylor, W.G. Deputy Chief Forest Ranger, Sioux Lookout, to Kenora as Chief Ranger at Minaki, June 1/55.

Dodds, F.M. Chief Forest Ranger, Sioux Lookout, to Forest Protection Supervisor, Kapuskasing, June 1/55.

Shalla, J.J. Deputy Chief Forest Ranger, Pembroke, to Chief Ranger at Hearst in Kapuskasing, June 1/55.

Flowers, J.F. Forester, White River to Timber Management Supervisor, Sudbury, July 1/55.

Longley, G.M.B. Forester, Timber Management to Timber Management Supervisor, Port Arthur, July 1/55.

Giles, J.W. Forester, Timber Management to Timber Management Supervisor, Pembroke, July 1/55.

Baxter, R.A. Forester, Parry Sound to Timber Management Supervisor, White River, July 1/55.

Bruce, D.S. Forester, Timber Management, to Timber Management Supervisor, Sault Ste. Marie, July 1/55.

Johnston, E.F. Forester, Lake Huron to Reforestation Supervisor, Fort Frances, July 1/55.

Hamilton, S.R. Forester, Lake Huron to Reforestation Supervisor, Swastika, July 1/55.

Gage, D.E. Forester, Lake Simcoe to Reforestation Supervisor, Chapleau, July 1/55.

Chadwick, J.D. Clerk, Sault Ste. Marie to District Accountant, Geraldton, July 1/55.

Jennings, G.A. District Accountant, Geraldton to District Accountant, Sudbury, July 1/55.

Williams, D.R. Chief Forest Ranger, White River to Chief Ranger at Red Lake in Sioux Lookout, July 1/55.

Anderson, E.F. Forester, North Bay to Timber Management Supervisor Kapuskasing, July 1/55.

Matheson, J.A. Clerk, Lake Huron to Park Superintendent, Ipperwash Beach Park, August 1/55.

Janser, F. Forester, Sault Ste. Marie to Timber Management Supervisor, Swastika, September 1/55.

Cecile, L.T. Deputy Chief Forest Ranger, Chapleau to Chief Ranger, Chapleau, September 1/55.

Morin, J.E. Chief Forest Ranger, Chapleau to Sudbury as Chief Ranger at Espanola, September 1/55.

Helmsley, A.F. From Pembroke to Division of Parks as Park Naturalist, September 1/55.

Simons, G. Stockkeeper, Cochrane, to Lands Supervisor, Cochrane, September 1/55.

Melin, E.A. Deputy Chief Forest Ranger, Fort Frances to White River as Chief Ranger at Franz, October 1/55.

Porch, W.H. Assistant District Accountant, Pembroke to District Accountant, Tweed, October 1/55.

Whalen, J.M. District Forester, Sudbury to Division of Forest Protection, February 1/56.

Cleavelly, W.G. Assistant District Forester, Sudbury to District Forester, Sudbury, February 1/56.

Affleck, L.M. Forester, Sault Ste. Marie to Division of Forest Protection, February 1/56.

Orme, J.A. Forest Ranger, Pembroke to Lands Supervisor, Pembroke, March 1/56.

ONTARIO FOREST RANGER SCHOOL

1955 Course

First Term - January 10th - March 26th, 1955

	<u>Attended</u>	<u>Passed</u>
Forest Rangers	21	21
Conservation Officers	11	10
Miscellaneous	19	18
Industry	4	4
	<u>55</u>	<u>53</u>

Second Term - May 16th - July 30th, 1955

Forest Rangers	21	21
Conservation Officers	10	10
Miscellaneous	17	17
Industry	4	4
	<u>52</u>	<u>52</u>

Third Term - October 3rd - December 17th, 1955

Forest Rangers	21	21
Conservation Officers	11	11
Miscellaneous	16	16
Industry	4	4
	<u>52</u>	<u>52</u>

TRAINING

1. Motor Fleet Supervisors Safety Training Course and Automotive Maintenance Course:

All Forest Protection Supervisors and Mechanical Supervisors have taken these courses. During the past fiscal year, one employee attended the courses.

2. Guide Training Course:

March 28th, 1955 - April 2nd, 1955, 29 Guides and 5 Department Officers attended this course which was held at The Ontario Forest Ranger School.

3. Outboard Motor and Marine Course (Peterborough):

Twenty-two employees attended the course.

4. Watson-Jack Course:

During January 1956, eight mechanical supervisors attended a three-day maintenance course in Montreal for the Watson-Jack fire pumps.

5. Executive Development Course:

Twenty senior officers, from both our District and Regional Offices as well as from our various Divisions at Head Office, attended an Executive Development Course held from January 30th, 1956 to February 10th, 1956.

In the afternoon of the last day, time was devoted to a panel discussion on the development and improvement of the course.

6. Course in Essentials of Public Administration:

This course was divided into two parts. Part I was held on a Wednesday of each for ten weeks commencing October 12th, 1955. One employee from each of the following divisions or district attended:

Lake Simcoe District	- 2
Operation and Personnel	- 1
Reforestation	- 1
Surveys and Engineering	- <u>1</u>
Total	<u>5</u>

Part II was held from February 1st, 1956 to April 4th, 1956.

The following attended:

Lake Simcoe District	- 1
Operation and Personnel	- 1
Reforestation	- 1
Surveys and Engineering	- <u>1</u>
Total	<u>4</u>

N.B. -- See also "Safety and First Aid".

Safety and First Aid

Safety Councils

24 Active Safety Councils in the Province.
127 Safety Council Meetings were convened during the fiscal year 1955-56.

Hunting Casualties

Accidents reported through our Department

24 Fatal Accidents
54 Non-fatal "
78 Accidents

A total of 1602 firearms of various types were seized by Departmental Officers; 500 were placed on sale; 34 were destroyed as unsafe; the balance were returned to their owners who committed minor infractions of the law--upon payment of the release fee.

One member of staff was admitted to the Fleet Supervisor's Course conducted at the University of Toronto. All District Mechanics and Forest Protection Supervisors have now completed this course.

First Aid Training

Approximately 800 persons have been trained in First Aid as taught or offered by the St. John Ambulance Association and Canadian Red Cross.

First Aid Courses were included in the Forest Ranger School Curriculum for the first time with our own department instructors officiating. Forty-eight (48) candidates graduated. Two (2) of these were from Wood Products Industry, and two from Department of Northern Affairs Natural Resources Dominion Government.

A Mobile Unit was partially equipped for the purpose of Safety Training, Driver Testing, Rescue and First Aid Services. It will be completed next year.

There were 6,762 Safety Posters distributed this year.

Safety demonstrations and talks were presented at the Sportsmen's Show in Toronto.

Several Radio broadcasts were made in the interests of Safety.

A boating film was started and it is expected that it will be completed next year.

Resuscitators

There are 43 Resuscitators located at strategic locations throughout the Province. To date, we have 308 qualified operators i.e. persons who have received instruction and practical training with this equipment.

Porto Clinic Tests

560 motor vehicle operators were tested with this equipment. Anyone failing these tests was given the opportunity to improve his qualifications. One driver was not allowed to continue driving Department vehicles.

FIELD INSPECTIONS

As part of normal routine there is constant inspection, through the field organization, of buildings, equipment and methods, and these are in the interests of economical standardization in maintenance and housekeeping.

Special investigations as directed by Head Office, staff and Departmental investigations, are conducted and reported as required.

For these purposes during the past fiscal year, the Chief Inspector has made trips as follows:

Regions	7
Districts	21
Chief Ranger Divisions	45
Deputy Chief Ranger Headquarters	53
Major Parks	8
Parks under construction	Several
Hatcheries	8
County Forests	20
Nurseries	6
Division of Air Service (Sault Ste. Marie) and Air Bases in the field	20

WORKMEN'S COMPENSATION

FISCAL YEAR 1955 - 1956

The accident record for the fiscal year 1955-56 stands alone, with no similarity to other years. The fire season from the beginning of April until October was extremely serious. Average cost per claim increased by \$8.82 this year.

Again, as may be noted by past reports, "axes and falls" are still the two major causes of accidents. Axe accidents did move down to second place leaving falls as the greatest single cause of accidents.

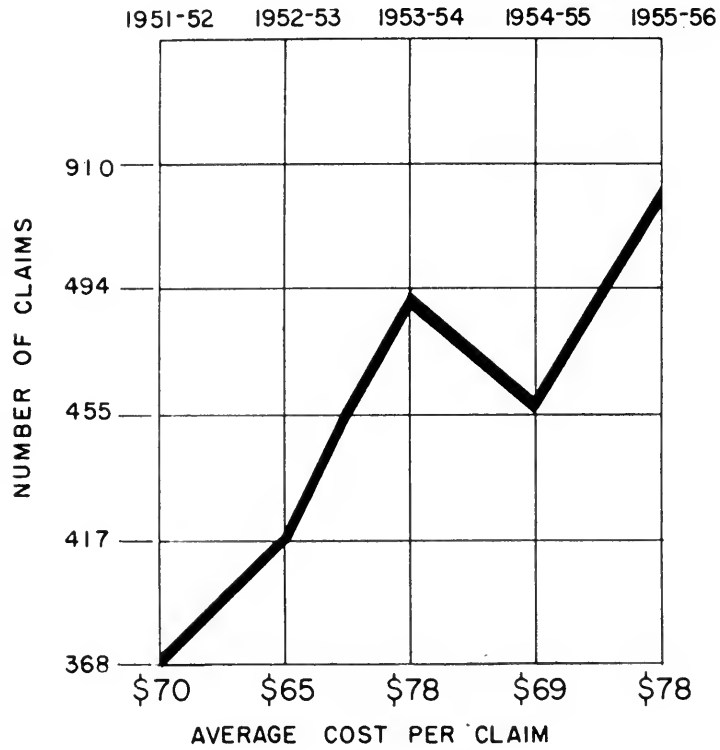
Allergies, this year, were two less in number despite the fact that more men are being engaged in work involving this "occupational hazard".

There were four deaths during the year, two by drowning, one in a traffic accident and one from a falling tree.

Workmen's Compensation Board costs for the fiscal year were \$106,962.46.

Average cost of claims was \$78.00. There were 910 compensable claims.

OUR RECORD A FIVE YEAR COMPARISON



WORKMEN'S COMPENSATION

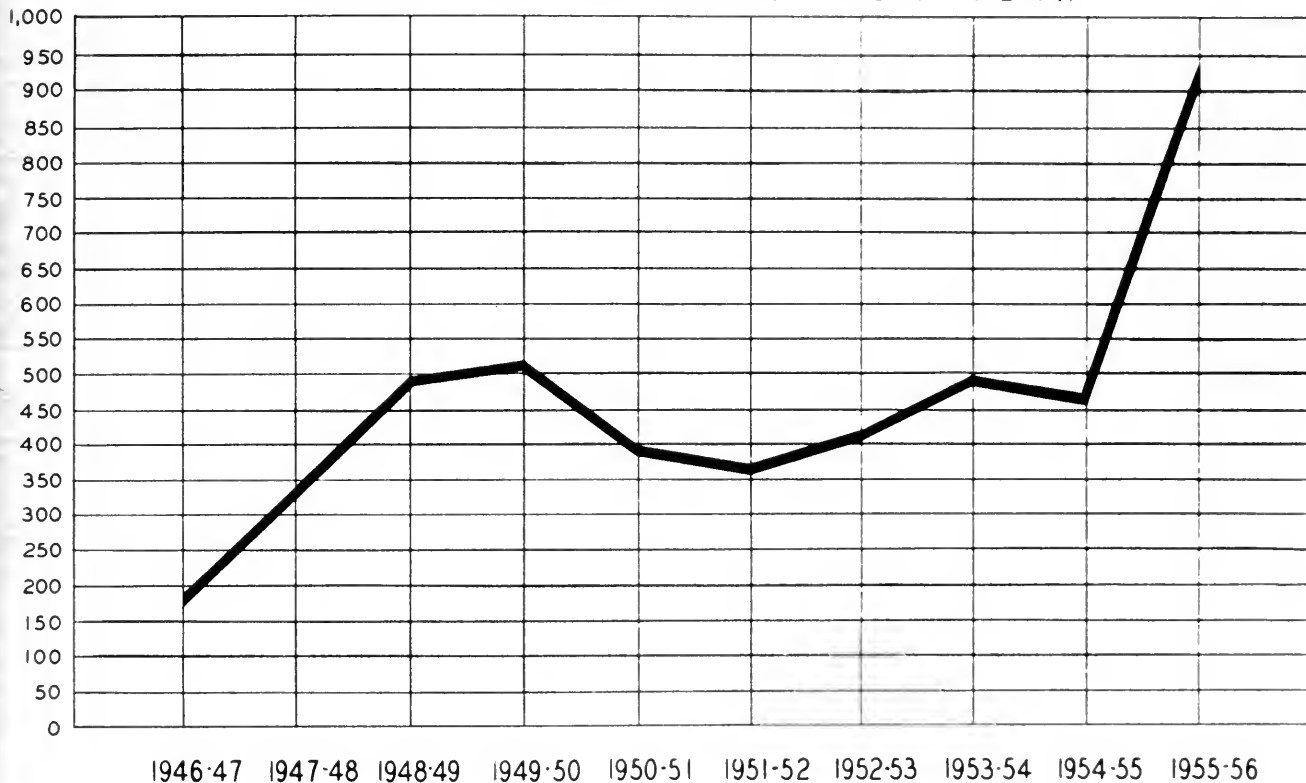
TABLE 1

TREND IN WORKMEN'S COMPENSATION CLAIMS

PREPARED FROM TOTAL CLAIMS FOR THE PAST TEN YEARS

1946-47 TO 1955-56

NUMBER OF ACCIDENTS PER YEAR



WORKMEN'S COMPENSATION

TABLE II

TREND IN WORKMEN'S COMPENSATION COSTS
PREPARED FROM TOTALS FOR THE PAST TEN YEARS
1946-47 TO 1955-56

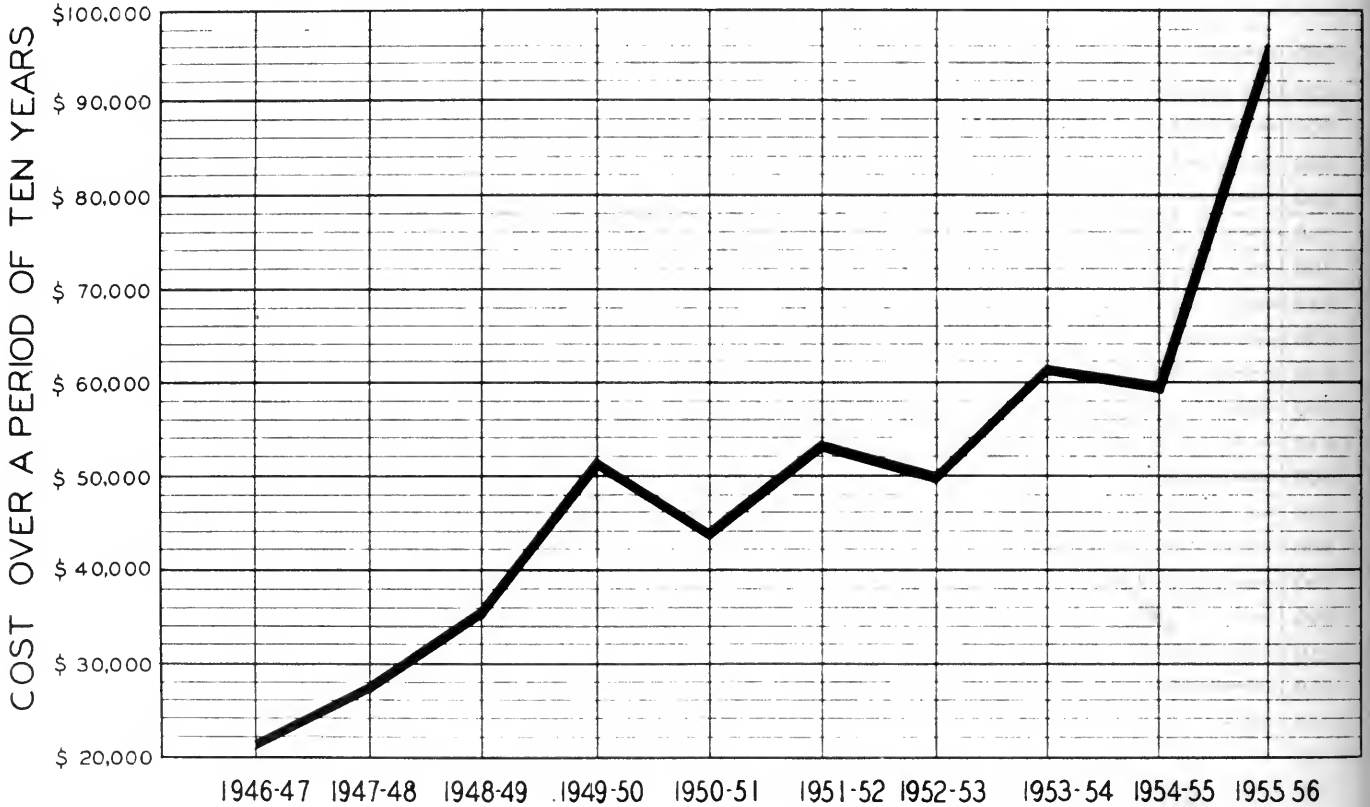


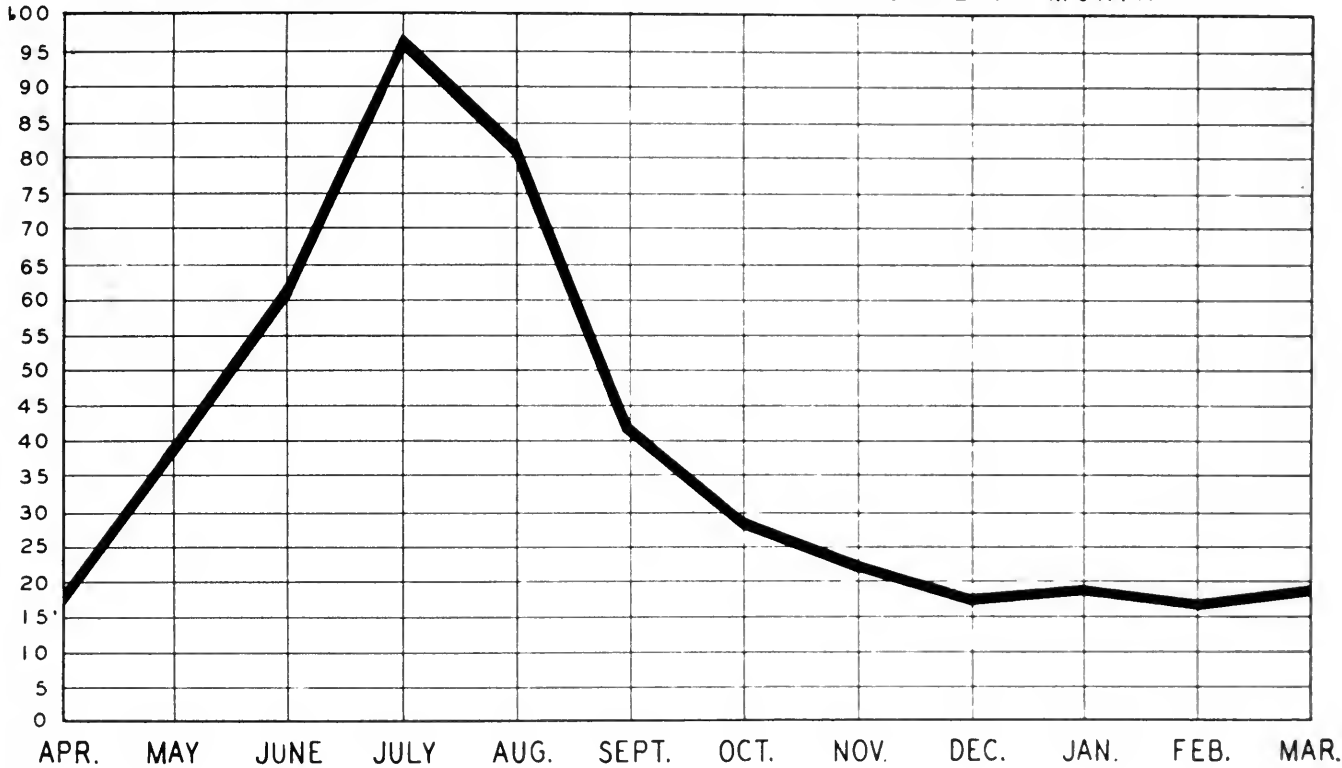
TABLE III

TREND IN WORKMEN'S COMPENSATION CLAIMS

PREPARED FROM AVERAGE FIGURES FOR THE PAST TEN YEARS

1946-47 TO 1955-56

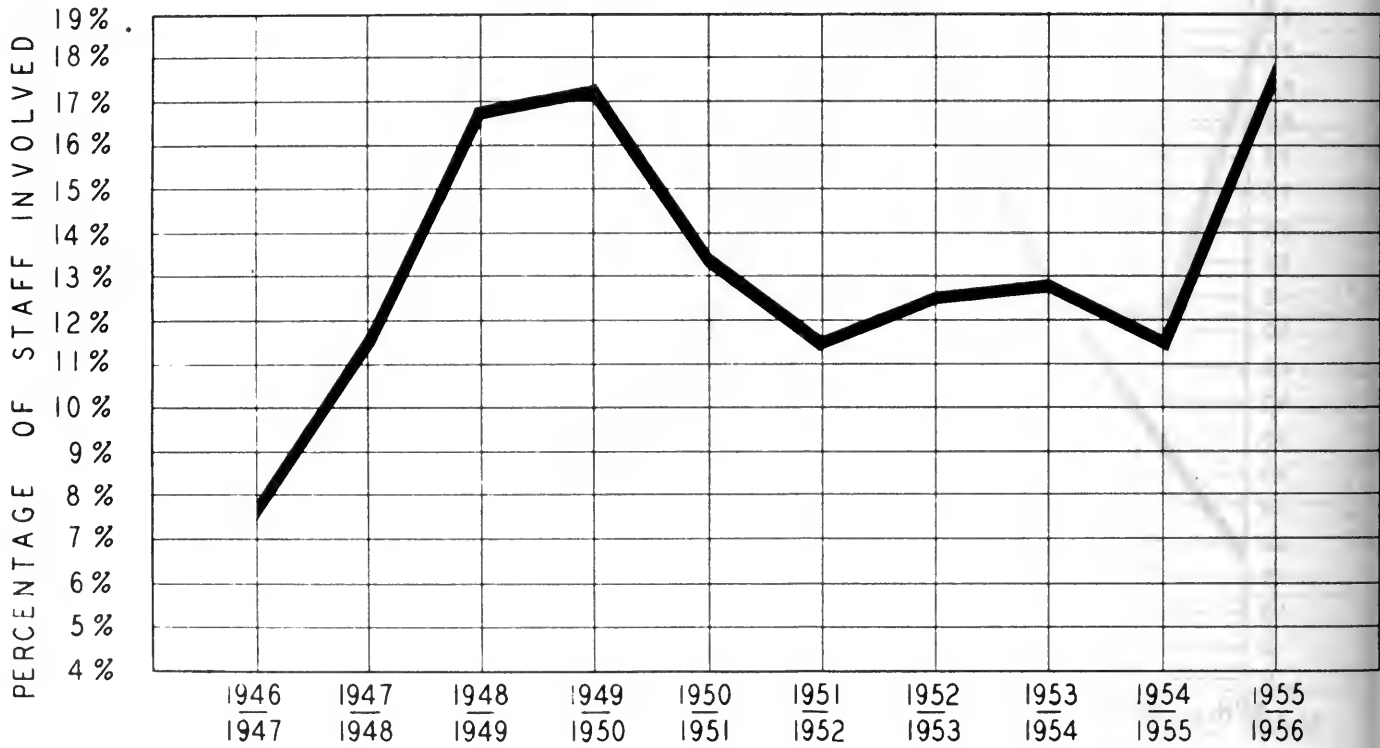
AVERAGE NUMBER OF ACCIDENTS SHOWING INCIDENCE BY MONTH



WORKMEN'S COMPENSATION

TABLE IV

PERCENTAGE OF STAFF INVOLVED
IN COMPENSABLE ACCIDENTS ANNUALLY
OVER A PERIOD OF THE PAST TEN YEARS
1946-47 TO 1955-56



HIGHLIGHTS
DIVISION OF OPERATION AND PERSONNEL

1955 - 1956

There was only a slight increase in staff during this fiscal year.

There was an increase of 31 permanent and temporary employees in comparison to 39 last year and 45 in the previous year. A total of 171 permanent and temporary employees left and 157 new permanent and temporary employees were appointed.

The staff turnover for this year was 9.4%.

Total number of employees on staff as of March 31st, 1956 was 1,791.

The following tables show comparisons of number of personnel on staff on March 31, 1956 compared with March 31, 1955:

1)	<u>Permanent</u>	<u>Temporary</u>	<u>Casual</u>
March 31, 1956	1611	180	655
March 31, 1955	<u>1618</u>	<u>142</u>	<u>727</u>
	7 decrease	38 increase	72 decrease

2) Personnel with Degrees:

	<u>Foresters</u>	<u>Biologists</u>	<u>Civil Engineers</u>	<u>Others</u>
March 31, 1956	139	34	6	27
March 31, 1955	<u>174</u>	<u>39</u>	<u>5</u>	<u>26</u>
	35 decrease	5 decrease	1 increase	1 increase

3) Personnel with Scaler's Licenses

March 31, 1956	404
March 31, 1955	<u>379</u>
	25 increase

4) Ranger School Graduates

March 31, 1956	425
March 31, 1955	<u>379</u>
	46 increase

5) Applications, Interviews, and Appointments:

	<u>1955-56</u>	<u>1954-55</u>
Applications	1,778	1,744
Interviews	257	246
Appointments	807	730

6) War Veterans in the Department:

	<u>Male</u>	<u>Female</u>	<u>Total</u>
March 31, 1956	763	7	770
March 31, 1955	<u>804</u>	<u>6</u>	<u>810</u>
	41 decrease	1 increase	40 decrease

7) Junior Forest Rangers:

<u>Districts</u>	<u>1954-55</u>	<u>1955-56</u>
Chapleau	40	46
Cochrane	39	45
Fort Frances	--	14
Geraldton	35	34
Gogama	34	41
Kapuskasing	32	43
Kenora	10	--
Lake Simcoe	--	9
Lindsay	29	11
North Bay	38	38
Parry Sound	20	25
Pembroke	42	51
Port Arthur	11	8
Sault Ste. Marie	60	53
Sioux Lookout	19	--
Sudbury	24	42
Swastika	31	42
Tweed	32	26
White River	28	46
Totals	524	574

Workmen's Compensation:

Comparison of Accidents and their Costs:

	<u>1954-55</u>		<u>1955-56</u>	
<u>Accidents</u>	<u>No.</u>	<u>Costs</u>	<u>No.</u>	<u>Costs</u>
1. Axe Accidents	64	\$4,077.	94	\$11,521.
2. Falls	66	7,473.	165	19,353.
3. Eye Injuries	36	470.	57	758.
4. Allergies	23	556.	21	490.

The fire season in 1955-56 was extremely serious and may account for the increase in accidents.

During the peak period of employment, July and August, the number of employees on Department pay lists was double that of the peak period for the preceding year. Because of the extreme fire season and the increase in number of personnel the accident total doubled.

The increase in the accident rate was 6.26% and the increase in number of accidents was 455, compared with the preceding year.

The average cost of a claim was \$78.00.

OFFICE MANAGEMENT SECTION

PROCUREMENT AND PURCHASING

Due to the continued expansion and the resultant need of equipment and office materiel, procurement and purchasing in this fiscal period was active and widespread. Among the multifarious activities carried out by this section, there was basically the continuing concern of demand and supply whether it was space requirements, duplicating, uniforms, licences of many and varied sorts, stationery and equipment, services such as the care of office machines, transportation, hotel accommodation, etc. Back of this basic demand were the many-faceted details of investigation and procurement, all of which contributed to the functional cohesion of this section.

As has been related in the past, the established routine calls for requisitions to be channelled to the Purchase and Supply Section for processing, in which the items listed are checked to ascertain if they can be supplied from stock, or if they must be ordered, either by direct purchase order or from the Queen's Printer or Public Works Department.

From time to time new items in office equipment and supplies are brought to this section's attention and are investigated. Divisional and district offices are kept informed of new items of equipment and services and their suppliers where it is deemed warranted, and, whenever possible, descriptive sheets and pamphlets are sent the aforementioned offices.

The number of incoming requisitions received was 7,079, and each of these were examined to see what must be ordered, either by direct purchase order, by requisitions to the Queen's Printer for stationery and printing, by requisitions to Public Works Department, and, in certain instances, by memoranda, and what can be supplied from stock. Many and varied details enter into the consideration and finalization of each requisition, and may involve telephone queries,

correspondence, customs clearance, and, where warranted, the calling of tenders. The majority of this work can be accomplished within a few days, but occasionally a requisition comes to hand which may take a lengthy period to complete.

Of work and supply orders issued, direct purchase orders were the largest single group in the amount of 5,224. Queen's Printer stationery requisitions totalled 1,043 and Queen's Printer printing requisitions, 350. Three hundred and fifty-four requisitions were issued to Public Works Department for various supplies and services.

UNIFORMS

The Department inaugurated the Uniform Project in 1947 and since that time officials in the districts are in full agreement that the wearing of the uniform by personnel, in close contact with the public, has been of great assistance to them in their work. The project has expanded greatly since its inception and now includes over 800 personnel. This continued expansion has necessitated the incorporation of a rigid system in controlling all issues of clothing. The control is maintained by use of a detailed card system, on which are recorded all initial and replacement issues for each uniformed employee. Periods of wear for the various items of clothing have been set, with due consideration for the period of time an employee wears the uniform while performing his duties. The issues are graduated down from those in uniform for the full working period to those who use summer wear only, and protects the Department from unwarranted replacements. Uniformed Personnel are governed in the mode of attire by means of a booklet entitled MANUAL OF REGULATIONS AND SCALE OF ISSUE -- the contents of which were derived from numerous Information Circulars issued in the past several years. A copy is issued to each employee in uniform for his personal use. A Record Card is included in each booklet on which the employee is to record all issues of clothing.

The initial issue to personnel must be recommended by the District Forester concerned, and the employee's classification must be included in the eligible personnel listing. The District Forester must also satisfy himself that garments, considered by the individual to be in need of replacement, are genuinely past normal wear before submitting the necessary requisition to Head Office. The requisition is checked against the individual's record card, to ensure the entitlement before authorization is granted.

DUPLICATING

Work in this subsection continued to be as active and as varied as heretofore. New forms, circulars and reports were designed and reproduced, in the preparation of which the Vari-typer played an important part. New forms were completely designed and composed by the staff, and revision of several forms and reports was also undertaken.

DISTRIBUTION OF EQUIPMENT AND SUPPLIES

Activity in this subsection continued apace with numerous and varied duties revolving around the primary charge of demand and supply. Over 5,500 items were listed on the stock records, and there was the constant supply from and replacement of these stores. There was also the distribution, often involving collation, of bulletins, technical reports, circular letters, weekly news letter, Sylva Magazine, the Wall Fish Chart and various other items. Long-term goods, e.g., maps, printed forms, advertising materials, books, stationery, office and first aid supplies, made up the great bulk of the stock.

As the present stockroom quarters are drastically overcrowded and far too small for the receipt, stocking and shipping, the newly-acquired commodious quarters at 160 Richmond Street West are expected to provide some assistance to the solution of the serious space problem which continues to plague this section.

ISSUE OF LICENCES

In this fiscal year there were approximately 30 various types of hunting, fishing, trapping and trap-line licences issued to licence agents and district offices throughout the province. Certain licences were also sent to issuers in the U.S.A. The quantities of these licences varied from 500 to 500,000.

The number of licences prepared and checked for mailing and expressing totalled 1,120,654, an increase of about 65,400 over the previous year, and were forwarded in 11,427 parcels to the 2400 issuers.

RECORDS

Primary among the duties allocated to this section are the assembly, indexing and classifying of incoming correspondence for distribution, compilation of new files and recharging files. Incoming letters to the extent of 41,600 were received and 3,200 new files prepared.

It is of interest to note that all mining claims, recorded in the province, are taken care of by the Records Office as the Department of Mines was originally a bureau in this department, and, since its inception as the Department of Mines in 1921, the mining claims have continued in the care of the Records Office.

Lack of adequate office space continued to face this section, but it is hoped that relocation in larger quarters may be available in the next fiscal year.

BOAT LICENSING

Considerable correspondence and contacts with various field offices and the Dominion Department of Transport are involved in this responsibility in the period under review. Forty-seven additional watercraft were licensed, bringing the total to 782.

OFFICE SPACE

Despite the acquisition of certain space and internal relocations and adjustments, the urgent need for adequate office space remained unresolved. However, toward the end of the fiscal year, some alleviation was in sight for about 25,000 square feet, in the property at 160 Richmond Street West (the former Brigden Building), was released for the use of this department by the Public Works Department as new quarters for the stock and receiving rooms. The commencement of renovation and reconstruction was made in March, but it will be a few months before possession will be available. On completion, these larger quarters are expected to provide some relief for the stock and receiving sections which now occupy a most congested area. The release of the present stockroom quarters in the coming fiscal year will provide some measure of relief from overcrowded office quarters for one section of this division.

SPECIAL ASSIGNMENTS

Arrangements for accommodation, transportation, conferences and meetings, such as the midday meetings of the Forestry Advisory Committee and the weekly meetings of the Division Chiefs, were undertaken by this section. Supervision of the demolition of buildings on property in Algonquin Park continued in the care of this section.

CONSERVATION EDUCATION

The functions of this section are as follows:

Conservation Education:-

Preparation of photographs, slides and 16 mm. motion picture films for lecture purposes.

Maintaining photo library for use in publications.

Supplying photo releases and mats to newspapers, periodicals and magazines.

Distribution of conservation photo displays for use in schools.

Supervision and recording of all public lectures by members of staff; lectures to schools, logging camps, summer camps, service clubs and church groups, fish and game associations, boys and girls groups and by radio and television.

Supplying and maintaining films and projection equipment for all Districts.

Producing a fifteen-minute weekly conservation radio broadcast over station C.K.F.H.

Exhibits:-

Control of all Departmental exhibits

Preparation of exhibit material for use throughout the Province.

Photography:-

Maintaining Departmental darkroom for photo processing.

Maintaining photo library on all phases of Departmental activities.

Preparing scripts and shooting 16 mm. motion films.

Maintaining 35 mm. slide library.

CONSERVATION EDUCATION SECTION

Visual Education

During the year the following titles were added to Head Office and
Field film libraries:

Accidents Don't Happen #7
The Beaver Makes a Comeback
Birds of Canada, #4
Canoe Country
Carguing and Loading
Clean Waters
Days of a Tree
Design for Survival
Double Your Money Through Trapping
A Fish is Born
Fire in the Forest
First Aid, Major Wounds, Fractures and Burns
The Flight Decision
The Forest Grows
The Forest Ranger
Green Harvest
Gunning the Flyways
Heads Up
High Over the Border
Hook, Line and Safety
Hunting With A Camera
If You Took Your Family to Work
The Jolifou Inn
Life in a Drop of Water
Michigan Deer Story
Micro Movies
Mighty Muskie
Mission Muskie
Nature's Half Acre
No Longer Vanishing
Operation - Fire Stop
Out of the Smoke
The Prairie Chicken in Missouri
Romance of Transportation in Canada
Saga of the Sockeye
Shooting Safety
Survival in the Bush
Take Time and Live
Then It Happened
Ti-Jean Goes Lumbering
Time and Terrain
Tomorrow's Timber
Tomorrow We Hunt
Trigger Happy Harry
Wealth in Wood
Woodland Manners
Word to the Wise
World at Your Feet
World in the Marsh
Your Forest Heritage

Three 16 mm sound projectors were purchased for replacement in the Field. Each District has its own projector and has access to District, Regional and Head Office film libraries. Films and projectors are used by Department personnel for public lecturing and intra-departmental training.

Four 35 mm projectors for slides were also added to our equipment.

General

During 1955-56 several hundred feet of motion picture film was used for depicting various phases of the Department's activities. The film was used for T. V. showings and for fillers in films being made by the Department for general distribution.

Exhibits

Conservation appeals were made to the public by means of some seventy-five exhibits and floats shown throughout the Province. The major exhibits are as follows:

- Canadian National Exhibition
- Canadian National Sportsmen's Show
- Central Canada Exhibition
- International Plowing Match
- Lakehead Exhibition
- Northern Ontario Exhibition
- Royal Agricultural Winter Fair

Other exhibits include Sportsmen's Shows, Agricultural Fairs, County Fairs and Parades. Material for major exhibits is prepared and displayed by this Section and then sent out for use at other exhibits from our Toronto workshop. Permanent exhibits suitable for transporting are emphasized to make an optimum appeal across the Province.

Radio Broadcasts

During the past year this section has been responsible for the writing and broadcasting of a 15-minute programme "Conservation Corner" on Saturday night, over a Toronto station which provided the time gratis. In addition, air time has been allotted to other officers of the Department by many radio stations across the Province, a gesture which is much appreciated, particularly in periods of high fire hazard.

Lecture Tours

Officers of the Department keep in constant touch with the public through Fish and Game Associations, Schools, Church groups, Service Clubs and Youth Organizations. Illustrated lectures are given on all aspects of the Department's work, with particular emphasis on Forest Protection, Fish and Wildlife Conservation, Timber Management and Reforestation.

The following table provides a summary of the public lectures delivered by Head Office and Field Staff during the fiscal year.

N.B. - A summary of the lecture tours which were carried out by the Canadian Forestry Association of Ontario during this same period is shown below the Department figures. The conservation lecture activities of the C.F.A.O. are partially subsidized by this Department and much of their success is due to the financial assistance mentioned plus excellent co-operation from our field officers.

REGION	DISTRICT	SCHOOL MEETINGS		PUBLIC MEETINGS		TOTAL	
		NO.	ATTENDANCE	NO.	ATTENDANCE	NO.	ATTENDANCE
Western	Kenora	6	184	18	1014	24	1198
	Fort Frances	36	2003	26	2868	62	4871
	Sioux Lookout	14	1581	21	889	35	2470
Mid-Western	Port Arthur	55	2343	83	3292	138	5635
	Geraldton	36	3589	41	2556	77	6145
Central	S. S. Marie	12	1352	39	12720	51	14072
	Sudbury	103	9920	58	3181	161	13101
	Chapleau	10	432	41	1892	51	2324
	Gogama	21	1407	16	626	37	2033
	White River	1	51	8	869	9	920
Northern	Kapuskasing	13	2126	47	5180	60	7306
	Swastika	42	2447	30	5300	72	7747
	Cochrane	25	7131	16	878	41	8009
South - Central	North Bay	134	10337	57	2907	191	13244
	Parry Sound	88	7143	92	5571	180	12714
	Pembroke	98	4988	39	1740	137	6728
South - Eastern	Lindsay	24	1826	37	2140	61	3966
	Kemptville	65	4445	49	4144	114	8589
	Tweed	19	1828	51	1832	70	3660
South - Western	Lake Erie	94	7552	199	14785	293	22337
	Lake Huron	40	3846	122	6865	162	10711
	Lake Simcoe	140	14009	312	26497	452	40506
TOTALS		1076	90540	1402	107746	2478	198286

Canadian Forestry Association meetings:

Lectures 703
Attendance 56,394

Photography

The Department's photographic library has over 10,000 8" x 10" black and white prints and approximately 1,000 35 mm colour slides, and includes a cut file section. Over 4,500 Department photographs were loaned to outside publications during the year. These sets mostly consist of from six to twelve photographs telling a story on some phase of the Department's activities. A large number of single photograph requests were also handled during the year.

Approximately 38,000 8" x 10" photographs were produced from our darkroom as well as a large number of 35 mm slides and black and white prints.

The services of the photographic library were open to all writers, editors, and reporters, as well as to the general public.

Over 3,000 feet of 16 mm films were taken covering Forest Protection, Fish and Wildlife, Surveys and Engineering and other activities of the Department.

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1945

CONSERVATION INFORMATION

The efforts of this section were directed towards informing the general public of the work of the Department, so as to secure their continued support for the main objectives of the Department which is to protect from depletion and bring about the full development and utilization of the natural resources under its administration in the best interests of the people of Ontario.

Publications

The majority of our publications were prepared for the public although some publications were prepared for certain Departmental groups. The use of general publications saves considerable time in answering personal letters requesting specific information.

Most of the original writing is done by the staff of the Department, mainly by personnel of this section.

During the year the following publications were published:

General

Minister's Annual Report in two parts: (1) Highlights (2) Detailed.
SYLVA. Volume 11, No's. 2 - 6. Volume 12, No. 1.

6,000 copies of each issue of this magazine are now produced in order to meet increased demand. It is also interesting to note the increased use of articles and photographs from SYLVA by magazines and newspapers internationally.

The American Association for Conservation Information awarded its plaque to SYLVA for the most outstanding contribution made during 1954 toward conservation education by any similar magazine on the North American Continent.

Air Service

Wings Over Ontario.

Fish and Wildlife

Condensed pocket size cards: (1) Open seasons: deer.
(2) Open seasons: moose.
(3) Open seasons: migratory birds.
(4) Open seasons: upland game birds.

Fish and Wildlife - cont'd.

Game and Fisheries Act
Summary of Fisheries Regulations
Summary of Hunting Regulations

Operation and Personnel

List of Publications
Ranger School Prospectus
Camping Safety Booklet

Parks

Algonquin Park Booklet

Miscellaneous

Special envelopes for Sylva
Certificates for retiring personnel

Publications Prepared but not published

Administrative Chart (O & P)
Letter to Algonquin Park Angler (Research)
Indians of Ontario (reprint) (General)

Press

The weekly news release "Conservation Corner" was issued regularly to all newspapers in the Province, all radio stations, outdoor writers, Game and Fish Protective Associations, and a miscellaneous list of interested conservationists and house organs. It approximates 2,000 to 2,500 words per issue and consists, for the most part, of reports on Departmental activities, changes in the Acts relating to Game and Fisheries, open seasons for hunting, fishing and trapping, and conservation appeals for the protection of resources.

This release serves a most useful purpose, and its acceptability rating is continuing to increase. Extensive use of News Release material is made by outdoor writers in their columns in newspapers and sports and outdoors magazines on both sides of the border. Many newspapers used mats provided by the section to illustrate News Release Articles of special interest.

In addition to the regular news release, a number of press releases of urgent importance were issued to the metropolitan dailies and to the wire

services.

Our clipping file contains over 400 individual files, with an estimate of more than 30,000 clippings per year.

Articles

A great many articles were provided to newspapers issuing special editions and considerable assistance given to writers seeking information for feature articles.

Advertisements

Copy was supplied for 55 display advertisements in magazines and newspapers during the year. They varied from one-quarter page to full page advertisements, mostly in black and white with art work or photos. Each stressed the need for public co-operation in preventing forest fires and the conservation of land, water, forests, wildlife and forest resources. Administrative advertisements totalling 99 were also inserted in newspapers throughout the Province. These dealt with timber sales and crown lands.

Posters

The following posters were produced:

Nature Trails - Algonquin Park
Sibley Park

Extract from Fishery Regulations

Experiments were continued in the use of plastic coated signs in order to produce a more satisfactory poster.

Correspondence

Routine requests for information or publications were handled during the year. The volume of requests for information regarding the work of the Department, the recreational facilities of the Province and its renewable resources is rapidly increasing. These requests come from adults and students not only in Canada and the United States but from many parts of the world. These are in addition to a large number of requests for information requiring considerable research. Over 8,400 requests were handled.

Personal Enquiries

The Section also handled a large number of telephone calls daily and interviewed a considerable number of callers seeking first hand information

or publications.

LIST OF PUBLICATIONS FOR DISTRIBUTION

ACCOUNTS

Accounting for Logging Operations

AIR SERVICE

Wings Over Ontario

FISH AND WILDLIFE

The Game & Fisheries Act & Regulations

Summary of the Fisheries Regulations

Extract from Fisheries Regulations (poster)

Summary of the Hunting Regulations

Fish & Wildlife Management in Ontario

Fur Farming in Ontario

Prairie Chickens in Ontario

The Bob White Quail in Ontario

Aerial Censusing of Moose at Black Bay Peninsula

Population Studies of Ring-Necked Pheasants on Pelee Island.....\$2.00

Chart of Ontario Sport Fishes in Colour.....\$1.00

FOREST PROTECTION

Forest Fires Prevention Act and Regulations

Forest Protection in Ontario

Technical Bulletins

- (a) Aerial Water Bombing
- (b) Aerial Cargo Dropping
- (c) Aerial Ground Hailer
- (d) Aerial Estimator
- (e) Pack Tractor

LANDS

Lands for Settlement in Ontario

Summer Resort Lands in Ontario

Sudbury Forest District

cont'd.....

LANDS cont'd.

- Kenora Forest District
- Fort Frances Forest District
- North Bay Forest District

LAW

- Complete set of 21 Acts administered by Department
(without binders).....\$5.00
- Law Enforcement Guide & Related Subjects

PARKS

- Algonquin Park

REFORESTATION

- Reforestation in Ontario
- Planning for Tree Planting
- Care and Planting of Forest Trees
- Forest Trees of Ontario.....50 cents
- The Farm Woodlot
- Forest Tree Planting

RESEARCH

- Forest Research in Ontario
- Bird Population Studies during a Spruce Budworm Outbreak
- Forest Spraying and Some Effects of DDT
- Bibliography of Canadian Biological Publications 1946
- A Letter to Algonquin Park Anglers
- Pollution of the Spanish River
- Planting Depths and Methods Experiments
- Report of the Laboratory for Experimental Limnology

SURVEYS AND ENGINEERING

- List of Geographical Townships in Ontario.....25 cents
- List of Water Powers in Ontario.....75 cents
- List of Lithographed Maps & Plans
- Ontario Surveys and the Land Surveyor
- Extracts from Lakes & Rivers Improvement Act as pertaining
to Construction, Repair and User of Dams

TIMBER MANAGEMENT

Systems of Forest Cropping

Manual of Scaling Instructions

Timber Management Manual:

- Part II - Timber Estimating (Field Work).....50 cents
- Part III - Timber Estimating (Compilations).....50 cents
- Part IV - Timber Marking for Special Cutting Operations.50 cents

Ontario Log Rule

Crown Timber Act & Regulations Made Thereunder

Timber Management in Ontario

Reports of Forest Resources Inventory:

- No.1 North Bay District
- No.2 Swastika District
- No.3 Cochrane District
- No.4 Kapuskasing District
- No.5 Geraldton District
- No.6 Port Arthur District
- No.7 Algonquin District
- No.8 Parry Sound District
- No.9 White River District
- No.10 Sudbury District
- No.11 Sault Ste. Marie District
- No.12 Chapleau District
- No.13 Gogama District
- No.14 Fort Frances District
- No.15 Kenora District
- No.16 Sioux Lookout District

GENERAL

Algonquin Story.....\$2.00

Administrative Chart

Annual Report of the Minister of Lands and Forests:

- Part I: Detailed
- Part II: Highlights

Definitions of Important Branches of Forestry

The Forest Tent Caterpillar in Ontario

Ontario Resources Atlas.....\$1.00

Camping Safety Folder

SYLVA, Your Lands and Forests Review, bi-monthly.....\$1.50 per year

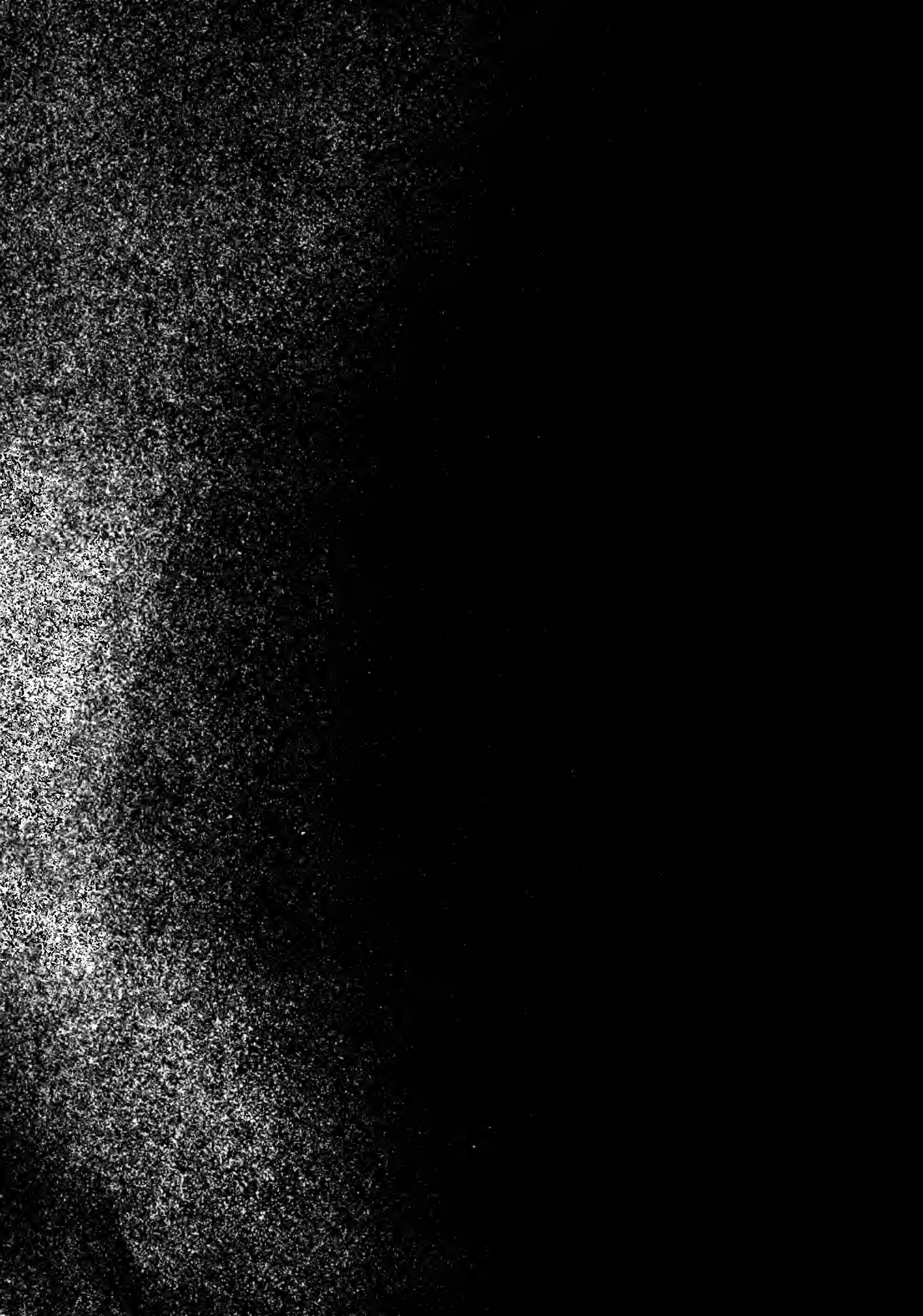
SYLVA Index, Volume 1 - 10 inclusive

Statistical Reference of Lands and Forests Administration

Coloured Chart "Sport Fishes of Ontario".....\$1.00

SECTION NO. 8

DIVISION of PARKS



DIVISION OF PARKS

The survey of the Province, which was started in 1954, was continued in order to locate, assess and recommend for acquisition or reservation, potential park properties. Emphasis was placed upon the densely populated portion of Southern Ontario.

As a result of the survey, properties were either reserved by the Department of Lands and Forests, or acquired through the Department of Public Works. Regulations were prepared for the establishment of many of these properties as Provincial Parks. Master plans for the development of these areas were prepared by technical personnel.

In January, 1955, a committee of four district foresters was set up to inspect approximately 90 Department of Highways parks and campsites, and recommend transfer to the Department of Lands and Forests. Of the 90 properties inspected, 45 were recommended for transfer to this Department and necessary negotiations were opened.

As of March 31st, 1956, the following Provincial Parks were in existence:

Algonquin	2,750 sq. miles	Established	1893
Rondeau	8 " "	"	1897
Quetico	1,795 " "	"	1913
Long Point	126 acres	"	1920
Presqu'ile	420 " "	"	1921
Ipperwash	109 " "	"	1937
Superior	540 sq. miles	"	1944
Sibley	53 " "	"	1944
Mark S. Burnham	102 acres	"	1955

In addition, 112 properties were acquired or reserved and regulations were prepared for the designation of 58 of these properties as Provincial Parks.

Nominal charges were made for the following:

1. The use of major camping areas in Algonquin, Rondeau and Ipperwash Provincial Parks.
2. Commercial boat licenses in Algonquin and Quetico Provincial Parks.
3. Non-resident guide permits in Quetico Provincial Park.

Travel by aircraft into Algonquin and Quetico Provincial Parks was restricted to certain airports located within or near the park boundaries and licensed in cooperation with the Federal Department of Transport.

The policy of acquiring leasehold properties in Algonquin Provincial Park was continued. To date, 46 private and commercial properties have been returned to the Crown.

In cooperation with the Department of Reform Institutions, labour personnel were made available for work in Provincial Parks. In seven districts, 124 individuals worked on eight improvement projects. In addition, personnel of three reform institutions manufactured 2,000 picnic tables, 1,500 fireplace grills and 750 boat tag licenses for use in Provincial Parks.

The preparation of a colour brochure describing the Provincial Parks was continued, and will be available in 1957.

Interpretive Programmes were continued in Algonquin, Rondeau and Sibley Provincial Parks. These programmes, consisting of museum displays, labelled nature trails, conducted hikes, illustrated talks and children's camp programmes, are designed to interpret the natural environment and the historical significance of the park area to the visiting public.

Emphasis is placed upon the purpose and importance of parks, and upon the forests, waters and wildlife found in the parks. Visitors gain an insight through these educational and recreational programmes into the environment in which they have elected to spend their holidays. They become familiar with the various plant and tree species and learn a little of the forms of wildlife. Topics dealt with on hikes and in lectures stress wildlife management, forest protection, conservation, importance of predators, and the relationships of plants and animals to themselves and their environment.

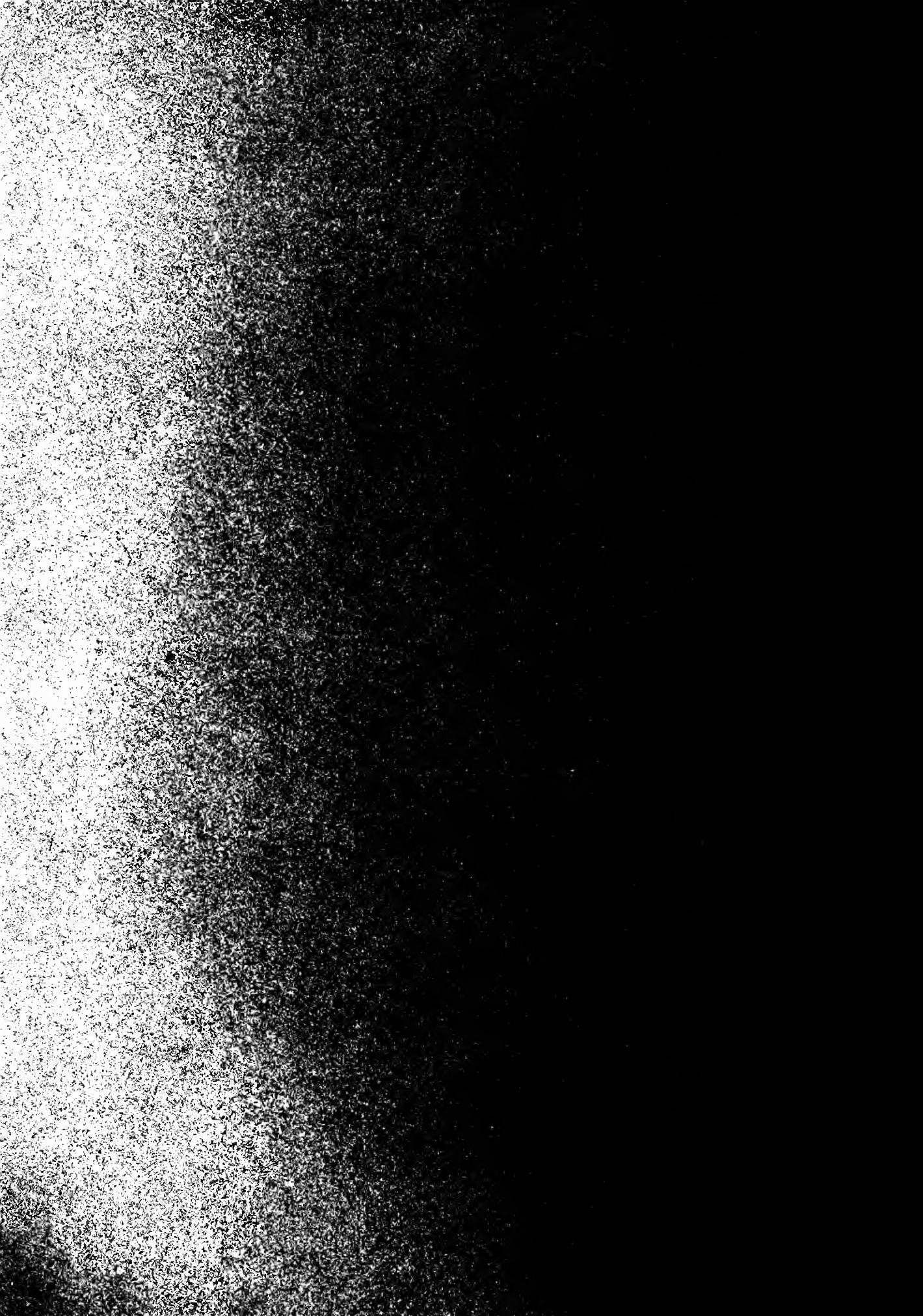
Algonquin Park, which has had an Interpretive Programme since 1944, has a permanent museum building. Displays include live fish, amphibians, reptiles, mounted birds and mammals. Displays of a similar nature in Rondeau and Sibley Parks are kept in temporary quarters.

The following table shows the attendances and activities for all three programmes:

	Algonquin Park	Rondeau Park	Sibley Park
Museum Registration	66,706	5,892	3,113
Days Open	114	51	78
Conducted Hike Attendance	1,339	301	303
Number of Conducted Hikes	28	26	21
Nature Trail Registration	24,439	614	335
Number of Trails	4	3	2
Afternoon Lecture Attendance	3,160		
Number of Afternoon Lectures	69		
Evening Lecture Attendance	2,696	176	461
Number of Evening Lectures	28	9	9
Children's Camp Programme Attendance	1,135		313
Number of Camp Programmes	9		8
Special Groups Programme Attendance	442	121	
Number of Special Groups Programmes	8	2	
Camp Naturalist Awards	183		

SECTION NO. 9

DIVISION of REFORESTATION



ANNUAL REPORT

Part 1 -- Detailed

DIVISION OF REFORESTATION

Year ended March 31, 1956

The Division of Reforestation furnished a total of 28,351,483 units of nursery stock for all purposes during the year. This is nearly three million more than in any previous year. Land was acquired and a new nursery is being established near Englehart. Targets for production of nursery stock were maintained at 30 million trees annually. As the demands for nursery stock are greatly in excess of supplies, plans have been made to establish additional nurseries and to increase production targets next year by 25% to a total of 40 million trees annually.

There were 7,757,859 trees planted on Crown lands during the year, an increase of approximately one and one-half million over the number planted in the last year. Plans have been made to increase this work as additional nursery stock becomes available.

The number of acres of forest lands managed for counties, townships and conservation authorities having agreements with the Minister under Section 2 of The Forestry Act increased from a total of 110,888.58 to 119,044.50 acres during the year. 4,199,075 trees were planted on these lands during the year.

The number of requests received from private landowners for advice in planning and carrying out reforestation and woodlot management work continued to increase. Every effort has been made to meet these requests by supplying general information in the form of pamphlets and bulletins but additional staff is required if we are to give "on the spot" advice and plans to satisfy the needs for these services. There were 16,254,270 trees furnished to private landowners for planting during the year. This is nearly two million more than in any previous year.

Members of staff assisted the Tree Farm Movement with organizing tree farm committees, inspecting and recommending tree farms for certification. They also assisted with organizing 4-H Forestry Clubs, instructing members in forestry work, and judging projects entered in forestry-club competitions. Similar co-operation has been extended to numerous other organizations interested in forestry work.

The Trees Act authorizes counties, and townships in unorganized areas, to pass by-laws to restrict and regulate the destruction of trees by cutting, burning or other means. By-laws for this purpose have been passed and are in force in the Counties of Brant, Bruce, Dufferin, Durham, Elgin, Grenville, Grey, Haldimand, Halton, Huron, Lambton, Leeds, Lincoln, Middlesex, Norfolk, North-umberland, Oxford, Peel, Perth, Waterloo, Welland, Wellington, Wentworth, and the Township of Brunel.

Summary of Dispositions
of
Nursery Stock
April 1, 1955 to March 31, 1956

Planted on lands vested in Her Majesty in right of Ontario.....	7,757,859
Planted on County, Township and Conservation Authority Forests managed by the Minister.....	4,199,075
Furnished in respect of Private Lands.....	16,254,270
Furnished for Educational and Scientific purposes.....	52,454
Miscellaneous Departmental exhibits, etc.....	85,495
Balance - Stored at planting sites, etc.....	<u>2,330</u>
Total	<u><u>28,351,483</u></u>

Trees planted on lands vested in Her Majesty in right of Ontario

Administrative District and project

Trees

Aylmer District:

Malahide Township	45
Ontario Forest Station - St. Williams	30,500
Niagara Provincial Parks Forests	4,000
Long Point Provincial Park Forests	1,000
King's Highways	<u>33,251</u>

68,796

Chapleau District:

De Gaulle Township	306,000
Panet Township	217,040
Stover Township	40,000
L Township	6,000
13G Township	<u>3,000</u>

572,040

Cochrane District:

Calder Township	17,000
Calvert Township	2,000
English Township	10,000
Glackmeyer Township	12
Leitch Township	18,500
Sheraton Township	<u>442,750</u>

490,262

Fort Frances:

Burriss Township	77,500
Fort Frances Township	50
Rowe Township	5,000
Unsurveyed - Sand Plain Area S-105 (O&M)	10,000
Unsurveyed - Glenorchy Area (P&E)	<u>2,000</u>

94,550

Geraldton District:

Ashmore Township	25	
Colter Township	3,000	
Pic Township	12,000	
Caramat School Plantation	1,500	
Stevens School Plantation	<u>1,500</u>	18,025

Gogama District:

Noble Township	3,066	3,066
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Hespeler District:

King's Highways	43,010	
Ontario Agricultural College - Guelph	1,500	
Ontario School for the Blind - Brantford	68	
Ontario Reformatory - Guelph	5,200	
Burtch Industrial Farm - Brantford	1,250	
Girls Training School - Galt	<u>300</u>	51,328

Kapuskasing District:

Stoddart Township	98,700	
Studholme Township	124,300	
King's Highways	<u>2,000</u>	225,000

Kemptville District:

Ontario Forest Station - Kemptville	17,500	
Ontario Industrial Farm - Rideau	33,800	
Ontario Hospital School - Smiths Falls	30,000	
King's Highways	<u>1,470</u>	82,770

Kenora District:

Jaffray Township	10,000	
Redditt Township	6,000	
Unsurveyed - West of Dewan Township	53,500	
Unsurveyed - Three Islands East of Bell Island - Lake of the Woods	1,000	
Lake of the Woods Concession	70,150	
Patricia Concession	<u>3,000</u>	143,650

Lindsay District:

Apsley Township	25	
Brighton Township	840	
Burleigh Township	75,000	
Emily Township	1,000	
Galway Township	100,000	
Glamorgan Township	4,825	
Haliburton Township	415	
Methuen Township	250,000	
King's Highways	<u>64,650</u>	496,755

Maple District:

Baxter Township	115,000	
East Gwillimbury Township	19,176	
Essa Township	2,197	
Matchedash Township	160,000	
Vaughan Township	28,000	
Vespra Township	8,375	
Wood Township	200,000	
King's Highways	42,586	
Ontario Hospital - Aurora	18,000	
Brampton Reformatory	<u>1,400</u>	594,734

North Bay District:

Calvin Township	452	
French Township	240,000	
Joan Township	75,000	
Latchford Township	105,000	
Lauder Township	1,500	
Mulock Township	22,000	
Papineau Township	100	
Strathy Township	2,000	
Widdifield Township	61	
King's Highways	<u>11,875</u>	457,988

Parry Sound District:

Armour Township	94	
Ballantyne Township	169,675	
Blair Township	328,675	
Chisholm Township	18,900	
Henvey Township (Island Number D-212 and D-213)	550	
Laurier Township	54,825	
Machar Township	161,900	
Mowat Township	303,400	
Peck Township	1,000	
Shawanaga Township	3,300	
South Himsworth Township	<u>10,675</u>	1,052,994

Pembroke District:

Bower Township	475,000	
Burns Township	14,000	
Cameron Township	10,000	
Guthrie Township	7,500	
Lauder Township	10,000	
Maria Township	25,600	
Petawawa Township	1,000	
Sabine Township	<u>502,400</u>	1,045,500

Port Arthur District:

Ontario Forest Station - Fort William	51,875	
Black Sturgeon Lake Ranger Headquarters	1,325	
Dorion Fish Hatchery	24	
Adrian Township	40,000	
Gorham Township	8,000	
Lybster Township	15,000	
Marks Township	20,000	
McIntyre Township	125	
Paipoonge Township	250	
Sibley Township	30,000	
Unsurveyed - (Abitibi Camp 34)	<u>1,000</u>	167,599

Ranger School:

Hindon Township	4,375	
Rideout Township	1,500	
Sherborne Township	2,000	
Stanhope Township	<u>2,625</u>	10,500

Sault Ste. Marie District:

Cobden Township	100,000	
Kirkwood Township	3,000	
Rose Township	100,000	
Tarentorus Township	20,000	
Wells Township	16,000	
4D Township	65,000	
4E Township	60,000	
4F Township	25,000	
5D Township	375,000	
King's Highways	<u>110,000</u>	874,000

Sioux Lookout District:

Dome Township	1,500	
Drayton Township	500	
Red Lake Management Unit (Two Island Lake)	8,500	
Patricia Concession (O&M)	50,000	
Auden Concession (T. B. Concession A-1)	<u>500</u>	61,000

Sudbury District:

Aylmer Township	50,000	
Bigwood Township	312	
Burwash Township	36,500	
Hallam Township	1,000	
Laura Township	3,500	
Merritt Township	42,000	
Nairn Township	15,000	
Secord Township	600	
Servos Township	10,000	
Shakespeare Township	<u>3,000</u>	161,912

Swastika District:

Beauchamp Township	192,500	
Bryce Township	75,800	
Burt Township	25,000	
Cane Township	25,600	
Evanturel Township	20,000	
Nordica Township	132,000	
Teck Township	350	
King's Highways	<u>250</u>	471,500

Tweed District:

Anglesea Township	100,000	
Blithfield Township	2,000	
Dungannon Township	121,000	
Faraday Township	20,500	
Mayo Township	80,000	
McClure Township	145,000	
Sandbanks Forest	22,700	
Tudor Township	97,300	
King's Highways	1,465	
Ontario School for the Deaf - Belleville	<u>300</u>	590,265

White River District:

Hunt Township	525	
29 Township	1,100	
Unsurveyed - Black River Concession	<u>22,000</u>	<u>23,625</u>

Total 7,757,859

Trees planted on County, Township and
Conservation Authority forests managed by the Minister

<u>County</u>	<u>Trees</u>	
Bruce	215,000	
Dufferin	3,000	
Grey	134,400	
Halton	37,300	
Huron	14,220	
Kent	7,200	
Lanark	58,750	
Leeds and Grenville	155,000	
Lennox and Addington	3,600	
Middlesex	22,600	
Northumberland and Durham	250,100	
Ontario	18,400	
Oxford	43,650	
Prescott and Russell	1,289,825	
Renfrew	21,400	
Simcoe	401,750	
Stormont, Dundas and Glengarry	85,300	
Victoria	29,000	
Waterloo	61,500	
Wentworth	165,300	
York	<u>95,900</u>	3,113,195
 <u>Township</u>		
Cumberland	14,000	
Torbolton	<u>125,750</u>	139,750

Conservation Authority

Ausable Forest	51,150	
Big Creek Forest	8,500	
Ganaraska Forest	321,800	
Grand Forest	89,400	
Humber Forest	74,500	
Middle Maitland Forest	11,780	
Moira Forest	103,000	
Napanee Forest	20,000	
Saugeen Forest	137,000	
Thames Forest	<u>129,000</u>	<u>946,130</u>
Total		4,199,075

Trees furnished in respect of

Private land

<u>County or District</u>	<u>Trees</u>
Algoma	271,350
Brant	166,675
Bruce	190,150
Carleton	155,675
Cochrane	13,700
Dufferin	890,575
Dundas	49,650
Durham	1,558,125
Elgin	230,875
Essex	45,925
Frontenac	76,850
Glengarry	19,050
Grenville	51,575
Grey	687,950
Haldimand	57,050
Haliburton	161,250
Halton	275,200
Hastings	390,900
Huron	314,695
Kenora	9,950
Kent	131,975
Lambton	118,625
Lanark	177,425
Leeds	58,700
Lennox and Addington	60,500
Lincoln	57,800
Manitoulin	269,600
Middlesex	192,725
Muskoka	799,300
Nipissing	242,125

Norfolk	234,800
Northumberland	588,825
Ontario	635,375
Oxford	198,100
Parry Sound	1,085,300
Peel	333,300
Perth	104,325
Peterborough	290,900
Prescott	52,825
Prince Edward	25,400
Rainy River	7,275
Renfrew	330,600
Russell	16,375
Simcoe	1,964,500
Stormont	8,575
Sudbury	96,125
Timiskaming	32,100
Thunder Bay	254,800
Victoria	150,175
Waterloo	250,975
Welland	108,875
Wellington	647,825
Wentworth	313,200
York	<u>797,775</u>
Total	16,254,270

NURSERY STOCK FURNISHED EACH YEAR

1946 TO 1956

<u>Year</u>	<u>Units</u>
1946	13,175,575
1947	12,269,533
1948	13,049,776
1949	17,700,970
1950	19,027,807
1951-52	20,749,268
1952-53	24,241,754
1953-54	23,447,860
1954-55	25,519,383
1955-56	<u>28,351,483</u>
Total	197,533,409

County Forests

March 31, 1956

	<u>Acres</u>
Brant	50.00
Bruce	14,477.35
Dufferin	2,042.00
Grey	6,668.08
Halton	1,545.63
Huron	1,339.00
Kent	100.00
Lanark	2,100.00
Leeds & Grenville	5,185.00
Lennox & Addington	786.00
Middlesex	280.00
Northumberland & Durham	4,865.00
Ontario	1,553.00
Oxford	733.00
Prescott & Russell	22,008.91
Renfrew	221.00
Simcoe	14,722.10
Stormont, Dundas & Glengarry	1,706.45
Victoria	7,045.00
Waterloo	583.00
Wentworth	760.00
York	<u>3,585.99</u>
Total	92,356.51

Township Forests

March 31, 1956

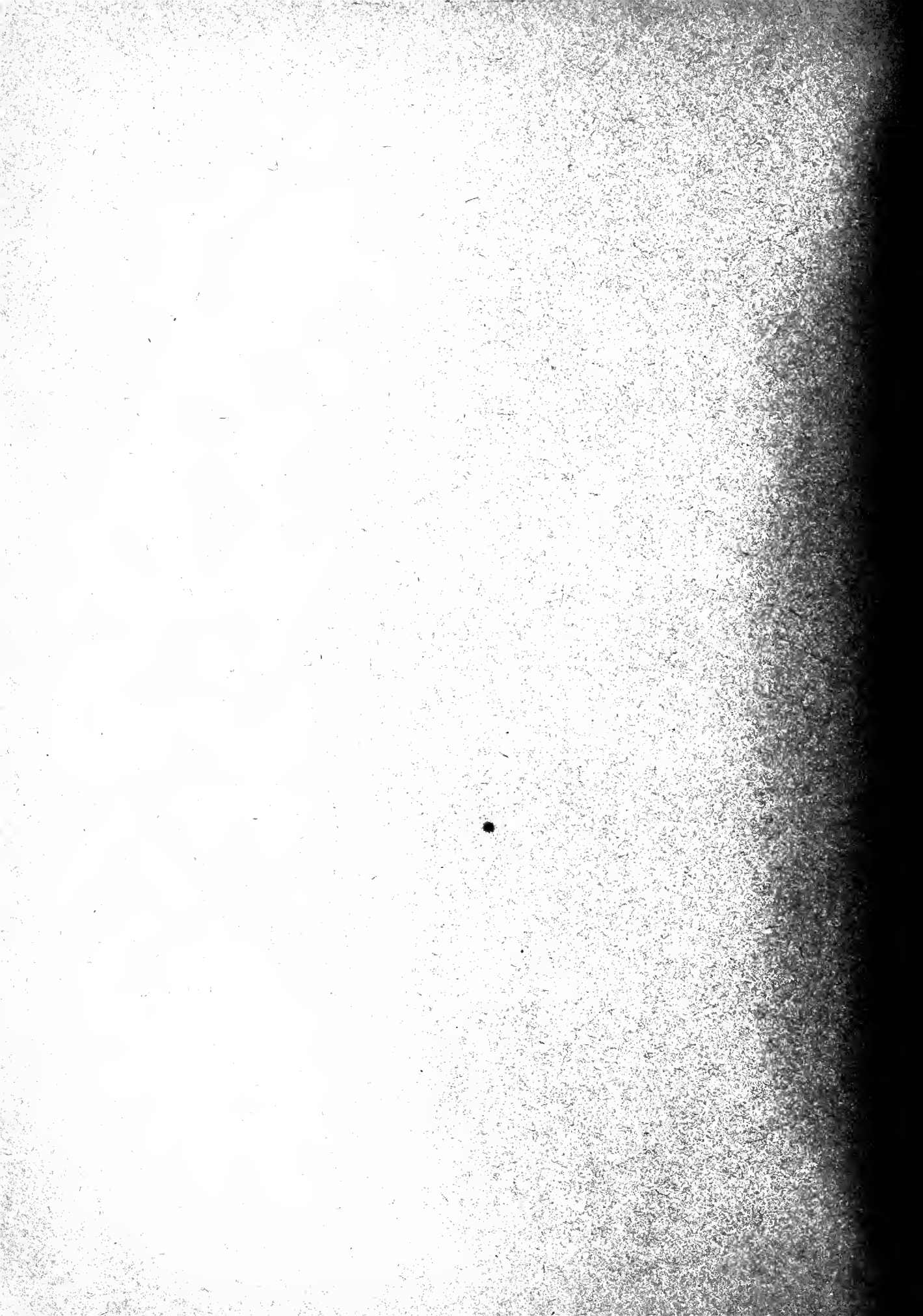
	<u>Acres</u>
Bonfield	60.00
Cumberland	808.44
Galway	100.00
Marlborough	200.00
Torbolton	<u>430.80</u>
Total	1,599.24

Conservation Authorities

March 31, 1956

	<u>Acres</u>
Ausable	1,406.00
Big Creek	1,441.00
Ganaraska	6,836.00
Grand	2,043.00
Humber	1,022.00
Middle Maitland	250.00
Moira	3,079.00
Napanee	2,281.00
Saugeen	4,221.00
Upper Thames	<u>2,509.75</u>
Total	25,088.75

DIVISION of RESEARCH



DIVISION OF RESEARCH

GENERAL INTRODUCTION

In summary of the research work of the past year, several of the projects have been selected for comment.

In the silvicultural projects established in the past five years, the first steps were concerned with observations and surveys to assess the deterrent factors affecting regeneration of the commercially important tree species. The second phase was experimental cuttings to offset these deterrents; and the third, commencing in 1953, has been the evaluation of the results of these cuttings. Among these, silvicultural treatments of yellow birch have been effective in improving germination, survival and height growth. In south-western Ontario, experiments have been concentrated on the use of silvicides as thinning tools.

Field work in the classification of forest sites during the past year covered approximately 6,900 square miles, while preliminary maps covering 3,000 square miles were made. This work was done in the Algonquin Park, Haliburton, Sault Ste. Marie and Cochrane areas. Detailed physiographic maps were finalized for experimental work in wildlife and forestry in Algonquin Park and North Superior Shore areas.

In the white pine tree breeding program, a new method called bare-root grafting was tried with great success. In aspen poplars, a new method of raising seedlings was produced. Several large test plantations of favoured aspen poplar hybrids were established by pulpwood companies.

In reforestation research, the report published in 1955, "Inventory of Nursery Stock", should give Departmental nurserymen sufficient technical guidance to prepare inventories within the accuracies required.

A major portion of the effort in mechanical research was expended on further improvements to, and testing of, a continuous-process conifer leaf still which was built in the previous year.

In fisheries research the Division co-operated with the federal govern-

ment and the Canada-United States Great Lakes Fishery Commission in measures to control the sea lamprey invasion of the Great Lakes. Recent studies have given most definite indications that the abundance of smallmouth bass is dependent on water temperatures during the hatching year; not on the number of spawning fish.

The major activity in physics research continued to be a study of the physical characteristics of the Great Lakes. Monthly synoptic surveys similar to those conducted previously in Lake Huron and Georgian Bay were made in Lake Erie, in co-operation with United States agencies. Smaller-scale surveys were made also in Lake Ontario and Lake Simcoe.

The most important undertaking in wildlife research was the experimental study of methods of censusing moose from the air, carried out during the winter in central Ontario. The availability of a helicopter made possible the first accurate checks of census figures collected by observers in Beaver aircraft. Investigations of beaver, formerly confined to the summer season, were expanded to cover the full year, making winter trapping operations possible.

Mathematical statistics is steadily assuming a more important place in the work of the department. The services in mathematical design and analysis provided by the competent statistician who has been employed by the department for the past eight years has greatly improved and accelerated research experimentation. The next forward step will be the greater use of machine computation, as delays in analyzing data are no longer permissible.

More detailed accounts are given of the foregoing and other projects in the text in the following pages.

One of the most important functions of the Division of Research is to obtain the greatest possible co-operation from other research agencies which are attempting to solve the problems of resource management in Ontario. While a number of formal agreements are effective between the Research Division and federal government and other agencies, it is necessary that joint committees constantly review programs.

SILVICULTURE AND SITE

In the fiscal year 1955-56, the Southern Research Station team of specialists in silviculture and site research were engaged mainly in projects already established and described in previous reports.

The silvicultural program suffered losses through the resignation of two of its members. One left at the beginning of the field season, and the other remained until September. For the remainder of the year, one man carried on in both his own field of mensuration and that of forest regeneration.

Three members of the section continued to carry on the extensive program of site investigations.

A photogrammetrist and his assistant were responsible for the preparation of maps and charts for reports, and provided other services in addition to their main functions in photogrammetry and draughting.

Research in the Petawawa Management Unit

Only the annual maintenance operations were carried out this year. These included (a) the measurement of local climate and the tally of seedling and subordinate vegetation in the ecological experiments, and (b) the estimate of damage in the following experiments:- (i) release of pine from overtopping hardwoods, (ii) thinnings in white and red pine, and (iii) regeneration cuttings in pure white and red pine stands.

Site Research in the Yellow Birch-Hard Maple-White Pine Region

The field work in this region consisted mainly of the extension of the landtype mapping program and the assessment of site productivity.

One forester, working in the Haliburton-Algonquin Upland region covered 3,900 square miles during an eight weeks' field season and mapped the east Denbigh and east Kaladar map sheets. Another forester covered approximately 3,000 square miles in the Sault Ste. Marie district during a fourteen

weeks' field season which included a training and familiarization program in addition to the work program.

During the winter, the first forester mapped the Combermere map area and adjoining areas totalling 1,800 square miles, and during approximately the same period the second forester mapped approximately 1,200 square miles.

In addition to mapping landtypes, the site research staff compiled information regarding (1) the potential productivity of the sites which make up each of the major landtypes of the region, and (2) the ecological interrelationships of soil, climate and forest which control forest productivity of each major landtype. This information is being incorporated in a publication, "A Guide to the Site of the Middle Ottawa River-Georgian Bay Region".

The Reforestation-Research Co-operative Program

A forester who had previously concentrated on forest mensuration, spent a large percentage of his time assisting in the designing of experiments and assessing results in broad-scale reforestation projects. The chief of these was the plantation assessment program on shallow soils in the Lindsay district. A report of the co-operative underplanting and release experiment in the Petawawa Management Unit has been presented in Section Report (Forestry) No. 10.

Site Research in the Wildlife Research Area, Algonquin Park

A map of the physiographic sites of the area was finalized with a key. A short report will be written next year.

Cull Inventory Co-operation

Training and direction in site classification were given to the two party leaders working on cull inventory in the Haliburton region under the direction of a member of the Division of Timber Management. The sites were grouped to facilitate a study of the relationships between site conditions and the incidence of cull in hardwood in the South-Central and South-Eastern administrative regions.

Assessment of Treatment Results in Stand Improvement Practice

One member of the section assisted the resident research forester in various phases of the work carried on in the South-Central region.

Jack Pine Regeneration Investigation in the Englehart Management Unit

The area was selected, surveyed, and plots were laid out. Preliminary cruises of the stand, lesser vegetation, and site, have been completed. Most of the work was done by foresters in the district with some assistance from the Southern Research Station team.

Co-operative Experiment at Heron Bay, Ontario, R. C. -17

The forester in this section who served as the technical director visited the area in the capacity of consultant on several occasions.

Another member of the team made a revision of the landtype map and wrote an accompanying report.

Greenhouse Research

The investigation of the causes of compression wood on white pine has now been completed and a report by Dr. D. R. M. Scott for publication in the journal "Forest Science" has been submitted.

Meetings, Consultations and Publications

The North-Eastern Forest Soils Conference met in Ontario under the chairmanship of Mr. G. A. Hills. The N. E. F. S. C. is an organization of foresters and soil specialists which holds informal meetings to discuss mutual problems. Originally composed of workers in the north-eastern United States, the organization has been expanded to include Canadians.

Considerable time was spent in the field, by both the site specialists and silviculturalists preparing for the presentation of the Ontario approach to site classification.

FOREST TREE BREEDING

Breeding work with white pine, aspen poplars and two-needled pines were the main projects. Some work with chestnut was started.

White Pine

A co-operative seed-source study, covering the entire range of eastern white pine, was organized with four forest experiment stations in the United States. Seeds from three localities in Canada were collected for this study and distributed to the other stations. The acquisition of new materials comprised 76 clones of eastern and western white pine, and three population samples of the latter species. Scions from young trees, resistant to blister-rust, were grafted on young planted stock at Dorset, Ontario, to make the plantation resistant to this disease in the future. Successful methods of fall grafting outside and of bare-root grafting in the spring were worked out and put into use. Forty-two interspecific crosses out of 62 made in 1954 yielded viable seeds. Thirty-three new such crosses were made in 1955. Hybrid seedlings resulting from several crosses made in previous years showed very high resistance to blister rust in this year's inoculation tests, as compared with native white pine. Hybrids of our native species with Balkan white pine seem especially promising in this respect.

Aspen Poplars

The production of aspen-like hybrids, suitable for planting in southern Ontario and easy to propagate from stem cuttings, is the chief aim of this project. By means of exchange with other poplar breeders and through our own collections, 62 new clones and three populations have been obtained. In breeding for industrial use, 37 new hybrid populations were produced. Of these, several made with aspen pollen from southern Europe showed outstanding vigour. Pollen of silver poplar was also received from southern Europe and used in several promising new hybrid combinations. In breeding for early flowering to produce dwarfing stock

for the grafting of breeding materials, five new hybrid populations were obtained. In breeding for rooting ability from stem cuttings, it was found possible to cross silver poplar with western cottonwood and to produce a second generation progeny of silver poplar-aspen hybrids. The new method of aspen seedling production developed in the nursery in 1954 was modified and considerably improved. A successful method of bench-grafting of aspen hybrids was worked out. The establishment of poplar test plantations in co-operation with several wood-using industries was continued and considerably expanded. Attempts at pollen fractionation of aspens, with the aim of separating giant pollen grains for the production of extremely vigorous hybrids, were started in co-operation with the National Research Council.

Two-needled Pines

The aim is the production of new types of hard pine, resistant to the European shoot moth and suitable for planting in southern Ontario, in areas where attacks by this insect make the growing of hard pines extremely difficult. To this end, four crosses with Asiatic pine species were made in 1953 which produced hybrid seedlings, and six crosses were made in 1954 yielding seemingly viable seeds. Nine new crosses were made in 1955. Crosses of Japanese red pine with species of the Austrian pine group have thus far yielded the most promising hybrids. Pollen of Japanese black pine, a species showing high resistance to the shoot moth, was obtained for further hybridization work. An experiment in partial girdling of young planted red pine, to induce early flowering was started in 1947 and is now yielding results of significance to this breeding project. An experiment in phloem inversion, also with the aim of early flower production in hard pines, was started in 1955.

Chestnut

A sweet chestnut breeding project was started in 1955. The aim is to produce hardy dwarf chestnuts resistant to blight. Such materials could be

used as dwarfing stocks in a breeding program with timber-type chestnuts and directly as fruit trees for small gardens. Seedlings of native chestnut, representing progenies of trees free from blight under conditions of severe infection, were obtained from a nursery in British Columbia. Seeds of several strains of dwarf chestnut were also obtained for further testing and breeding work at the Southern Research Station.

REFORESTATION

Nursery Stock Inventory

In co-operation with the Statistics Section of the Division, Research Report No. 33 entitled "Inventory of Nursery Stock", was prepared to present our findings and recommendations on this problem. This report was distributed to all foresters in the Department, to the nurseries, to universities, other research stations, outside nurseries, etc., because of the information contained in the general field of sampling techniques. It is believed now that our nurseries have sufficient technical guidance to be able to prepare inventories within the accuracies required.

Nursery Stock Packaging

In the spring of 1955, an experiment was conducted at the Kemptville Nursery and at Larose Forest to study the moisture retaining material in bales of nursery stock. A report of the experiment was prepared and published as Research Report No. 34. The report showed that poplar excelsior was as effective as sphagnum moss (and about half the price) in retaining the viability of stock stored in bales for periods up to four weeks.

Straw Fumigation Experiment

In the fall of 1954, an experiment was established at the Orono Nursery to study the effectiveness of steam and MC_2 treatments of straw used as seed bed mulch, in killing weed and grain seeds. Counts were made in 1955 of the numbers

of weeds, and a report prepared and mimeographed for distribution to the nurseries of the Department.

Culling and Grading of Nursery Stock

The third and final planting of white spruce, both shippable and cull, from the Orono, Midhurst and St. Williams Nurseries was made in the fall of 1955. A count of mortality of the 1954 planting was taken. In co-operation with the Statistics Section, study was continued of the results of the survival of the 1953 planting, in an effort to correlate survival with the six measurements taken of every tree. This computation work, assisted by IBM computer systems, will continue for some time. It is not proposed to proceed with studies of other species until the results of this experiment are fully understood.

Root and Top Pruning Treatments of White Spruce

In the spring of 1955, an experiment was established near Powassan, with 2-2 white spruce from the Midhurst Nursery. This material had been given several degrees of single and repeated root and top prunings during the previous year. At the time of planting, a further treatment with a commercial rooting hormone was introduced. The effect of these treatments upon survival was obtained in a count taken in the fall of 1955, but effect upon growth will not be obtainable for a few years. An interim report on the effects on survival is planned for 1956.

Polyethylene Packaging Experiment

In the spring of 1955, a small experiment was planted in Algonquin Park to compare Burlap, Kraft, and Polyethylene as the wrapping materials for bales of nursery stock. Unfortunately the extremely dry weather of the summer caused almost complete mortality and no results were obtainable from the planting. It is planned to repeat this experiment, with some modifications, in 1956.

Planting Methods Experiment

In the fall of 1955, an experiment to study four methods of hand planting of seedling stock was started near Algonquin Park, in co-operation with the Reforestation Supervisor, Pembroke. The rest of the experiment will be planted in the spring of 1956. No data on survival will be available until the fall of 1956.

Seed Bed Mulch Experiment

A small experiment was started in the fall of 1955 at the Orono and Midhurst Nurseries to study the use of mulches which can be permanently left on the seed bed in comparison with the usual rye straw which must be removed each spring.

Duneman Stock Experiment

In co-operation with the Forest Pathology Laboratory, Maple, a small experimental planting has been established at the Ganaraska Forest to compare 2-0 white pine, red pine and white spruce produced by the Duneman process at the Orono Nursery, with 2-1 and 2-2 stock of the same species.

REGIONAL RESEARCH FORESTERS

MID-WESTERN REGION

Research activities in the 1955-56 fiscal year were focused on the regeneration, both natural and artificial, of the commercially important conifer species of this area in the silvicultural field and on the preparation of a correlated program of forest research in the co-ordination field.

Some positive and encouraging results can be reported from our efforts in the cutting methods, seeding and planting work. In the co-ordination phase of the work, it is difficult to report what degree of success has been attained because of the indirect methods of co-ordination we are using. It is felt, though, that some positive progress has been made in fostering a spirit of co-operation

among all agencies.

Silvicultural Research

Cutting Methods

1. Studies were continued on the effects of normal operating procedures and modifications to these normal procedures on the regeneration conditions on a variety of forest cover types. The study plots on the limits of the Abitibi Power and Paper Company and the Great Lakes Paper Company were re-examined.

Encouraging results were obtained towards increasing white spruce regeneration in one of the logging modifications in which the ground around white spruce, left as seed trees, was mechanically scarified.

2. Active co-operation was rendered the Division of Timber Management in their program of applying, on a trial basis, any recommended modifications in cutting practices.

Seeding

1. The search for a simple, efficient seed protector against rodents was continued. A trial including deep hole seeding, seeding in wire cages, seeding under wire mesh, and seeding under inverted waxed cups of three sizes was established for four conifer species. Preliminary results, after one growing season, for the cup procedure show promise but additional study is necessary.

2. In co-operation with the Marathon Corporation, a large scale practical testing of the Brohm Hand Seeder was established. Manual scalping and seeding with naked jack pine at five feet and less spacing, a crew of nine men averaged 1.8 acres per man day on a 75 acre cut-over area. Survival counts at the end of the first growing season indicated an average stocking of 46 percent over the whole area. In view of the extremely dry, hot year, these results are quite promising.

Planting

Studies of root pruning, root induction and planting times were continued this year. Examinations were made on the trials established in 1953 and 1954

and new trials were established. Survival counts in the 1955 plantations showed very poor results because of the hot dry weather during the growing season.

Research Co-ordination

Through meetings, an annual summary and a library, the co-ordination committee is attempting to develop the necessary spirit of co-operation for the production of a co-ordinated research program for Northwestern Ontario.

Meetings

One major meeting was held in the past year. Thirty-two representatives from 18 agencies conducting research in this area participated in a two day meeting on the topics of cutting methods, planting and artificial seeding. Indirectly, this meeting was of great value in evolving individual agency programs.

Annual Summary

The annual listing of research projects established and proposed by all agencies in this area was prepared and distributed by the Division of Research. This year it consisted of 33 pages of submissions from 15 organizations.

Library

The library expansion program for the past year was somewhat curtailed by the resignation of the librarian. The essential activities of loan service, periodical mailing service, cataloguing and filing were adequately continued through a temporary co-operative arrangement between the Lakehead Technical Institute and this Division.

NORTHERN REGION

Regeneration

Jack Pine Regeneration

Research in the Northern Region, previously confined almost entirely to spruce studies, was expanded this year to include jack pine. The economic importance of this species has greatly increased in recent years.

An experiment of operational proportions was undertaken in co-operation with a timber licensee in the Englehart Management Unit.

The stand selected was pure jack pine on sand, open enough to allow mechanical scarification prior to the cut. It was cut for poles and saw logs.

By terms of the contract, the operator agreed to prepare the seed bed by scarification. Two methods, mechanical and hand, were carried out either before or after cutting. In some cases this was supplemented by lopping and scattering cone-bearing slash.

The pre-cut stand tally, plot descriptions and regeneration counts were completed by early summer and the cutting by late fall.

The costs of the extra work to encourage regeneration have already been computed on a per acre and M. Fbm. basis.

Regeneration counts and collection of stand composition data will continue until either positive or negative results are established.

Spruce Regeneration

Scarification plots, established in mixed stands on well drained sites were re-examined. These plots were laid out in 1953 to study the effects upon spruce regeneration of a seed bed, prepared by scarification.

Artificial Regeneration

Two experiments were carried out in fall planting of spruce. The first was to study the results of planting open fields to: (a) alternate rows of 2-0 white and black spruce, and (b) alternate rows of 2-2 white and black spruce.

The second was to test the possibility of using 2-0 stock for underplanting. For this purpose 1,250 seedlings were hand planted under a young stand of aspen and white birch on clay.

A total of 15,000 seedlings were planted, mostly by machine.

Site

A fall site meeting conducted by Mr. G. A. Hills, Division Soils Specialist, for two days at the Leitch Township Research Reserve and for two days at the Englehart Management Unit, was well attended by representatives from industry and federal and provincial government services. Such meetings have done much to increase the average forester's knowledge of site evaluation.

Forest Protection

Silvicultural field work was greatly curtailed during the period from July 15th to September 15th. The emphasis at this time was directed toward the requirements of forest protection which were short term and urgent.

Wet Water

An investigation into the efficiency and a method of application of "wet water" was conducted at the actual scene of a fire. This is described in Section Report (Forestry) No. 5, issued in January 1956. Section Report (Forestry) No. 6, also issued in January 1956, deals with a study of the potentialities of the Plasecki H21 helicopter in fire suppression work. Data for this report were gathered first hand while servicing fires in the Northern region.

Hose Study

The tremendous accumulation of used hose awaiting servicing in the Cochrane Warehouse, as well as the quantities culled on fires, emphasized the problems involved with this item of equipment.

Representing a high percentage of total fire protection equipment expenditures, it became apparent that it should be the subject of a complete and thorough investigation. These studies have been carried on since late fall and will continue during this summer. It is expected that a final report will be ready by next fall.

Essential Oils

All work done in this field has been on the improvement of the distillation process. A new type of continuous operating still has been developed and is undergoing tests at the Southern Research Station, Maple.

When final tests have been completed, the still will be set up in the Research Reserve near Cochrane for essential oil production.

Co-operative Research

The committee for co-ordinated research in the Northern region issued two reports.

The first was a summary of all projects carried out in 1954 and planned for 1955 by all agencies working in the Northern region.

The second was the proceedings of a meeting held to determine, from present knowledge, the best management techniques for Clay Belt species.

SOUTH CENTRAL REGION

The study of the silvical characteristics of commercial tree species was continued throughout 1955-56, and the following is a brief outline of the work in progress.

Regeneration Studies - Swan Lake and Crozier Lake

During 1953-54, silvicultural treatments were conducted in the tolerant hardwood stands of the south-central region. This experimental work was designed to assist the re-establishment of yellow birch, a valuable species that does not regenerate satisfactorily after logging. The techniques employed consisted of seed bed preparation by scarifying, and the further opening of the crown canopy after logging by the felling or poisoning of defective residual stems.

The evaluation of this work was continued during 1955-56 within two permanent research reserves - Swan Lake in Algonquin Park and Crozier Lake near the town of Dorset. A series of permanent sample plots were established

in these reserves under three sets of conditions:

1. Uncut stands
2. Normal light selection cut
3. Experimentally treated stands.

To date the measurements and observations indicate definite advantages of this silvicultural treatment with respect to yellow birch germination, survival and height growth.

The location of the two experimental reserves has brought to light an important factor that effects birch regeneration, namely deer browse. Both the reserves inside and outside Algonquin Park supported large numbers of yellow birch seedlings after treatment, but the regeneration at Swan Lake within the park has been seriously damaged by the high deer population. In contrast to this, the reserve at Crozier Lake is subjected to normal hunting pressure and the birch seedlings are well on their way toward establishment.

The deer browse study, mentioned in last year's report, has been taken over by the wildlife section of the Division of Research, and it is expected that this phase of the work will be reported by that section.

The work on direct site measurements was continued during the summer and winter of 1955-56. Air and soil temperatures, relative humidity, and other factors are being recorded.

The work carried out toward the development of a birch seed orchard was continued this year. Scions were collected during the winter logging operations in 1955, and were grafted at Angus for planting at Swan Lake.

The birch root and soil temperature studies, carried out by the Laboratory of Forest Pathology and research office, were continued and expanded this year at Swan Lake.

Regional Program

During 1954, silvicultural programs were conducted in the following townships: Conger, Sherborne, McClintock, Wilkes, Biggar, and Sandy Island on Lake Nipissing. The regional research office assisted the Divisions of Timber Management and Reforestation in the planning and execution of these programs and are presently occupied in the evaluation of this work. In general terms, this silvicultural work includes application of herbicides; direct seeding; planting of 1-0 seedling stock under brush, followed by a foliage application of herbicides; study of the silvical characteristics of red spruce; growth studies in pine following release; and scarification experiments in pine and birch forest lands.

SOUTH-WESTERN REGION

Several projects were undertaken during the 1955-56 fiscal year. Most of the work was confined to silvicultural studies in the hardwood cover types and to the use of silvicides in forestry. However, one project was confined to pruning effects on Scotch pine Christmas trees.

Silviculture

Silvics and Silviculture of Silver Maple

The silver maple experiment which was started in the summer of 1953 was examined again in 1955. Diameters were taken on all live trees from 0.6" d.b.h. and up, as well as a tally on the regeneration. A record was also kept of the vegetation, as well as the condition of the trees poisoned for thinning purposes in 1953.

Hardwood Growth Plots

A number of permanent sample plots were established ten years ago by District Forester I. C. Marritt in scattered woodlots throughout the Lake Huron District. Fourteen of these came up for remeasurement in 1955. At the instigation of the zone forester, it was decided to take not only the d.b.h. but also

the potential merchantable lengths so that the volumes of each plot could be computed at five year intervals.

Hardwood Pruning Studies

Six acres of open-grown hardwoods were given a further pruning in 1955. The diameter of all branches removed at the point of contact with the bole of the tree were recorded and then computed to square feet. A time record was also kept on the entire operation. This project will be completed in 1956.

Taper Studies

A need was felt by some of the zone foresters in the Lake Huron District for better volume tables. Taper studies were made on second-growth silver and hard maple trees. This project called for a pair of pole calipers which were made at the Hespeler district office.

Silvicides

Silvicides for Thinning

At the present time there is little or no market for thinnings in the South-Western region of Ontario. Many of the second growth stands are in need of thinning to promote maximum growth for the crop trees. Since cutting is expensive, it was decided to continue testing new silvicides for this purpose. A working arrangement was then made with two chemical companies to test their silvicide products on some of the common hardwood species which occur in southern Ontario. Five species were treated with 10 different chemicals during the summer of 1955. The poisons were applied as basal sprays.

Silvicides for Stand Conversion

A working arrangement was made with the Christian Island Indians through the Indian Affairs Branch to conduct silvicide studies on Beckwith Island. The object of this study was to convert 30 acres of dense hardwood to white pine, as the site appeared favourable for this species.

A foliage spray of Esteron 2-4-5T was applied from aircraft on the

3rd August, 1955 to approximately 30 acres of bush; the treatments consisted of spraying 4 gallons of 2, 4 and 6 pounds of acid per acre. Thirty thousand white pine will be planted with Indian labour in the spring of 1956 on the treated area.

Chemical Debarking

There is a possibility in the not too distant future that hardwood pulp might have a market in the Lake Huron district. Peeled wood commands a better price than rough wood. It was decided to test 10 potential chemical debarking agents in some of the common tree species in the region. The trees were given three treatments during the peeling season and were then examined at periodic intervals thereafter. Results will not be fully evaluated until the spring of 1956.

Christmas Tree Studies

The Scotch pine Christmas trees which were given five degrees of pruning at ten-day intervals throughout the growing season of 1954 and at monthly intervals thereafter were remeasured in July 1955 following completion of height growth. This experiment will not be completed until 1956.

FISHERIES

Fisheries research in 1955 was mainly concerned with Great Lakes fisheries problems. Work on inland waters was continued in Algonquin Park and the Parry Sound district.

Lake Superior

The problem of distinct populations of Superior lake trout, their distribution and their vulnerability to lamprey predation, were investigated in 1955. Tagging and catch sampling were carried on at Rosspport and Michipicoten. In the latter area, estimates of the number of young trout were made, and in-

formation obtained on the effect of an experimental chub fishery.

Records of lamprey scarring show an increase, particularly in the in-shore fisheries which are declining rapidly.

Lake Huron

Research in Lake Huron continued to be confined largely to an intensive study of fish populations in South Bay, Manitoulin Island. Changes that are occurring have not been the result of the intensive fishery established there in 1947, but rather the results of natural phenomena, particularly the sea lamprey.

Attempts to re-establish lake trout by hatchery plantings in the face of lamprey predation are being continued. Speckled lake trout hybrids which have also been introduced, seem to be less vulnerable to lamprey attack.

The utilization of undesirable fish as mink food was expanded. Fish were also supplied to the Ontario Veterinary College where staff conducted experiments to find the most desirable ration.

An analysis of data collected on smallmouth bass in the period 1947-1954 demonstrated the influence of temperature on the strength of year classes.

Information obtained from questionnaires indicated an increase in lamprey predation on commercial species.

Lake Erie

Research in Lake Erie in 1955 was mainly concerned with the fish movements, age, growth and food of commercial species. Some 4,000 fish were tagged and 5,500 fish examined. The tagging has shown that blue walleye wander widely throughout the lake.

Information was also obtained on the distribution and growth of the sea lamprey which appear to be increasing in abundance. Sea lampreys were taken more often in the east basin than in the western portion of the lake. A major run of sea lamprey was located at Big Creek near Delhi.

Some time was devoted to a study of fish spoilage and the use of trawls to take fish.

Lake Ontario

Routine examination of the commercial catch of whitefish in eastern Lake Ontario was continued in 1955. The collection is now adequate to permit an analysis to determine the factors affecting the production of the fishery, which is presently the only one of consequence in Lake Ontario.

In 1955 the first recoveries of lake trout planted by the Province of Ontario and the State of New York were made. These fish show a fast rate of growth and a considerably higher recovery is anticipated in 1956.

Algonquin Park

In Algonquin Park the creel census continued to provide information on angling success and the effects of management techniques. While less heavily fished lakes are maintaining their good fishing, lake trout angling continues to decline in Opeongo. Restocking with marked hatchery fish has not proved effective.

Speckled lake trout hybrids have been successfully introduced into at least one lake and should provide attractive fishing in the coming year.

A tagging study of Opeongo bass showed that the population was sparse and that individuals ranged widely throughout the lake during the summer. An analysis of the creel census material collected from 1939 to 1954 showed that bass reproduction and fry survival was seriously reduced in colder summers and that the low production of bass could be ascribed primarily to temperature and secondarily to the small spawning stock present.

Factors influencing lake and speckled trout spawning and egg survival continued to receive some attention. Studies of the nutrient balance in lakes were also continued.

Parry Sound

The creel census was maintained on Three Mile Lake where minimum size limits on yellow walleye were suspended in 1954 to allow better utilization of the slow growing stock. Information was obtained on the production, fishing quality, and growth rate. It is planned to resume the census in 1957 when the effects of lifting the minimum length restriction will be more evident.

PHYSICS RESEARCH

The major activity in physical research continued to be in Great Lakes studies. During the summer of 1955 synoptic surveys like those conducted previously in Georgian Bay and Lake Huron were made in Lake Erie, and on a smaller scale in Lake Ontario and Lake Simcoe. In Lake Erie they were made in co-operation with the Ohio Department of Natural Resources and other U. S. agencies. By means of these surveys, preliminary observations on the seasonal changes in lake temperatures, currents, and chemical constitution have been made. The Royal Canadian Navy, Toronto Harbour Police and Ontario Provincial Police supplied many of the vessels for the work. In Georgian Bay, a co-operative study with the University of Toronto was undertaken to measure the value of gravity on islands in the Bay. In Lake Erie, a co-operative survey of pollution in the lake was made with the Ontario Department of Health.

In addition to the research on the Great Lakes, exploratory hydrological work continued with assessment of the value of small dams for flood control and of watershed research as applied to water supply problems in southern Ontario.

WILDLIFE RESEARCH

Wildlife Research Station, Algonquin Park

The field studies of beaver were continued, supplemented by projects in the Chapleau and Kenora Forest Districts carried on in co-operation with the district foresters. In addition, two laboratory studies, one an investigation of

methods for determining the age of beaver, and the second, an assessment of the ovary as an index to reproductive rate, were initiated at the Southern Research Station. The main objectives of determining carrying capacity, population turnover, growth, reproductive rate and sex and age composition of colonies in various habitats were pursued by means of a trapping program in which some live animals were tagged and released and a series collected for studies of growth, reproduction, age compositions and pelt quality. With the establishment of an experimental winter trapping program, the beaver project has been put on a twelve-month basis, permitting a study of the entire annual cycle.

The study of the movements of marten were continued in a live-trapping and tagging program. Nineteen animals were trapped and their movements in relation to forest type investigated.

As in past years, facilities was provided at the Station for co-operative studies with the Ontario Research Foundation and University of Toronto.

Wildlife Habitat Improvement Project

Since 1948, this project has been concerned with the site requirements, growth and culture of shrubs considered to be of value in improving habitat for wildlife on agricultural land. Since this work has now reached a stage where it can be largely maintained through a series of inspections of experimental plantings, it was possible this year to expand the program to a study of aquatic plants of value to waterfowl. A survey was made in co-operation with the district foresters to determine the distribution of wild rice. A series of specimens collected across the province were identified by Dr. W. G. Dore, Canadian Department of Agriculture, and it was found that there are three varieties of wild rice widely distributed in Ontario. During the summer of 1955, an experiment was carried out in co-operation with the staff of the Parry Sound Forest District to explore the prospects of introducing desirable aquatic plants into a few Precambrian lakes. Plantings of six species were made at eight sites, but none of these was successful.

There is an obvious need for further research on the requirements of aquatic species to provide a basis for the selection of suitable planting sites.

Big Game Project

The work on deer and moose was considerably reduced during the year owing to a reduction in staff. However, it was possible to continue the annual snow survey in co-operation with the districts, and to begin the analysis of the data from the intensive investigation in Algonquin Park of the effects of snow on the movements of deer carried out in the winter of 1953-54 and 1954-55. The study of the factors affecting productivity of deer in South Canoto Township was continued by means of a browse survey and the collection, during the hunting season, of the vital statistics of the harvest. A study of the ovary of the deer as an index to reproductive rate is being conducted in co-operation with the Department of Zoology, University of Toronto.

Between the middle of February and the end of March, an experimental study of methods for censusing moose from the air was carried out in the White River and Gogama Forest Districts. The general procedure was to check census figures secured from Beaver aircraft against what were believed to be more accurate counts made from a helicopter. The results of this investigation emphasized the difficulties of censusing moose, especially in the denser forest types. The basis was laid for further experiments and for the improvement of aerial censusing methods now in use across the province.

Studies of Diseases of Wildlife

The general survey of parasites and diseases of wildlife in birds and mammals was continued on a less extensive scale than previously. The survey work so far completed has, as was intended, revealed several profitable areas of research which are being attacked on a more intensive scale. An intensive survey of parasites and diseases of beaver, recently initiated, is an example. In the autumn of 1955, an investigation of a die-off of muskrat in the Walpole

Island marshes was carried out with the co-operation of the Ontario Department of Health, and tularemia was diagnosed as the cause. A considerable amount of time was spent in collecting information on the occurrence of rabies in wildlife in Ontario in co-operation with the Canadian Department of Agriculture. Reports on the disease and its status in Ontario were prepared for the information of the Departmental staff.

Studies of Wolves in Ontario

The investigation of the taxonomy and distribution of the brush wolf in Ontario was continued. A large series of skulls borrowed from museums in Canada and the United States were examined and diagnostic measurements from each were recorded. The stock of breeding brush wolves and brush wolf x dog hybrids kept at the Midhurst Forest Nursery was increased by two litters resulting from brother x sister matings in F_2 hybrids. Six matings between F_2 hybrids and brush wolves were made, three of which were successful. Six F_2 hybrids from previous matings were sacrificed and preserved for comparative study.

A study of methods of aging brush wolves and timber wolves was initiated. Preliminary examination of the teeth indicates that the pattern of replacement and exfoliation may be useful in aging these species.

Control of Meadow Mice in Reforestation Plantations

During the summer of 1955, a preliminary study of field mice in reforestation plantations was carried out. The main objectives were to develop a simple and rapid method for assessing populations and to test zinc phosphide as a poison. Results so far show that more work is required before any adequate method of assessing populations will be available. Zinc phosphide in our experience and that of others appears to be a satisfactory poison which should be more generally used on an operational basis.

MECHANICAL RESEARCH

The projects and other services carried out by the Mechanical Section are described below.

Conifer Leaf Still - Continuous Process Type

Although the batch type still, which was completed and tested during the previous year, did cut down on the extraction time considerably, it left much to be desired in the way of putting the oil extraction process on a paying basis.

In an attempt to increase the oil yield per hour, the design and construction of a continuous process still was undertaken. The advantage of this type of apparatus is that the raw material is fed continuously through the still at a pre-determined rate. This eliminates the loading and unloading time and heating up period between each batch.

Preliminary tests of this new still indicated that additional improvements would be necessary in order to make this process economically sound.

Recognizing the fact that the best oil yield that can be realized lies between one half and one percent of the weight of raw material treated, and that only the leaves contain oil, some means must be provided to entirely separate the useless wood, which if put through the still occupies a large percentage of its total capacity.

Practical measurements and calculations have shown that the output could be increased from eight to ten times if this useless wood material could be eliminated. This problem will be attacked in the near future.

Although the present still is quite small, it would treat 400 pounds of pure leaves per hour, which should give an oil yield of between two to three pounds per hour.

With a market price of oil at \$1.50 per pound, this apparatus would realize up to \$4.50 per hour.

If the forthcoming tests turn out as expected, it should be a simple matter to calculate the size of plant required to put the operation on a paying basis.

Power-Driven Pneumatically Controlled Roller Press for Fish Scale Impressions

For the purpose of determining the age of fish, which requires the preparation of thousands of cellulose acetate slides, a power-driven roller press with pneumatic cylinders for controlling the roll pressure was built during the winter of 1956.

The two main advantages of this design over the hand operated-mechanical pressure adjusted type are, first, the pneumatic cylinders give more accurate roll pressure control and also automatically compensate for small irregularities in the thickness of the slides, and second, the power-driven feature, greatly increases the output of the machine, while at the same time eliminating strain on the operator.

Fish Cooker - Steam Jacketed Screw Type

To assist in fisheries research, and the Ontario Agricultural College, in their experiments on the utilization of coarse fish and smelts for mink and other animal food, a steam jacketed screw cooker, having a capacity of one ton of fish per day, was constructed and completed in March 1956.

This cooker has been used successfully by the staff at the South Baymouth Fisheries Station.

New Type of Survey Post

At the request of the Division of Surveys, the design of a new type of survey post is being investigated.

The drawbacks to the present type of post are that there is a 3 1/2 inch disc fastened to the bottom end which prohibits it from being driven into the

ground. The post being made of one and a quarter inch iron pipe tends to rust away in a few years. This difficulty has been partly overcome by filling it with concrete.

While the purpose of this disc is to make it difficult for unauthorized persons to remove the post, it also prevents it from being driven into the ground. The method of locating these posts is to dig a long trench at an angle to the ground surface. The post is then put in place and the earth is tamped around it. This is a costly and time consuming procedure.

The requirements of the new type of post are: easy to drive into the ground, difficult to remove, and long lasting (up to 100 years).

At the present time a survey post containing an explosive charge in the base is under test. The underlying principle is that after the post has been driven into the ground, the charge is set off, which spreads the specially designed base, thereby making it difficult to pull out of the ground. For long life the post is constructed of red brass.

Although some progress has been achieved, considerably more work will be necessary before any definite success can be claimed for this idea.

Tree Baler

A power-operated tree baler for use in connection with the "Moisture Retention Materials for Nursery Stock" experiments being conducted at the Kemptville Provincial Nursery was constructed during the winter.

This machine bales the trees to a pre-determined pressure. Trees baled with this machine are well-suited for transporting to planting areas and dropping from aircraft.

Miscellaneous Services

Besides the main projects described above, numerous smaller services were carried out for other sections of the Research Division. The main ones

are listed below:

- Experimental lamprey traps
- Hand tree planting tools
- Fire pump repairs
- Forest fire hose testing
- Repairs and modifications to scientific and other equipment.

FOREST FIRE PROTECTION RESEARCH

During the year, a member of the Research Division acted in the capacity of liaison officer between the Divisions of Research and Forest Protection on matters concerning forest fire research. Several minor research projects were initiated and numerous services were rendered to the Division of Forest Protection.

The Division of Research standardized an emergency food ration kit for use by forest fire fighters. The kit is composed of shelf stables and contains 18 meals. The ration is nutritionally balanced, and is sufficient to sustain a man doing heavy physical work. The ration kit serves both as an emergency ration and as an initial ration that allows fire fighters to operate independently of further immediate food supplies. Minimum shelf life for any food item contained within the ration kit is in excess of 12 months.

Four vehicles in the Lindsay District were treated in June 1955 in such a manner as to make it possible to evaluate benefit gained from an undercoating operation. Examination of these vehicles will be conducted each fall and spring until data becomes adequate for a conclusive analysis.

Soils for Falconbridge Township, Sudbury District were analyzed in an attempt to interpret the burning peculiarities and suppression difficulties particular to areas adjacent to the smelters of Sudbury and district. Some success was obtained in this endeavour but conclusions reached were, for the most part, in the form of conjecture.

It was necessary to carry out some tests on cargo parachutes again this year. These tests were largely serviceability tests and were conducted either

by the Division or for the Division by the Ontario Research Foundation.

Some staff service of a research nature was extended to the Division of Parks in relation to park signs, paint life, and post preservation.

A review of literature on results from tests of wetting agents and fire-retardant chemicals in forest fire suppression was carried out and reported on to all Division Chiefs and field offices.

CO-OPERATION WITH OTHER RESEARCH AGENCIES

As it is the responsibility of the province to manage the renewable natural resources within its boundaries, it is imperative that the work of all agencies concerned with the solution of the management problems be co-ordinated. If co-ordination is not effected, the energies and funds of the various agencies are wasted, and duplication occurs.

The Division of Research, being in closest touch with the management problems of the various operating divisions of the Department, gives the lead in the co-ordinating process by initiating formal agreements with other research agencies and setting up of joint committees to prescribe programs.

During 1955-56, co-operative studies were continued actively with several departments of the federal government: in silviculture with the Forestry Branch, in forest pathology and entomology with the Science Service, in fisheries with the Department of Fisheries, and in wildlife with the Canadian Wildlife Service, as well as with the Canadian Navy in physical research.

Co-operative programs were continued also with the University of Toronto, especially in fisheries, wildlife and physics; with the Ontario Veterinary College, and with other Ontario universities, as well as with the University of Michigan in physical research of the Great Lakes.

The Division of Research has also benefited from the skills and experience of such organizations as the Ontario Research Foundation and the National Research Council, as well as of the forest industry, the fisheries industry, and individuals.

FISHERIES

Algonquin Park

Lake improvement (i) Fertilization

(ii) Liming

(iii) Nutrient balance

Algonquin Park creel census

Lake trout studies (populations, movements, diseases and predators)

Speckled trout studies

Smallmouth bass studies

Lake Huron (South Bay)

Lake Huron fisheries research (i) Experimental fishery

(ii) Utilization, processing

(iii) Migration and abundance

(iv) Trout re-establishment

(v) Sports fishery

(vi) Lamprey predation

(vii) Hydrography

(viii) Experimental fishing gear

Lake Huron sampling of commercial catch

Lake Superior

Lake trout and sea lamprey (i) Catch sampling

(ii) Distribution of population

Lake Erie

Initial study of fisheries

Lamprey scar count survey

Sampling commercial catch

Tagging

Lake Ontario

Planting and recovery of lake trout

Lamprey scar count survey

Tagging

Catch sampling

General

Study on removal of minimum length restrictions on yellow pickerel (Three Mile Lake)

Trout in Southern Ontario streams

Creel census, Quetico Provincial Park

Pike removal from lakes, Sibley Provincial Park

Pike-maskinonge hybrids

Storage and transportation of fish eggs and sperm

Speckled and brown trout study Wilmot Creek

1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956

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MECHANICS

1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956

Forest Protection Devices and Tests

Pump and hose test
 Treatment of fire hose with fungicides

Hose folder
 Easifill pack can

Water bomb filling equipment

Reforestation Devices

Tree planter

Infrared seed extractor

Nursery seed bed seedling lifter

" " root pruner

Fisheries

Steam fish cooker

Fiberglass boat and equipment

General (large items only)

Pack tractor

Spot planer and scarifier and fire line builder

Conifer leaf still for essential oils

Walking stick (Brohm) seeder

Seed coating pan and aerial sowing device

Power tree pruner

Water sampling device

Survey post

Tree girdling saw

Miscellaneous and repair

X-----X

X

X

X-----X

X

X

X-----X

X

X

X

X

X-----X

X-----X-----X-----X

X

X

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All devices except engine of pack tractor and hull of boat designed and made by Mechanical Section.

1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956

WILDLIFE

Studies of populations, movements and predators of deer,
 ruffed grouse, Algonquin Park x
 Study of pheasants, Pelee Island x
 Habitat improvement on agricultural land by planting food producing
 shrubs; wild rice, etc. x
 Specific studies on beaver and marten in field and laboratory
 Small mammal work & botanical collections on a greatly reduced scale
 Big game project (deer, moose) outside Algonquin Park. Study of numbers,
 age, reproductive rate, and effect of food supply and hunting.
 Annual snow survey
 Laboratory studies of feeding habits of important furbearers (fisher, marten,
 beaver) x
 Work on parasites and diseases in wildlife with special reference to beaver in
 N. W. Ontario. Includes ovary studies to determine reproductive performance x

PHYSICS

General survey of problems x
 Physical problems of Great Lakes Fisheries x
 Survey of effects of Hurricane Hazel on Humber x
 Study of Currents and water masses of Georgian Bay x
 " " " " " Lake Huron x
 " " " " " Lake Erie x
 " " " " " Lake Ontario x

GENERAL

Start construction of Southern Research Station x
 Acquisition of Gwillimbury Research Area x

SECTION NO. 11

DIVISION of SURVEYS and ENGINEERING



DIVISION OF SURVEYS AND ENGINEERING

The programme of extending base and meridian lines in the north-western portion of the Province to provide control for mapping from aerial photography and to assist in determining potential forest resources was continued. The meridian in approximate longitude 92 degrees and 56 minutes was extended 48 miles and a portion of the Fifteenth Base Line produced toward the Ontario-Manitoba Boundary. The mining activity in the Manitowadge area in the District of Thunder Bay and the establishment of a town-site made it necessary to survey township outlines. There was a decrease in the number of applications for summer resorts and this enabled the inauguration of a programme of surveying the majority of these locations as subdivisions and preparing plans for registration. Some progress was made in the re-surveys of obliterated township subdivisions.

The distribution of lithographed map sheets was less during the past fiscal year. This reduction was caused by not obtaining the revised map of parts of the Districts of Algoma and Sudbury until late in the year and having to curtail the distribution of map of the Province on the scale of thirty-five miles to an inch which is being revised. It has also been noted that the white prints of individual large scale maps have been requested instead of the lithographed maps on smaller scales.

The revision of base maps was continued. A new map of Quetico Park is being prepared which will include the additional topographical information obtained from aerial photography. It is anticipated this map will be available before the tourist season. Type-face lettering is being used in all our maps instead of hand-drawn lettering. Shore lines of lakes and streams and the names of these features are shown blue on new maps being issued. This change has added much to the appearance of the map and made the features more easily identified. Base drawings are being prepared for a revised map of Southern Ontario.

Weather conditions during the summer of 1955 were most favourable for aerial photography. During the latter part of the season the aircraft used for photography was used by the Division of Forest Protection. All but 800 square miles of Southern Ontario has now been photographed on a scale of one-quarter of a mile to an inch.

Reconstruction of the Tarentorus Trout Rearing Station has been nearly completed and is in operation. Hatchery troughs made from reinforced plastic were installed. It is believed that this is the first installation of its kind in North America. Hydrologic data was compiled for the construction of dams in the interest of conservation, propagation of fish and wild life and forest protection. Preliminary surveys of the "Tiny Marsh" have been made having in view the establishment of a game sanctuary.

LEGAL SURVEYS

Survey Instructions issued during the period between April 1st, 1955 to March 31st, 1956:

General

1. Retracement survey to establish the easterly four miles of the north boundary of the Township of Otto, District of Timiskaming, made at the request of the Geological Branch of the Department of Mines. Survey costs borne by the Department of Mines.
2. Surveys of commercial and residential areas along the water front of Red Lake in the Township of Dome, Improvement District of Red Lake, for the purpose of filing plans to facilitate the registration of titles.
3. Survey of the production of the 6th Meridian a distance of approximately 48 miles and a portion of the 15th Base Line a distance of approximately 50 miles in the District of Kenora, Patricia Portion, for the purpose of establishing ground control for aerial mapping under The Canada Forestry Act.
4. Surveys of summer resort locations in the districts of Parry Sound and Muskoka.
5. Surveys of summer resort locations in the County of Simcoe and the District of Muskoka.
6. Subdivision survey for residential lots north of Ear Falls in the District of Kenora, Patricia Portion.
7. Subdivision survey of a redivision of part of Registered Plan M-215 of the Gold Pines Townsite in the District of Kenora, Patricia Portion, for residential purposes.

8. Retracement survey of the line between concessions 2 and 3 in front of lot 11, and the line between concessions 3 and 4 in front of lots 13 and 14 in the Township of Lake, County of Hastings, required in connection with a timber trespass on Crown lands.
9. Subdivision survey for summer resort locations on Little Cedar Lake in Township 72, District of Thunder Bay.
10. Survey of summer resort locations in the District of Sudbury.
11. Subdivision survey for summer resort locations in the Township of Carling in the District of Parry Sound.
12. Survey of certain township boundaries in the District of Thunder Bay within the Improvement District of Manitouwadge.
13. Subdivision surveys for residential lots in the Township of Murchison in the District of Nipissing.
14. Subdivision survey for summer resort locations on an island in Kasshabog Lake in the Township of Methuen, County of Peterborough.
15. Inspection of portions of the survey of township outlines in the District of Thunder Bay, surveyed during the fiscal year.
16. Retracement survey of the west, north and east boundaries of the Township of Porter in the District of Sudbury, made at the request of the Geological Branch of the Department of Mines. Portion of the cost of survey borne by the Department of Mines.
17. Retracement survey of the line between concessions 2 and 3 in front of lots 9 and 10, the line between concessions 4 and 5 in front of lots 10 to 15 inclusive, and the side line between lots 10 and 11 across concessions 3 and 4 in the Township of Galway in the County of Peterborough, to facilitate the surveys of summer resort locations on Crown lands.
18. Preliminary survey of the Tiny Marsh in the Township of Tiny in the County of Simcoe.
19. Retracement survey of certain limits in sections 22, 23, 26, 27, 33 and 34 in the Township of Kars in the District of Algoma. Total cost of the survey to be borne by the Department of Mines and Technical Surveys, Ottawa.
20. Survey of the north boundary and other related surveys in connection with the proposed Indian Reservation at Big Trout Lake in the District of Kenora, Patricia Portion. Total cost of the survey to be borne by the Department of Mines and Technical Surveys, Ottawa.
21. Survey of certain lands required by the Department of National Defence near the mouth of the Winisk River in the District of Kenora, Patricia Portion. Total cost of survey to be borne by the Department of National Defence.
22. Survey of parts of Mining Location 10X, Township of Oliver, District of Thunder Bay, in connection with the Provincial Park at Kakabeka Falls.

23. Retracement survey of parts of the original survey of the Township of Conger in the District of Parry Sound, to facilitate the surveys of summer resort locations.
24. Surveys of summer resort locations in the County of Simcoe in the vicinity of the Georgian Bay, the Severn River and Six Mile Lake.
25. Survey of a proposed road diversion in the Township of Tehkummah in the District of Manitoulin.
26. Survey of summer resort locations in the District of Sudbury.

Municipal Surveys

No survey instructions were issued for municipal surveys during the period April 1st, 1955, to March 31st, 1956.

Summer Resort Location Surveys on Crown Lands

Under authority of the Public Land Regulations, 1269 summer resort locations were surveyed and the returns of survey filed in the Department for examination and approval; 433 surveys of this number were surveyed under direct departmental instructions to the surveyor where the applicant paid in the survey fee to the district office, in accordance with the provisions of the Public Land Regulations. The following is a breakdown of the summer resort locations surveyed in the various administrative districts in the Province:

<u>Administrative District</u>	<u>Crown Surveys</u>	<u>Private Surveys</u>
Chapleau	Nil	6
Cochrane	Nil	9
Erie	Nil	13
Fort Frances	30	58
Geraldton	Nil	14
Gogama	Nil	Nil
Huron	Nil	9
Kapuskasing	Nil	Nil
Kenora	2	146
Lindsay	127	55
North Bay	34	17
Parry Sound	79	100

<u>Administrative District</u>	<u>Crown Surveys</u>	<u>Private Surveys</u>
Pembroke	19	29
Port Arthur	21	130
Rideau	Nil	1
Sault Ste. Marie	1	31
Simcoe	49	38
Sioux Lookout	Nil	54
Sudbury	63	62
Swastika	Nil	10
Tweed	8	39
White River	<u>Nil</u>	<u>15</u>
Totals	433	836 ----1269

The following is a summary of surveys for Federal Government departments made in the Province of Ontario under instructions from R. Thistlethwaite, Surveyor General, of the Legal Surveys Division of the Department of Mines and Technical Surveys, during the past fiscal year:-

- (1) Subdivisions of Village lots on Christian Islands, I. R. No. 30; Georgina Island I. R. No. 33; Kettle Point I. R. No. 44.
- (2) Part of the north boundary of Point Pelee National Park.
- (3) Exterior boundaries of Mallorytown Landing Area in the St. Lawrence Islands National Park.
- (4) Subdivision of water front in Henvey Inlet I. R. No. 2 and French River I. R. No. 13.
- (5) Retracement surveys in Goulais Bay I. R. No. 15A.
- (6) The boundaries of the new reserve known as Big Trout Lake Indian Reserve.
- (7) A programme to survey Indian holdings within the Tyendinaga I. R. No. 38.

SURVEY RECORDS AND MAP DISTRIBUTION

The number of District and other maps produced by this Department distributed this year totalled 16,139; of these 16⁴⁴ were for official Departmental use. Part of the decrease was caused by supplying Algonquin Park Headquarters with a large stock of Map 47A, (Algonquin Park) before the end of the previous fiscal year. It was necessary to have Map 21A (Southern Ontario) re-printed.

A slight increase is to be noted in the distribution of lithographed map sheets produced by the Dominion Department of Mines and Technical Surveys and the Army Survey Establishment Bureau, Department of National Defence, for resale to the public or for the "Official Use" of this and other Departments of the Ontario Government over the previous year, for a total of 35,676 copies (see "Trend of Map Distribution" chart). Of these, 6,477 copies were supplied to this Department, including the District Offices, for "Official Use" by the Department of Mines and Technical Surveys without charge. 9,199 copies were purchased by district offices for resale purposes.

A slight decrease in the number of Provincial Topographic lithographed map sheets distributed, over those of last year, is to be noted. These sheets are produced by the Army Survey Establishment Bureau, Department of National Defence, Ottawa, from aerial photography and information supplied by the Forest Resources Inventory Section of the Division of Timber Management of this Department. The total quantity distributed this year was 12,928 (see "Trend of Map Distribution" chart).

The following map sheets on the scale of two miles to the inch were received for distribution:

Elsas	Latitude 48°30' to 49°00'	Longitude 82°00' to 83°00'
Kapuskasing	Latitude 49° 00' to 49°30'	Longitude 82°00' to 83°00'
Opasatika	Latitude 49°30' to 50°00'	Longitude 82°00' to 83°00'
Opazatika Lake	Latitude 49°00' to 49°30'	Longitude 83°00' to 84°00'
Hearst	Latitude 49°30' to 50°00'	Longitude 83°00' to 84°00'
Mattawa	Latitude 46°00' to 46°30'	Longitude 78°00' to 79°00'

The summary of the total quantity of lithographed maps distributed in this fiscal year is as follows:

National Topographic Series	48,604	
Map 20A (Free issue)	2,113	
District Maps	10,475	
Island Maps	882	
Miscellaneous Maps	<u>2,669</u>	
TOTAL.....		64,743

An increase in the letters of requests for maps and survey records, as well as the number of cash sales, is to be noted over the past fiscal year. Ten thousand, three hundred and fifty-five (10,355) letters were handled, the increase being due mainly to the use of a form letter requesting prepayment in advance. Sixty-four hundred (6400) cash sales were made for maps and copies of survey records. The increase also being due to the cash sale or prepayment in advance policy.

A drop in the square footage of photostat paper consumed over that of the past fiscal year is noted. Forty thousand, four hundred and twenty-five (40,425) square feet of paper were used on the reproduction of maps and survey records for departmental work, the survey sections of The Hydro-Electric Power Commission and Department of Highways, other Provincial Government Departments and Commissions, Ontario Land Surveyors and the public. Nearly eight hundred (800) 5" x 3" photostatic copies of the new survey record catalogue cards were made.

The amount of sensitized paper and linen used in the reproductions of various topographic map tracings, Crown Land tracings and Township prints, Georgian Bay Island map sheets, subdivision and summer resort survey plans and other miscellaneous plans by the Dry Process printing method increased this year by nearly seven-thousand, six hundred (7,600) square feet, for a total of two hundred and twenty-three thousand, three hundred and fourteen (223,314) square feet.

A summary of the dry process material used is as follows:

Black and Blue Line paper	217,749 square feet
Transparent Linen	4,725 square feet
Opaque Linen	<u>840 square feet</u>

TOTAL..... 223,314 square feet

Thirty-nine (39) "Litho-line" transparent reproductions reduced to one-half scale from the Forest Resources Inventory Planimetric base maps on the departmental format were obtained during the year from a commercial firm. This method eliminates the preparation of the base drawing, by hand, of the Crown Land sectional tracings on the scale of one-half mile to the inch.

Some five thousand (5,000) photostatic copies of pages of the oldest field note books were bound into approximately one hundred and fifty (150) individual field note books. In addition, twenty-seven (27) field note books of current surveys and approximately one hundred and five (105) volumes of various types were bound or repaired for various sections of this Division, the Conservation Information Section of the Division of Operation and Personnel and the Patents Branch of the Division of Lands.

The reference to, and reproduction of original Crown Survey Records, plans and field notes by the Ontario Hydro-Electric Power Commission and the Department of Highways' survey sections, as well as by Ontario Land Surveyors in private practice and the general public, continued to be a major item. Three (3) sets of field notes of Municipal Surveys, twenty-six (26) field note books of Crown Surveys, as well as ninety (90) Crown Survey plans and three (3) municipal survey plans, were catalogued and filed. Catalogue sheets for one thousand and ninety-three (1,093) plans were written and some three thousand one hundred (3,100) catalogue cards were typed covering the re-indexing and cataloguing of the rolled plans of survey. Nearly fifteen hundred (1500) entries were made, of designation numbers of surveyed parcels, into the card filing system. Six hundred and eighty (680) plans of survey and one hundred and sixty-seven (167) field note books, as well as forty-one (41) volumes of Crown Instructions for surveys, were micro-filmed in negative form during the year and thirty-five (35) reels of positive microfilm obtained.

The programme of the preservation of old original survey plans was increased this year by having a commercial firm remount four hundred and eighty-nine (489) plans and descriptions from six (6) of the old Upper Canada partial plan books on individual boards, back to back, to save filing

space, with a cellulose wash finish applied to the surfaces for protection. These were re-indexed and filed. One hundred and twenty-five (125) old township and town plans were also remounted. Approximately one hundred (100) miscellaneous maps of various kinds, including reproductions of plans of surveys of subdivisions were also mounted in various manners, for use of various Departmental offices and for filing in the Land Titles and Registry Offices.

Two thousand, five hundred and eighty-five (2,585) iron survey bars in the standard sizes of 1" x 1" x 48" and 3/4" x 3/4" x 30" were distributed to various District Offices for summer resort and subdivision surveys on Crown Lands. Two hundred and eighty-eight (288) Standard Crown Survey Posts were used on Crown surveys. Eight hundred (800) aluminum preliminary survey identification plates were shipped to various District Offices for the preliminary marking of summer resort parcels. Preliminary investigation was made into a newly marketed Bronze Cap to be used in conjunction with the Standard Iron Survey Bars.

GEOGRAPHIC AND MAP PUBLICATION

The new base drawings of Map 32A (Algoma and Sudbury) were completed and the map was published on a scale of four miles to an inch. The basis outlines and lettering appear in two colours, black and dark blue, which is an improvement from previous maps which were in black only. The map shows all available topographical features obtained from aerial photography. Type face lettering has been used.

A reprint with minor revision was made of Map 14d. (Islands in McGregor Bay).

Revision and additional information relative to nomenclature was supplied to the Canadian Board of Geographic Names, the various mapping offices of the Federal Departments and the Department of Mines of this Province. This included information for twenty sheets and five navigation charts. Maps prepared included in the Forest Resources Inventory were referenced re nomenclature and the names of features submitted to Canadian Board of Geographic names for approval.

The compilation and preparation of new base drawings for maps of "Southern Ontario" and "Quetico Provincial Park" was continued.

AERIAL SURVEYS

During the summer of 1955, weather conditions were more favourable than normal and an area of 17,358 square miles was photographed. Low altitude photographs were obtained of areas where research programmes were being undertaken by the Department. Mosaic panels have been completed for two-thirds of the portion of the Province south of a line from Orillia to Arnprior. The mosaics are prepared to be used in connection with the Forest Resources Inventory and are being used by the District Foresters in other activities of the Department. The demand for prints of the aerial photographs has increased. The number of contact prints produced this year was 75,590 and 6,063 enlargements were made.

<u>Vertical Photography</u>	<u>Area Square Miles</u>
Forest Resources Inventory and Research Division	16,258
Other Departments	<u>1,100</u>
	17,358
<u>Mapping</u>	
Mosaic Panels	9,500

Total Area photographed and sketched by
Department from 1924 to March 31st, 1956,
(does not include areas photographed by
contract.)

Aerial Sketching	-----	26,903 square miles
Oblique Photography	-----	10,790 square miles
Vertical Photography	-----	186,142 square miles

Area photographed during the past Five Years

1951/52	-----	16,464 square miles
1952/53	-----	12,743 " "
1953/54	-----	16,490 " "
1954/55	-----	9,050 " "
1955/56	-----	17,358 " "

ENGINEERING

The number of requests for information concerning the construction of dams on small streams has increased each year. These dams are constructed by owners of properties as suburban homes and creation of ponds to conserve water for irrigation and farm ponds. Plans of thirteen such dams were examined in addition to fifteen dams for storage and timber operations.

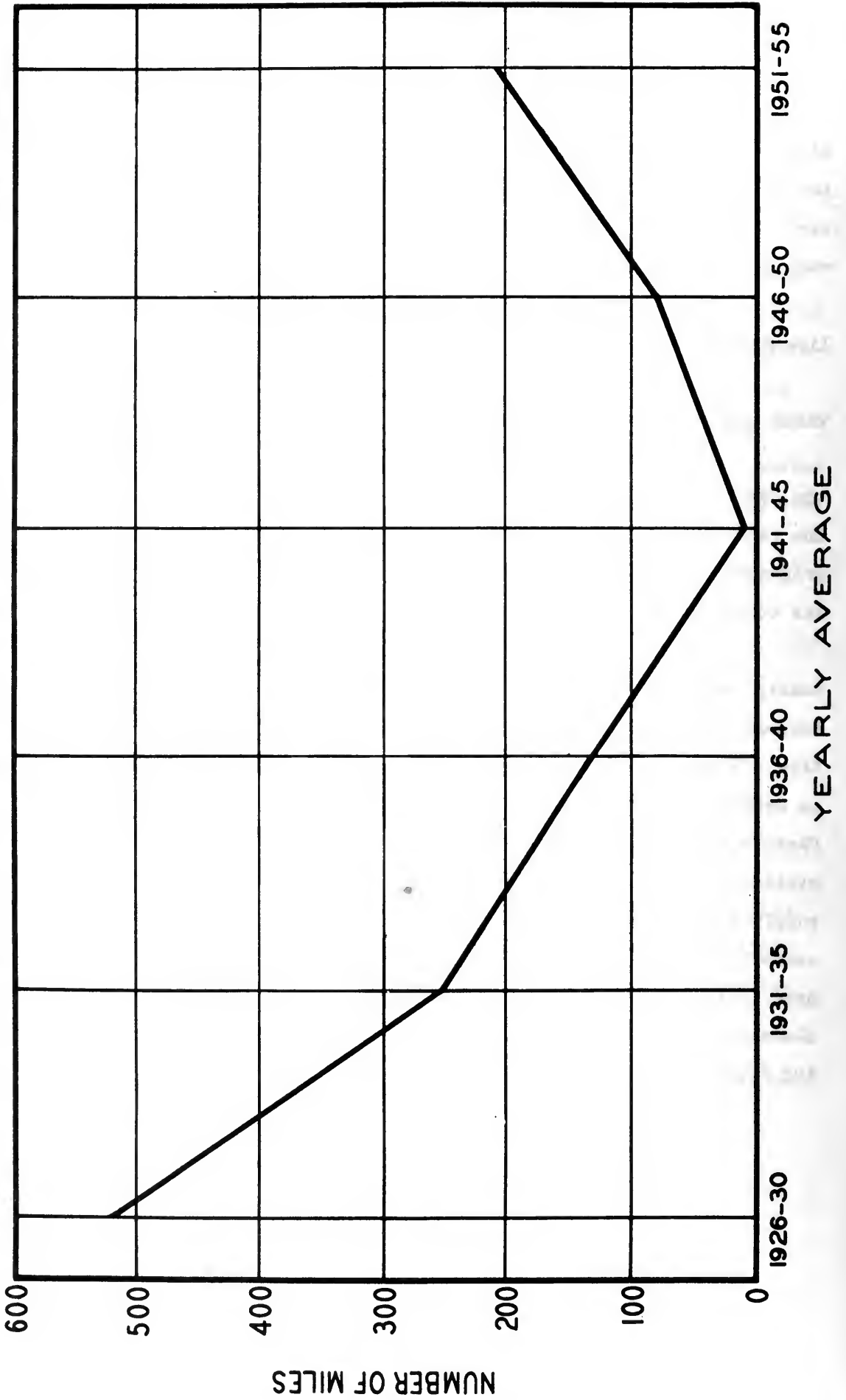
Eight licences of occupation for flooding were issued and seven licences for flooding were cancelled.

A new Water Power Lease Agreement was issued to replace a lease which had expired.

Hydrologic data and information on previous dams were supplied to the Department of Public Works for the construction of three new dams and the rebuilding of seven dams. Inspections of twelve dams were made. The programme of rebuilding obsolete dams formerly used in lumbering operations was continued.

The reconstruction of the Tarentorus Trout Rearing Station was nearly completed. Reinforced plastic trough were used instead of the former cedar troughs and these have proved to ensure more efficient operation. Pressure filter units with capacity of 300 imperial gallons for use as dechlorinating filters were installed at the Port Arthur hatchery. Plastic valves to replace metal valves to supply hatchery troughs were installed at the Wiarnton Hatchery. An old wood stove pipe for the water supply main at the Deer Lake Hatchery was replaced by a smaller asbestos-cement pressure pipe. Investigations of using more efficient materials used in the construction of all hatcheries are being carried on. Preliminary planning is progressing for a major renovation of the Chatsworth Trout Rearing Station.

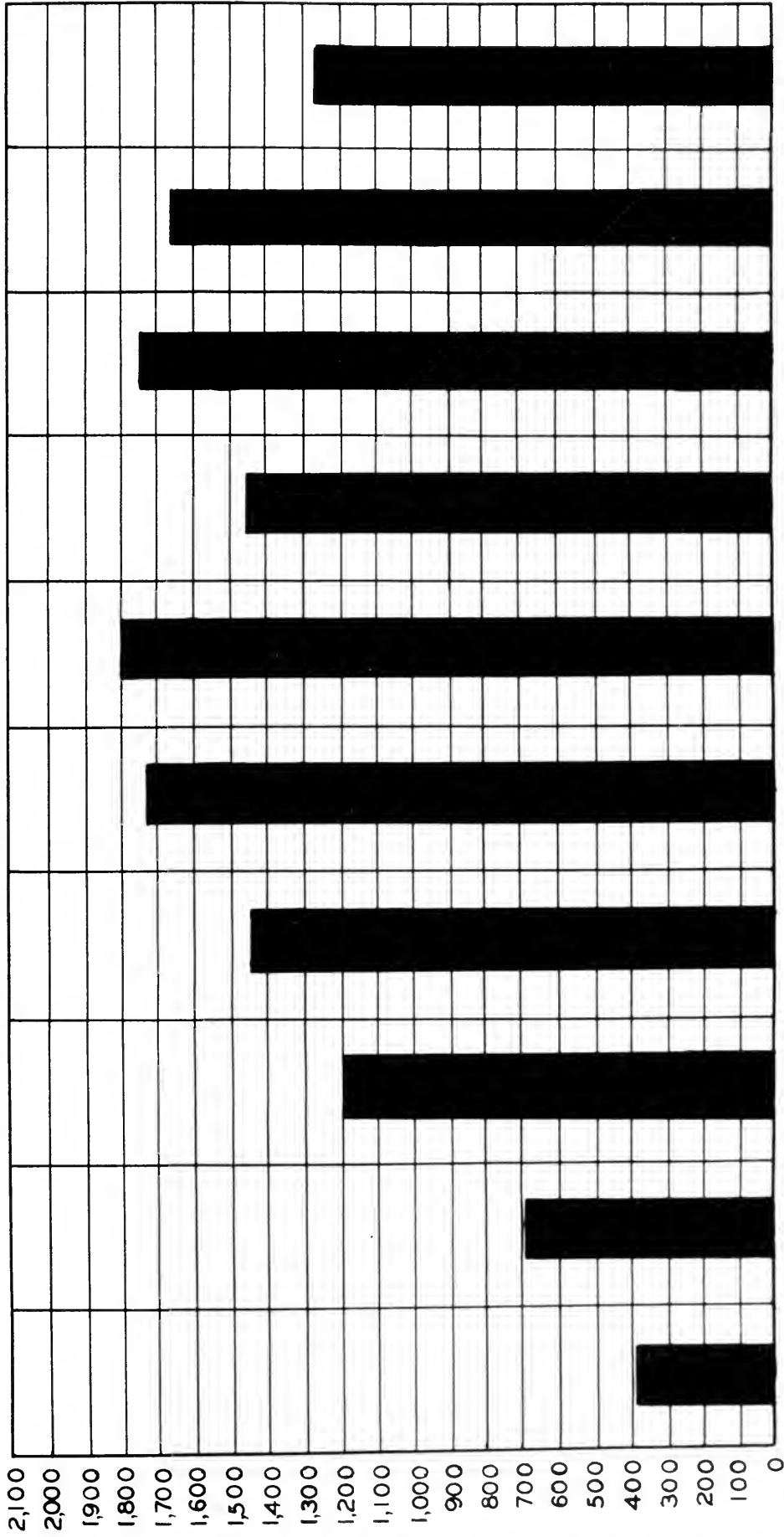
TREND OF BASE AND MERIDIAN LINE SURVEYS



ON CROWN LAND

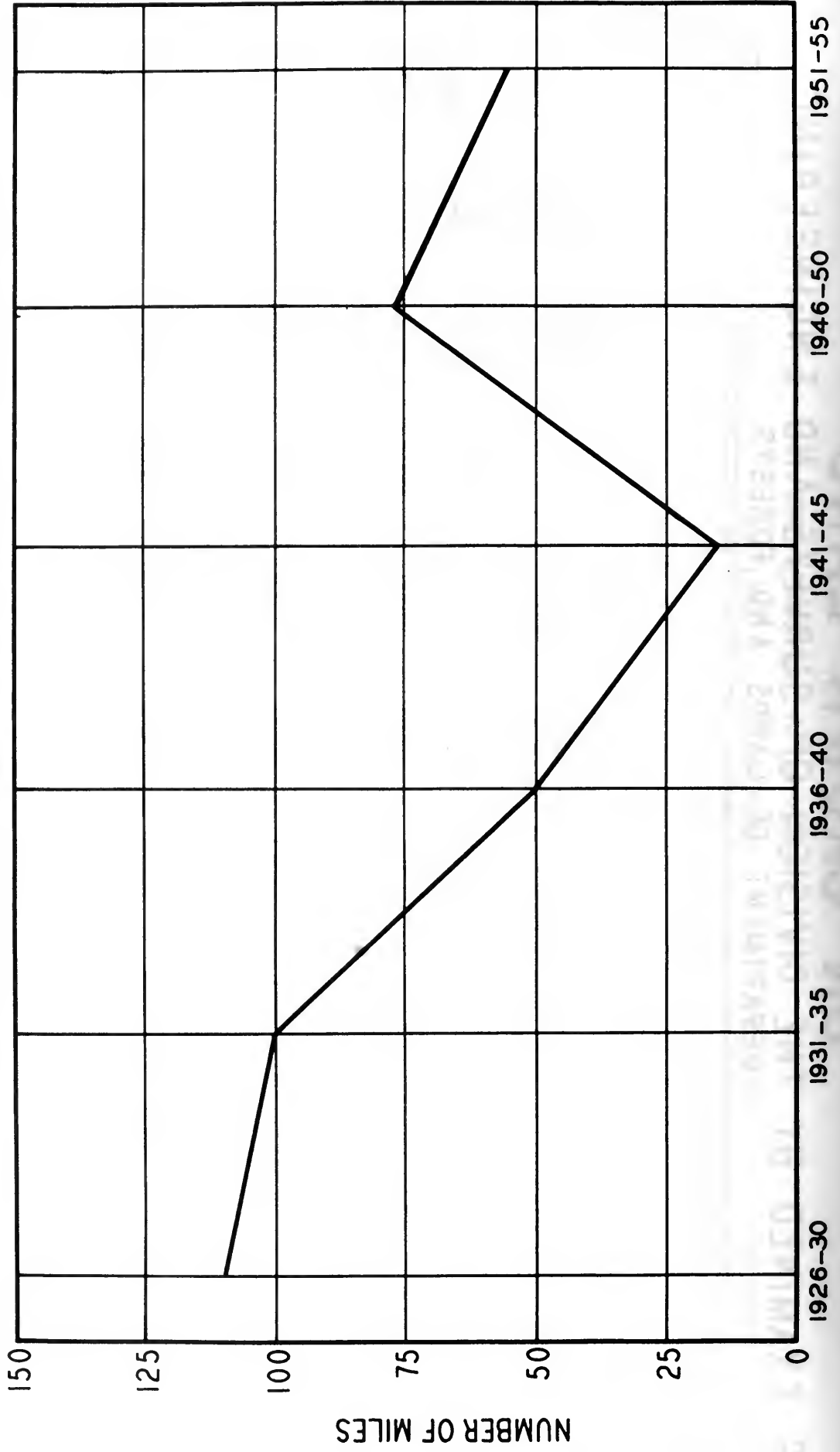
EXAMINED BY THE DIVISION OF SURVEYS AND ENGINEERING
DEPARTMENT OF LANDS AND FORESTS

INDIVIDUAL SURVEYED SUMMER RESORT LOCATIONS

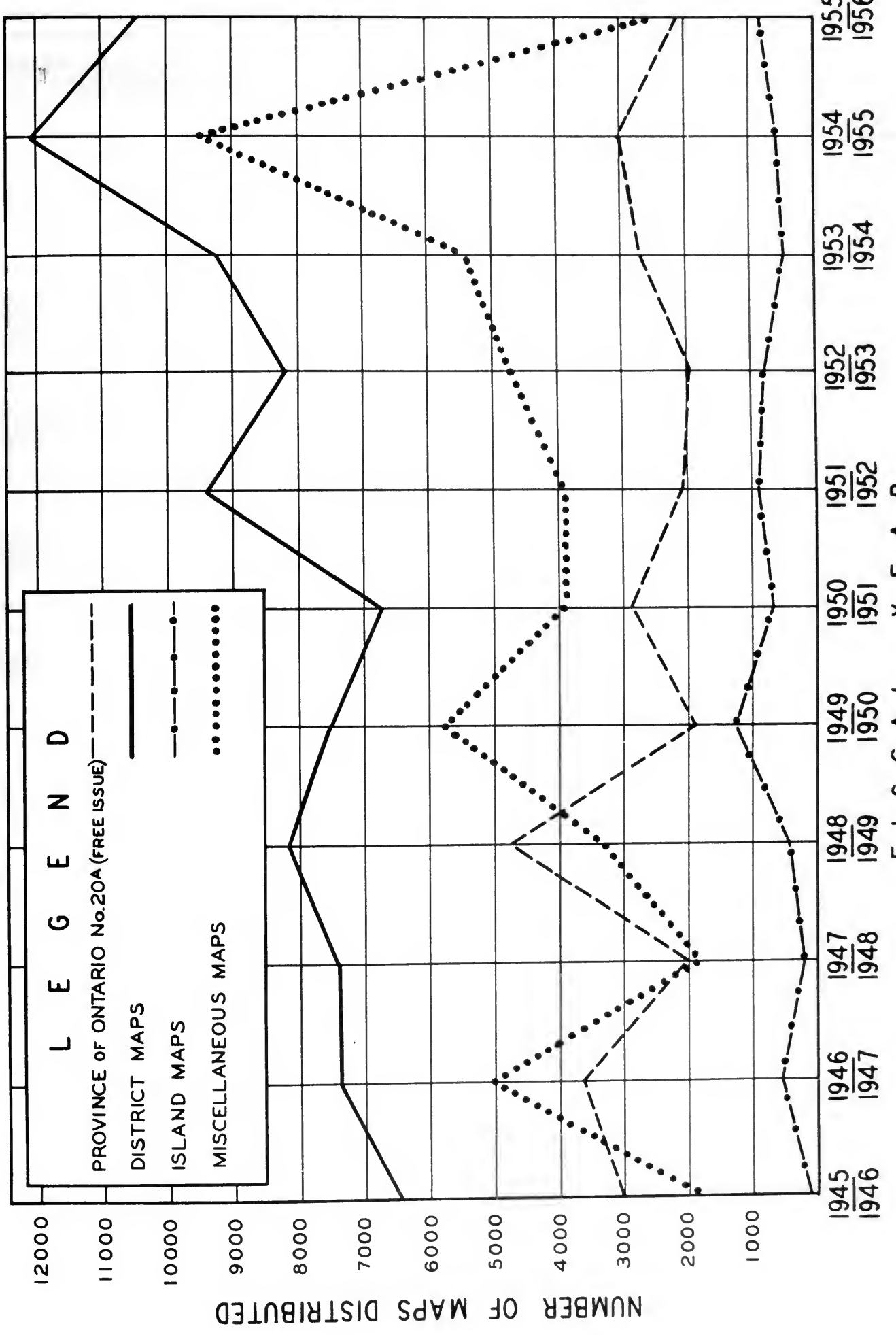


1946-47 1947-48 1948-49 1949-50 1950-51 1951-52 1952-53 1953-54 1954-55 1955-56
FISCAL YEAR ENDING MARCH 31 ST

TREND OF RETRACEMENT SURVEYS

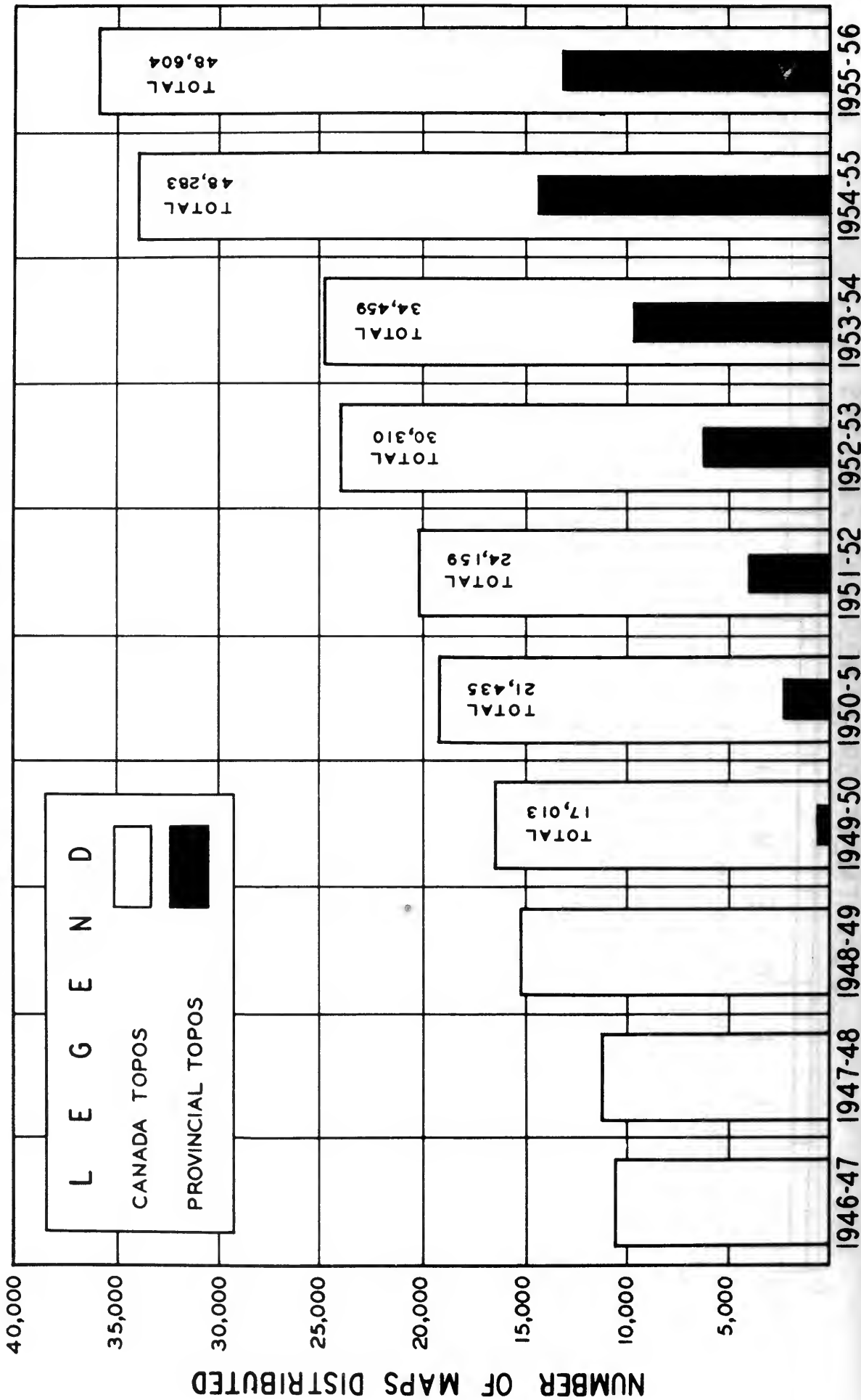


PROVINCIAL ISSUES DEPARTMENT OF LANDS AND FORESTS



TREND OF MAP DISTRIBUTION

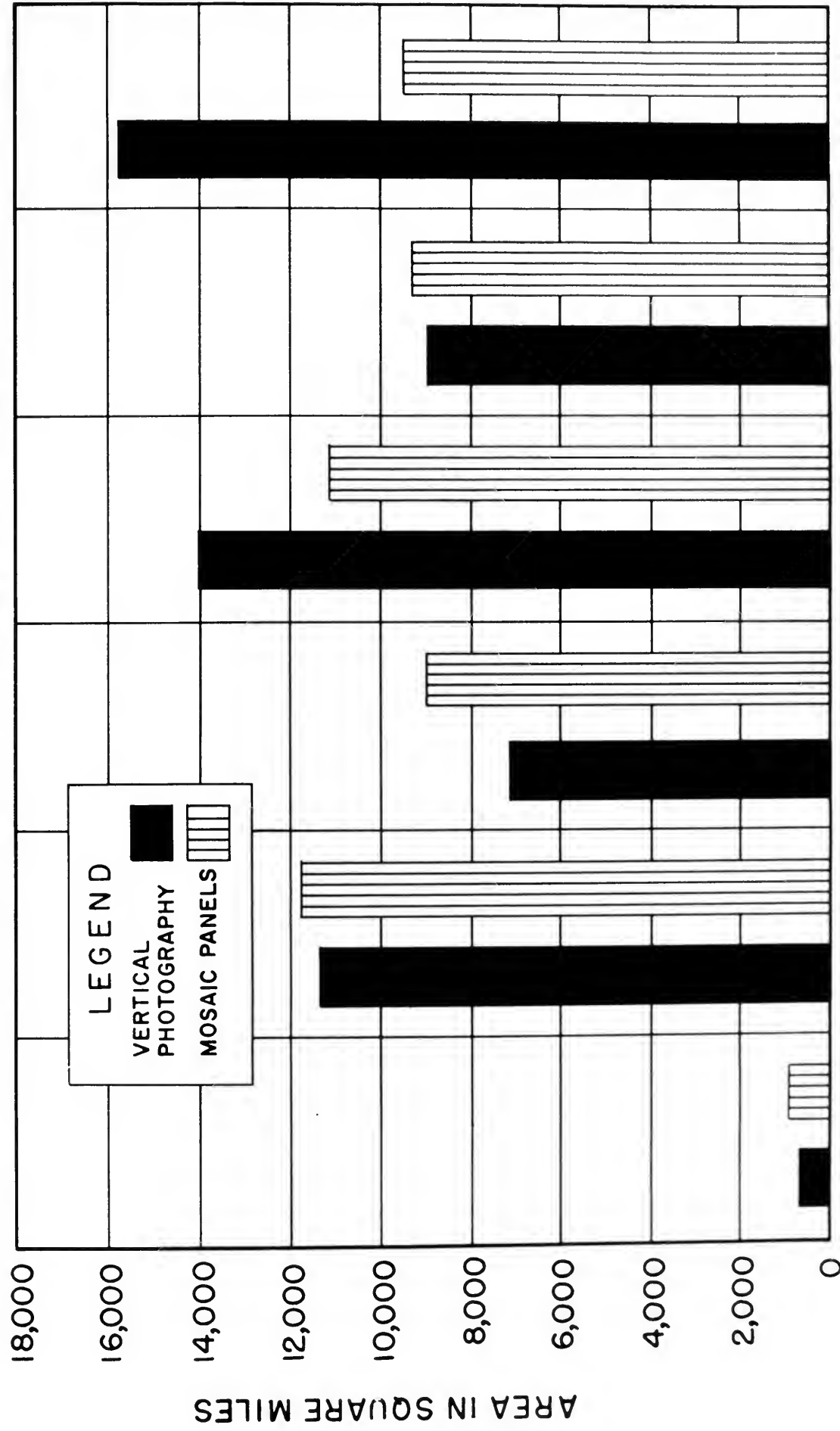
NATIONAL TOPOGRAPHIC SERIES
DEPARTMENT OF LANDS AND FORESTS



FISCAL YEAR ENDING MARCH 31ST.

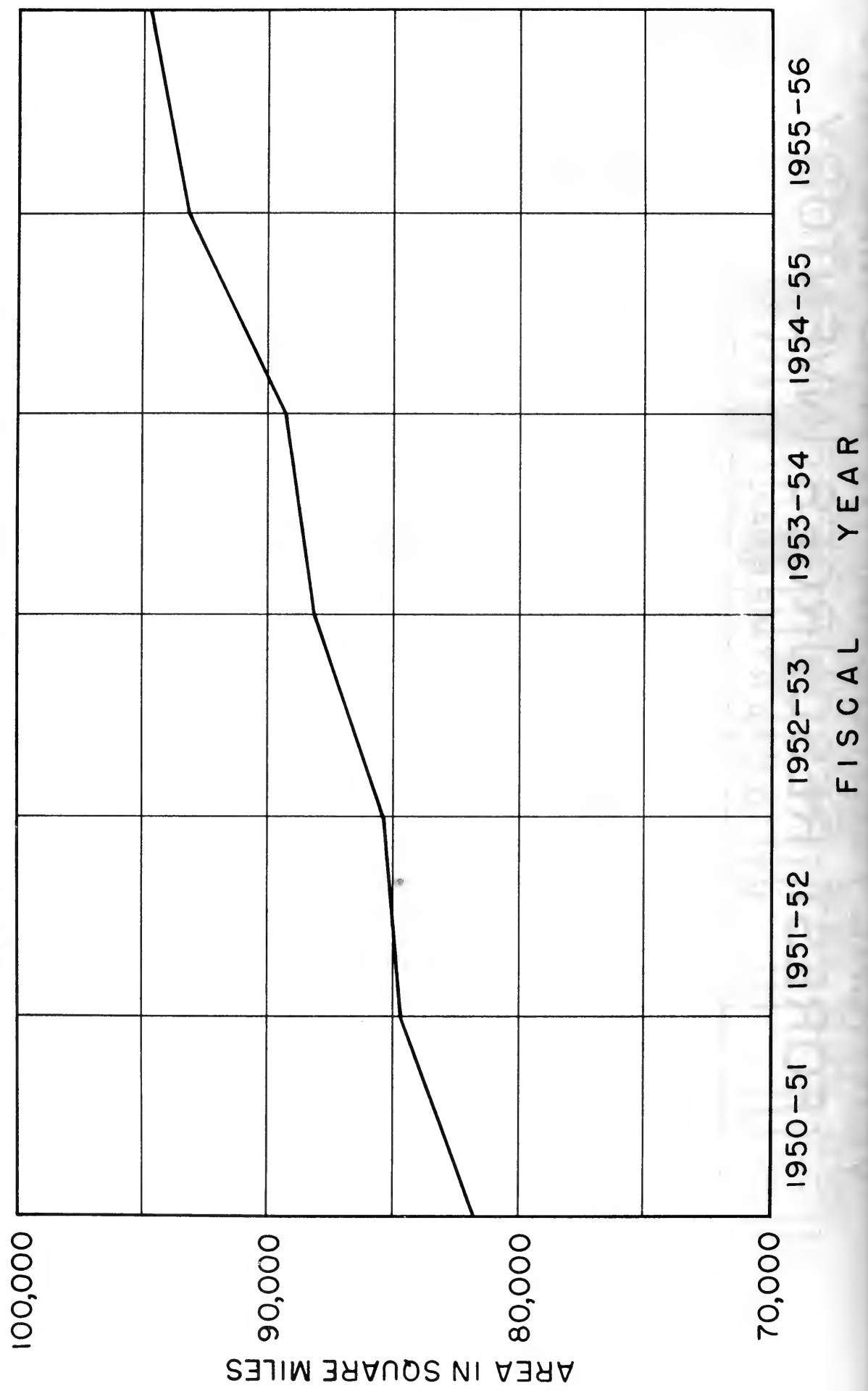
VERTICAL PHOTOGRAPHY AND MAPPING FOREST RESOURCES INVENTORY

BY DEPARTMENTAL STAFF



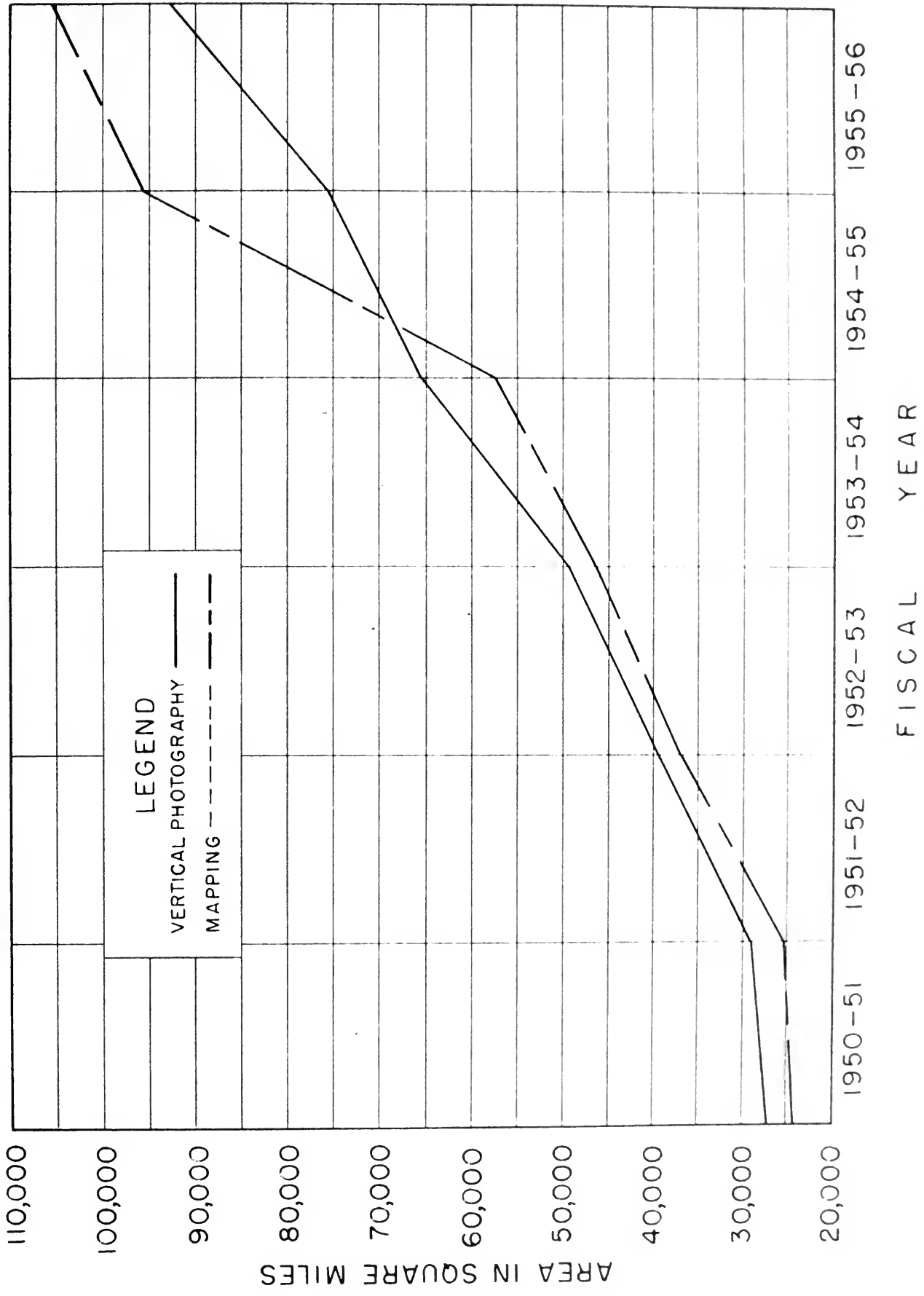
1950-51 1951-52 1952-53 1953-54 1954-55 1955-56
PLANIMETRIC MAPPING FOR F.R.I. BY DEPARTMENTAL STAFF COMPLETED DURING FISCAL YEAR 1954-5.

VERTICAL PHOTOGRAPHY OTHER THAN FOREST RESOURCES INVENTORY



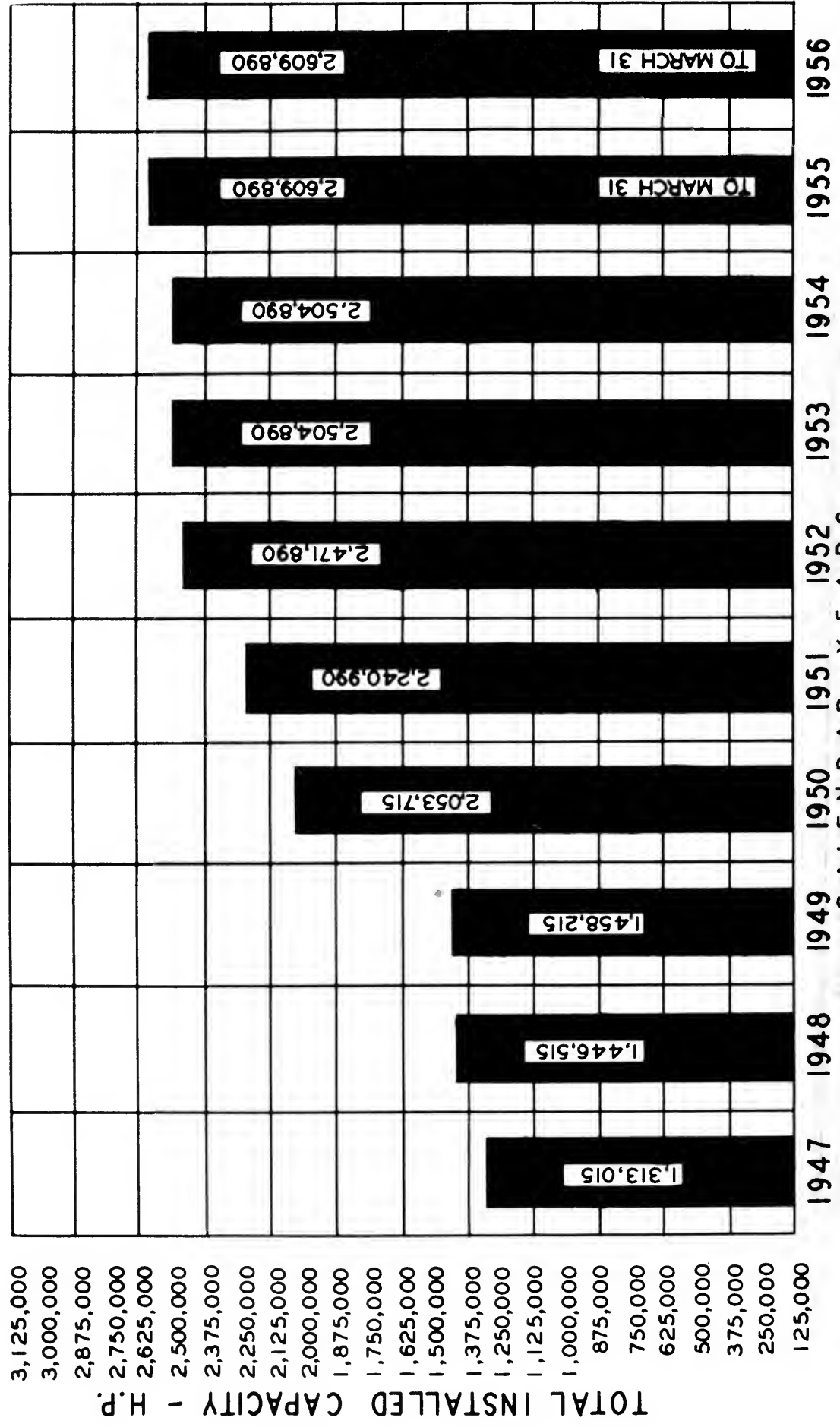
PROGRESS CHART

VERTICAL PHOTOGRAPHY AND MAPPING



INSTALLED CAPACITY IN HORSE-POWER

OF ALL PLANTS UNDER CROWN LEASE FOR YEARS 1947 - 1956

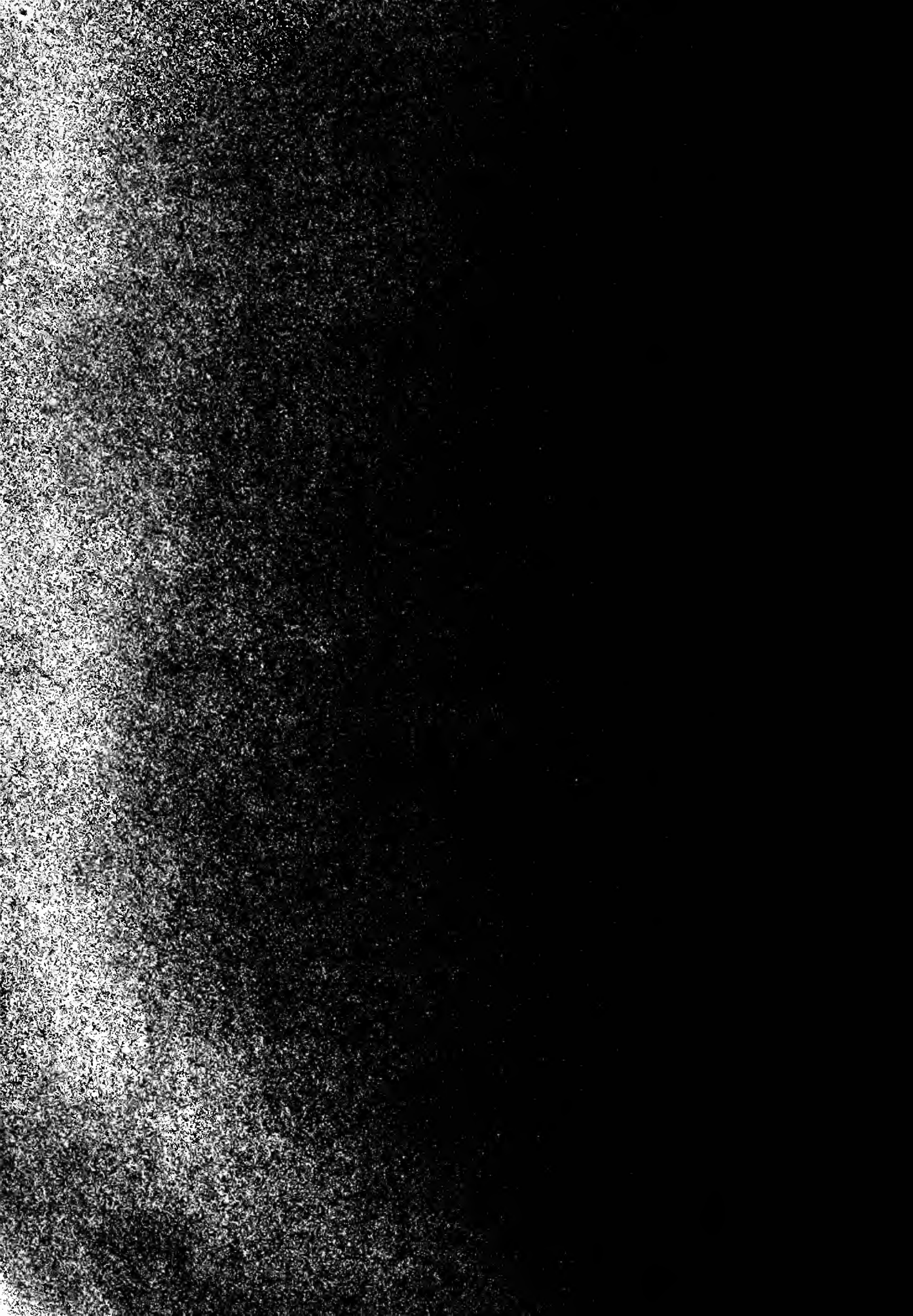


APPLICABLE TO ALL YEARS

1947-1956

SECTION NO. 12

DIVISION of TIMBER MANAGEMENT



DIVISION OF TIMBER MANAGEMENT

FOREST RESOURCES INVENTORY

Under this program 26,025 square miles of photography was done, 3,178 square miles of planimetric mapping, 9,500 square miles of photo mapping and 9,790 square miles of field cruising during 1955-56.

Since the organization of Forest Resources Inventory in 1946 the objective in the inventory program has been increased from 125,000 square miles to 300,000 square miles. To date the following has been completed, Aerial Photography 283,563 square miles; Planimetric Mapping 241,815 square miles; Photo Mapping 20,500 square miles; Field work 117,239 square miles, with private companies supplying inventories in 80,000 square miles, this making the publication of final reports on 16 districts possible.

During the year cull studies were carried on in Geraldton, Kapuskasing, Swastika, Tweed and Lindsay District.

STAND IMPROVEMENT 1956

Following the policy to improve stands which may secure financial returns in a short time, the work in 1955-56 was conducted in Southern Ontario, and here, again, on good and easily accessible sites only.

We aimed at doing the work on a rather small area, but thoroughly, primarily to train a sufficient number of labourers for any future expansion, and to cover the types of improvement work which have a future in the existing condition.

Along that line, yellow birch seedlings were released from competitive vegetation on some cut-overs. Valuable white pine, white spruce, jack pine, and red pine stands or young growth, were cleaned and thinned out to stimulate quality growth; salvage operations, by cutting scattered old white pine trees which were affected by blister rust and damaged by fire, were combined with the release of white pine regeneration and ribes eradication. Woods operations were continued in marginal stands at Petawawa with a view to promoting natural regeneration of valuable species. In two Districts,

work has started on planning more detailed forest management practices aiming at making better use of site and growing quality timber.

Salvage operations and ribes eradication were done on approximately 450 acres, and yellow birch was released on 400 acres. Tending of young growth involved some 490 acres. The two areas designed for detailed forest management cover some 6,000 acres.

MANAGEMENT PLANS - MARCH 31, 1956

There are 39 Company Units with an area of 78,382 square miles.

Of these units...

27 plans have been received	-	57,706	square miles
6 plans are not yet due	-	7,861	" "
<u>6 plans are overdue</u>	-	<u>12,815</u>	" "
39		78,382	" "

There are 82 Crown Management Units for which the Department staff is responsible for preparing the Management Plan.

Of these units...

9 plans are not yet due.

1 plan is over-due.

72 plans have been written covering an area of 119,015 square miles.

The 10 units without management plans are newly formed or recently altered units, for which we do not have the present area.

Within the Crown units, there are 57 management plans to be prepared by licensees, covering an area of 12,457 square miles.

Of these plans...

7 are not yet due		1,140	square miles
5 are overdue		2,243	" "
<u>45 have been received</u>		<u>9,074</u>	" "
57		12,457	" "

Handwritten calculations on the right side of the page:

$$\begin{array}{r}
 119,015 \\
 12,457 \\
 \hline
 106,558 \\
 78,382 \\
 \hline
 184,940 \\
 \hline
 690 \\
 12,457 \\
 \hline
 197,397
 \end{array}$$

ACCESS ROADS - CAPITAL LOAN FUND

During the 1955 session of the Legislature a sum of \$500,000.00 was voted for the construction of forest roads on unalienated Crown land which would open up areas of mature and overmature timber which should be harvested. In 1955-56 the following roads were built.

Pembroke (Crooked Chute) 6 miles complete.

Pembroke (White Partridge) 2 miles complete, 6 miles graded.

Swastika (Englehart) 6 miles.

Pembroke (Cameron Lake) 5½ miles.

Also several miles of previously built access roads were maintained.

The total expenditure being \$95,000.00.

TIMBER SALES 1955-56

	<u>No.</u>	<u>Area</u>
Crown Timber Sales C.T.A. 2 (1)	31	105.07
Crown Timber Sales C.T.A. 3 (1)	46	14,868.23
Crown Timber Sales C.T.A. 4 (1)	<u>7</u>	<u>163.56</u>
Total	84	15,136.86

ABANDONMENTS 1955-56

In the fiscal year 1955-56 licensed areas in the amount of 12,084.84 square miles were abandoned.

Summary of area under Crown Timber Licence classified in accordance with the Crown Timber Act 1952 - as at March 31st, 1956.

Year	Licences under Section 2	Licences under Section 3	Licences Under Section 4	Total Area
1954-55	6,435.5	85,075.4	21.1	91,532.00
1955-56	6,140.05	88,273.71	170.26	94,584.02

SUMMARY OF PULPWOOD AND TIMBER AGREEMENT FOR
YEARS 1946-47 TO 1953-54

<u>Fiscal Year</u>	<u>Square Miles</u>	<u>Fiscal Year</u>	<u>Square Miles</u>
1946-47	56,745.00	1950-51	80,460.75
1947-48	66,254.50	1951-52	83,316.00
1948-49	66,980.75	1952-53	87,007.00
1949-50	69,860.75	1953-54	87,007.00

SUMMARY OF VOLUME AND VALUE OF WOOD CUT BY SPECIES
DURING 1954-55.

<u>Species</u>	<u>Cubic Feet</u>	<u>Value</u>
<u>Softwoods</u>		
Balsam	14,093,212.69	\$285,713.07
Cedar	738,499.61	14,070.21
Hemlock	3,871,562.27	104,988.95
Red & White Pine	30,527,550.04	1,683,966.65
Jack Pine	81,778,858.16	2,182,996.28
Spruce	175,666,276.92	6,371,266.91
Tamarac	25,320.03	587.05
Christmas Trees	21,665.00	1,743.20
Softwood - Fuelwood	<u>3,001,473.25</u>	<u>23,924.62</u>
Total Softwoods	309,724,417.97	\$10,669,256.94
<u>Hardwoods</u>		
Ash	24,411.47	1,016.53
Basswood	271,808.49	14,804.49
Beech	42,201.98	1,317.13
Birch	7,505,974.91	487,878.18
Cherry	12,901.50	413.95
Elm	122,560.45	4,704.20
Maple	2,265,074.57	84,785.46
Oak	78,608.86	3,962.34
Poplar	12,955,458.51	181,754.16
Hardwood - Fuelwood	<u>1,802,385.90</u>	<u>22,700.62</u>
Total Hardwoods	25,081,386.64	\$803,337.06
Total All Species	334,805,804.61	\$11,472,594.00

NOTE: Value of export levy not included in above figures.

The mills licensed during the year under The Crown Timber Act 1952 were as follows:

Less than 10,000 ft. daily capacity	1115
10,000 to 50,000 ft. " "	162
Over 50,000 ft.	59
Pulp Mills	29
	<u>1365</u>

Scalers Examinations were held as follows:

<u>Location</u>	<u>Date</u>
May 9th, 1955	Ontario Forest Ranger School, Dorset, Ontario.
May 13th, 1955	Mattawa, Ontario.
May 21st, 1955	Atikokan, Ontario.

TIMBER SALES FROM APRIL 1, 1955, to MARCH 31, 1956

Date Offered 1955	Date of Sale 1955	Locality	Area Sq. M.	No. of Tenders	To Whom Sold	Kind of Timber	Bid	Bonus	Dues	Total
May 2	May 25	Little Township	3	2	William Pedskalney Nellie Lake, Ont.	Spruce Pulpwood Spruce Sawlogs Balsam Pulpwood Poplar Pulpwood Birch Fuelwood Larch Cedar Posts Jack Pine Pulpwood	\$.65 .02 1.00 .10 .10 .10 .005 .20	\$.65 .007 1.10 .10 1.40 1.50 .01 2.00	\$2.80 .033 1.40 1.00 1.20 1.40 1.50 1.01 2.20	\$4.10 .06 3.20 " " " " " " " " " " " " " "
May 9	June 30	Floranna Township	1.1	1	J. E. Martel Box 488, Chapleau	Jack Pine Spruce	.0007 .0005	.003 .003	.0235 .033	0.0272 " " " " " "
May 10	June 30	Township 11F	.9	3	Kormak Lumber Co., Ltd. 6 Dufferin St. Sudbury, Ont.	Jack Pine Spruce	.0085 .0135	.003 .005	.0235 .033	.035 " " " " " "
May 25	June 28	Dunmore Township	1.1	4	H. S. Rodgers Box 81, Englehart	Jack Pine Sawlogs and Poles Spruce Sawlogs Spruce Pulpwood	.04 .04 .033 .30	.0165 .007 .40	.0235 .033 2.80	.08 " " " " 3.50
June 1	June 30	Ramsden Township	1.2	2	Aristide Boisvert La Salle, Quebec	Jack Pine Sawlogs	--	.003	.0235	.0265
June 18	June 24	Parkinson Township	.3	3	W. M. Reid R. R. #1 Iron Bridge, Ont.	White Birch Sawlogs Yellow Birch Sawlogs Maple Sawlogs	5.00 15.00 --	5.00 10.00 3.00	3.00 5.00 5.00	13.00 30.00 8.00
Aug. 22	Sept. 8	Stoddart Township	2	2	J. D. Levesque Hearst, Ont.	Spruce Balsam Poplar	.02 -- --	.017 .0105 --	.033 .0185 .012	.07 " " " "
Aug. 22	Sept. 8	Joly Township	3.44	1	Leo Webster R. R. #1 Sundridge, Ont.	Maple Sawlogs Yellow Birch Sawlogs Hemlock Sawlogs	1.00 1.00 .50	1.00 6.50 2.00	5.00 5.00 3.00	7.00 12.50 5.50
Aug. 23	Sept. 15	Gould Township	.9	6	L. H. Shay Venser Co. of Canada Ltd. Sault Ste. Marie	Maple Sawlogs Yellow Birch Sawlogs Hemlock Sawlogs Oak Sawlogs Spruce Sawlogs	15.00 30.00 11.00 15.00 19.00	5.00 15.00 1.00 5.00 2.00	5.00 5.00 3.00 5.00 4.00	25.00 50.00 15.00 25.00 25.00
Aug. 26	Oct. 11	McLeod, Ellis	23	3	J. Don Cockburn Sturgeon Falls, Ont.	White Pine Sawlogs Red Pine Sawlogs	2.85 2.85	2.50 2.50	5.00 5.00	10.35 10.35
Oct. 20	Sept. 16	Greisinger Township	.3	1	Horace Bowes Box 136 Fort Frances, Ont.	Jack Pine Pulpwood Poplar Pulpwood	.20 .10	.05 --	2.00 1.00	2.25 1.10
Sept. 15	Oct. 5	Area West of Shoal Lake District of Kenora	4.4	1	G. A. Newton 801 Somerset Bldg. Winnipeg, Manitoba	Jack Pine Spruce Balsam Poplar Cedar Poles	.002411 .003058 .000705 .003235 .000588	.0015 .003 .0015 .001 .01	.0235 .033 .0165 .012 .03	.027411 " " " " " " " "
Sept. 27	Oct. 20	Welk Township	.25	6	H. C. Loucks P.O. Box 14 Thessalon, Ontario	Rard Maple Sawlogs Yellow Birch Sawlogs Hemlock Sawlogs White Pine Sawlogs	10.00 25.00 2.00 10.00	3.00 20.00 3.00 10.00	5.00 5.00 3.00 5.00	18.00 50.00 8.00 25.00

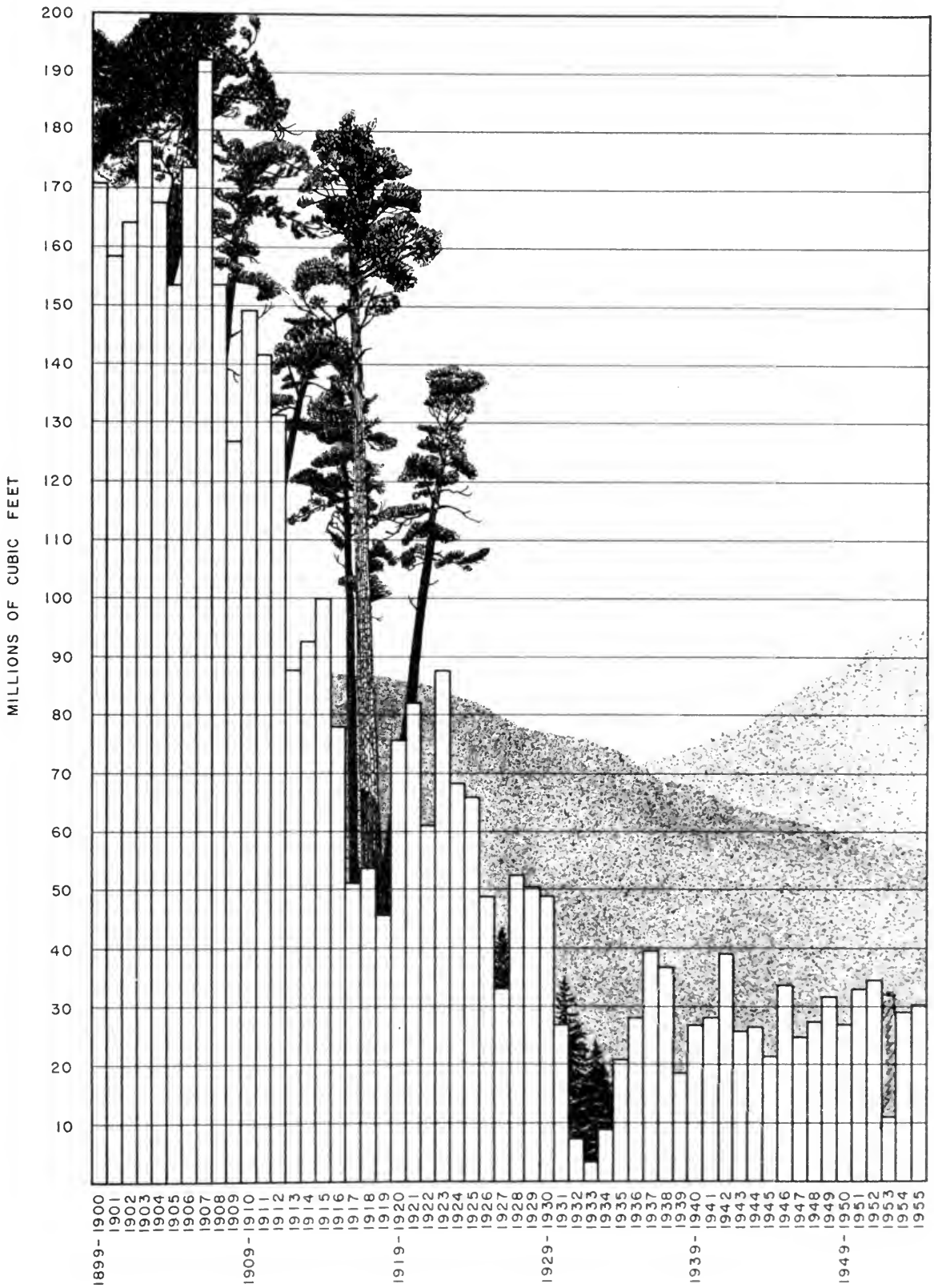
TIMBER SALES FROM APRIL 1, 1955, to MARCH 31, 1956

Date Offered 1955	Locality	Area Sq. M.	No. of Tenders	To Whom Sold	Prices Paid			Total	
					Kind of Timber	Bid \$	Bonus \$		Dues
Sept. 29	Ignace Township	5.8	1	G. M. Jorgenson Box 19, Ignace, Ont.	Jack Pine Pulpwood Spruce Pulpwood	\$ -- --	\$.15 .55	\$2.00 2.80	for each cord 3.35
Oct. 6	Osborne Township	1	2	Prescott and Lussier Osborne, via Tomiko, Ont.	White Pine Sawlogs Yellow Birch Sawlogs Spruce Sawlogs White Birch Sawlogs	1.00 1.00 1.00 2.00	10.00 12.50 5.00 3.00	5.00 5.00 5.00 5.00	MEM MEM MEM MEM
Oct. 11	Phelps Township	7.04	4	Whitman, Linton Lumber Co. Ltd. 293 Worthington West North Bay, Ont.	Maple Sawlogs Yellow Birch Sawlogs Hemlock Sawlogs Basswood Sawlogs Ash Sawlogs Oak Sawlogs Spruce Sawlogs Spruce Pulpwood Balsam Pulpwood Poplar Pulpwood White Birch Pulpwood Cedar Posts	8.00 6.50 1.00 2.00 1.00 3.00 2.00 .25 .25 .25 .25 .0025	1.00 1.00 3.00 3.00 M11 M11 2.00 4.00 1.00 1.00 1.00 1.00 M11	5.00 5.00 3.00 5.00 5.00 5.00 2.80 1.40 1.00 1.00 1.00 .01	for each MEM MEM MEM MEM MEM MEM for each cord MEM MEM MEM MEM 11n. foot
Oct. 18	Area S. of Rush Bay, Kenora District	4.66	3	A. K. Penner R. R. #1, Giroux Manitoba	Spruce Pulpwood Jack Pine Pulpwood Balsam Poplar Poplar Sawlogs Spruce Sawlogs Jack Pine Sawlogs Balsam Sawlogs Red Pine Sawlogs White Pine Sawlogs Cedar Poles Up to 10 cubic feet from 10 to 20 cu. ft.	1.95 1.00 .85 M11 .004 .024 .0125 .0075 10.00 10.00 10.00 .005 .005	.25 M11 M11 M11 .003 M11 M11 M11 5.00 5.00 5.00 .005 .005	2.80 2.00 1.40 1.00 .012 .033 .036 .024 .0165 5.00 5.00 .03 .04	MEM MEM MEM MEM MEM MEM MEM MEM MEM MEM MEM MEM MEM MEM
Nov. 1	Zealand Township	.25	2	Carl Schmidt 106 Princess St. Dryden, Ontario	Spruce Pulpwood Jack Pine Pulpwood Balsam Pulpwood Poplar Pulpwood Poplar Sawlogs Jack Pine Sawlogs Balsam Sawlogs	.10 .15 .10 .05 .025 .0165 .005	1.00 .35 .25 .25 .008 .025 .0185	2.80 2.00 1.40 1.00 .012 .025 .0165	for each cord for each cord MEM MEM MEM MEM MEM
Nov. 2	Lockhart Township	6.58	6	Whitman-Linton Lumber Co. Ltd. 282 Worthington W. North Bay, Ontario	White Pine Sawlogs Yellow Birch Sawlogs Spruce Sawlogs White Birch Sawlogs Hard Maple Sawlogs	8.00 12.00 4.00 13.00 10.00	7.00 4.00 4.00 4.00 2.00	5.00 2.00 3.00 3.00 5.00	MEM MEM MEM MEM MEM
Nov. 4	Hartman Township	.5	1	D. Levesque Dryden, Ontario	Jack Pine Sawlogs Jack Pine Pulpwood Spruce Pulpwood	.01 .05 .05	.0165 .30 .95	.0235 2.00 2.80	for each cu. ft. MEM MEM
Dec. 1	Gross Township	.5	3	H. S. Rodgers Box 81 Englehart, Ont.	Jack Pine Spruce Poplar	.065 .057 M11	.0015 M11 .006	.0235 .033 .012	for each cu. ft. MEM MEM

TIMBER SALES FROM APRIL 1, 1955, TO MARCH 31, 1956

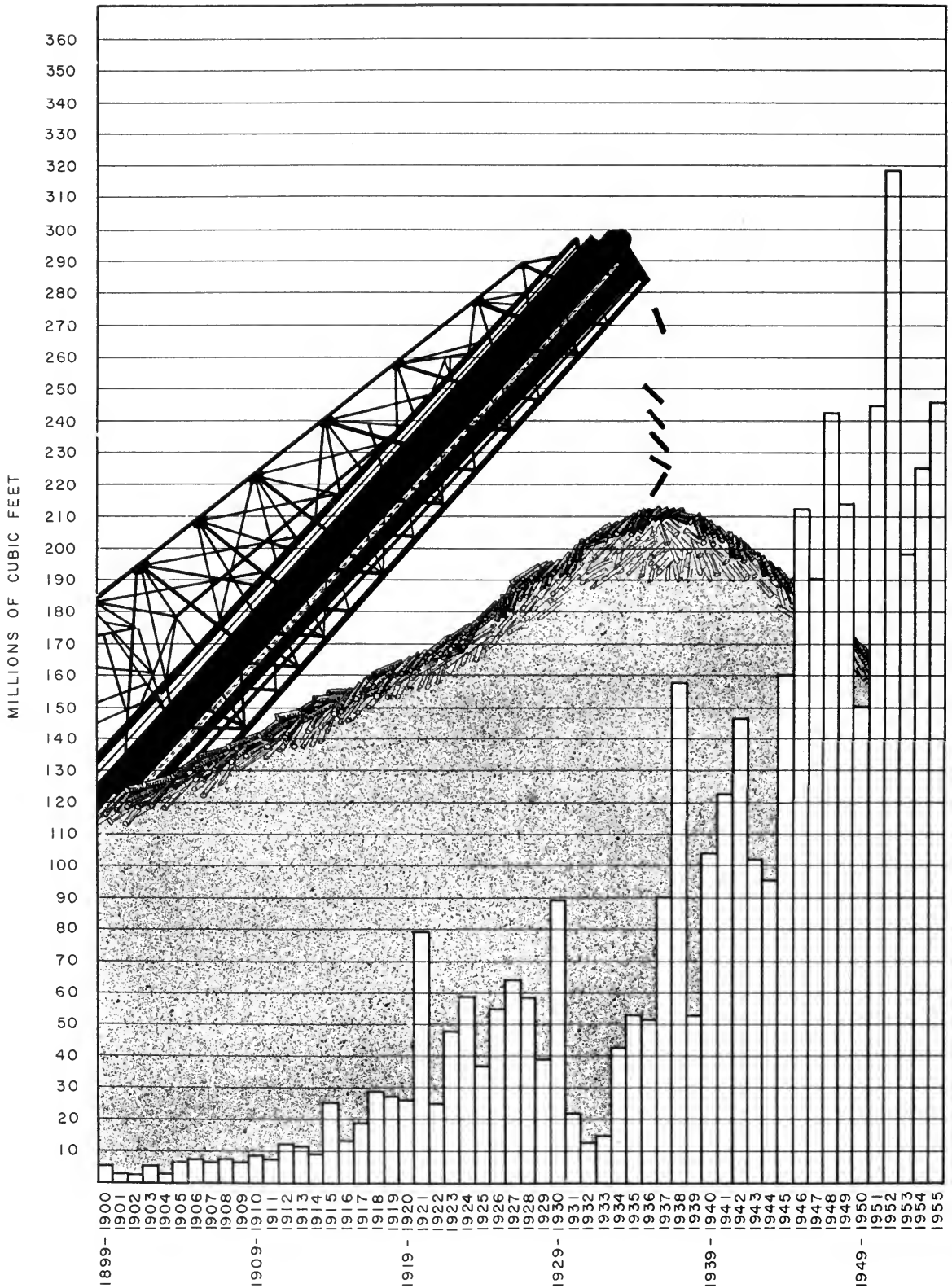
Date Offered 1955	Date of Sale 1955	Area Sq. M.	Locality	No. of Ten- ders	To Whom Sold	Kind of Timber	Prices Paid			Total	
							Bid	Bonus	Dues		
Dec. 6	Dec. 29	24.4	Leonard Township	2	William Pollock & Sons Limited Englehart, Ont.	Red Pine Sawlogs White Pine Sawlogs	\$5.00 5.00	\$5.00 5.00	\$15.00 15.00	for each MEM " " "	
Dec. 14	1956 Jan. 10	.9	Chapman Township	2	Gordon Prior Sundridge, Ont.	Hemlock Sawlogs Maple Yellow Birch Sawlogs Spruce Sawlogs Elm Sawlogs Beech Sawlogs Balsam Sawlogs	3.00 3.00 5.00 6.00 5.00 3.00 11.00	4.00 2.00 15.00 4.00 M1 4.00 M1	10.00 10.00 25.00 10.00 15.00 15.00	for each MEM " " " " " " " " " " " " " " " " " "	
Dec. 14	Jan. 10	.8	Ballantyne Township	2	Canadian Wood Products Limited Kearney, Ont.	Yellow Birch Sawlogs Maple Sawlogs Hemlock Sawlogs Spruce sawlogs White Pine Sawlogs	5.00 2.00 M1 4.00 M1	15.00 2.00 4.00 3.00 10.00	25.00 5.00 7.00 10.00 15.00	for each MEM " " " " " " " " " " " "	
Dec. 14	Jan. 10	1	Laurier Township	2	Canadian Wood Products Limited Kearney, Ont.	Hemlock Sawlogs Spruce Sawlogs Balsam Sawlogs Yellow Birch Sawlogs Maple Sawlogs	M1 M1 M1 5.00 2.00	4.00 6.00 6.00 15.00 2.00	7.00 10.00 10.00 25.00 9.00	for each MEM " " " " " " " " " " " "	
Dec. 6	1955 Dec. 22	.14	South Lorrain Township	4	G. D. Bowers R. B. #1 North Cobalt, Ont.	Red Pine Sawlogs White Pine Sawlogs	4.00 5.50	7.50 7.50	16.50 18.00	for each MEM " " "	
Jan. 10	Jan. 27	1.42	Rebecca Island of Rainy Lake Rainy River District	1	A. Sawfield 603 Nelson St. Fort Frances, Ont.	Red Pine Sawlogs Jack Pine Sawlogs Forest Red & Jack Pine Up to 10 cubic feet 10 to 20 " " 20 to 30 " " 30 cu. ft. and over	.50 .25 M1 " " " " " "	7.00 1.00 .01 .01 .01 .01	12.50 5.25 .04 .02 .06 .07	for each MEM " " " " " " for each cu. ft. " " " " " " " " "	
Jan. 10	Jan. 27	1.38	Gurd Township	2	Thos. D. Kelly Restoule, Ont.	Hemlock Sawlogs Maple Sawlogs Yellow Birch Sawlogs	2.25 2.75 10.50	4.00 3.00 13.00	9.25 10.75 28.50	for each MEM " " " " " "	
Jan. 11	Jan. 31	1.6	Haines Township	1	A. E. Jacobson Lumber Co. Ltd. P. O. Box 234 Port Arthur, Ont.	Red Pine Sawlogs White Pine Sawlogs Jack Pine Sawlogs Spruce Sawlogs Balsam Sawlogs Cedar Posts	2.00 2.00 2.00 1.50 .50 .00125	7.00 7.00 1.50 2.50 1.50 M1	14.00 14.00 7.50 8.00 6.00 .0125	for each MEM " " " " " " " " " " " " lin. foot	
Jan. 12	Jan. 31	1.2	Goldie Township	17	Harold Craig Kabeveka Falls, Ont.	Jack Pine Sawlogs Spruce Sawlogs	.09 .08	.0005 .002	.0235 .033	.114 .115	for each cu. foot " " "
Jan. 20	Feb. 14	4.01	Ells Peninsula Lake of the Woods District of Kenora	1	Frank Peterson Box 358 Kenora, Ont.	White Pine Sawlogs Red Pine Sawlogs Jack Pine Sawlogs Jack Pine Pulpwood Spruce Pulpwood Balsam Sawlogs Balsam Pulpwood Poplar Sawlogs Poplar Pulpwood	3.50 3.50 1.50 .25 .40 M1 .35 .10 .10	5.00 5.00 1.50 .25 .70 M1 .10 M1 M1	13.50 13.50 7.00 2.50 3.90 4.00 1.85 3.10 1.10	for each MEM " " " " " " for each cord MEM " " " MEM " " " MEM " " " MEM " " " cord	
Total -											
											Sq. M. 105.07

WHITE AND RED PINE
SAWLOG TIMBER
CUT ON CROWN LANDS



335,000

PULPWOOD TIMBER — ALL SPECIES CUT ON CROWN LANDS



Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Ash	1,983		130,492	24,402.00	651.60	364.25	1,015.85
Balsam	45,990		1,211,879	226,621.37	4,847.51	2,401.27	7,248.78
Basswood	21,966		1,449,410	271,039.67	7,237.48	7,423.35	14,660.83
Beech	3,434		225,679	42,201.97	677.07	640.06	1,317.13
Birch	399,964		36,294,460	6,787,064.02	178,976.98	274,040.67	453,017.65
Cedar	15,868		519,470	97,140.89	1,558.42	377.59	1,936.01
Cherry	991		68,992	12,901.50	344.96	68.99	413.95
Elm	7,183		653,728	122,247.14	3,268.76	1,414.37	4,683.13
Hemlock	322,946		20,366,902	3,808,610.67	60,729.69	42,467.88	103,197.17
Maple	133,598		12,031,381	2,249,866.25	60,157.24	23,588.68	83,745.92
Oak	5,037		418,159	78,195.73	2,090.25	1,845.04	3,935.29
Red and white pine	1,765,990		152,043,125	28,432,064.39	761,204.23	821,691.15	1,582,695.38
Jack pine	2,398,906		66,067,773	12,354,673.51	264,306.57	127,366.14	391,674.71
Poplar	126,560		5,687,255	1,100,910.68	17,651.47	5,443.86	23,095.33
Spruce	1,032,857		31,356,769	5,863,715.80	126,207.02	79,957.51	206,164.53
Tamarac	5,361		116,129	21,716.12	348.39	141.34	489.73
Total Ontario Scale	6,288,654		328,841,603	61,493,379.71	1,490,257.64	1,389,233.75	2,879,491.39
Boyle Scale							
Basswood	4		491	139.94	2.46	5.65	8.11
Birch	17,167		1,577,836	574,332.30	7,814.50	17,733.99	25,548.09
Elm	9		1,215	301.32	6.08	13.97	20.05
Hemlock	2,724		234,945	62,260.42	704.84	1,057.25	1,762.09
Maple	515		49,348	12,287.65	246.74	567.50	814.24
Red and white pine	79,741		6,756,216	1,689,054.00	33,781.10	40,898.24	74,679.34
Jack pine	313,022		5,940,144	2,601,783.07	23,581.84	27,662.54	51,244.38
Poplar	975		15,806	6,306.59	47.42		47.42
Spruce	163,328		2,320,775	879,573.72	9,283.10	12,498.03	21,781.13
Total Boyle Scale	577,485		16,896,776	5,826,039.01	75,468.08	100,436.77	175,904.85
Cubic Foot Measure							
Sawlogs							
Ash			9.46	9.46	.68		.68
Balsam	27,610		254,834.12	254,834.12	6,082.41	957.81	7,040.22
Basswood			628.88	628.88	135.55		135.55
Birch	9,471		142,954.59	142,954.59	9,127.79	5.73	9,133.52
Cedar	1,266		24,077.15	24,077.15	927.86	23.62	951.48
Elm			12.00	12.00	1.02		1.02
Maple	180		2,918.68	2,918.68	225.30		225.30
Oak	15		413.12	413.12	27.05		27.05
Red and white pine	9,248		106,014.15	106,014.15	7,139.72		7,139.72
Jack pine	783,401		4,918,123.30	4,918,123.30	142,848.78	17,259.41	160,108.19
Poplar	46,519		352,323.56	352,323.56	6,078.36	70.15	6,148.51
Spruce	1,239,846		6,223,224.30	6,223,224.30	226,873.91	12,173.21	239,047.12
Tamarac	321		3,603.92	3,603.92	97.32		97.32
Total sawlogs (cubic)	2,117,877		12,029,137.23	12,029,137.23	399,565.75	30,489.93	430,055.68
Boom Timbers, Poles, Piling							
Booms							
Cedar	519		5,699.54	5,699.54	214.84		214.84
Hemlock	44		691.18	691.18	29.69		29.69
Red and white pine	4,896		129,696.54	129,696.54	6,861.55	100.19	6,961.74
Jack pine	22,870		303,562.66	303,562.66	12,683.90	424.75	13,108.65
Spruce	19,868		445,736.83	445,736.83	25,035.82	22.73	25,058.55
Poles							
Cedar	10,461		106,405.83	106,405.83	4,052.59	227.99	4,280.58
Jack pine	102,552		1,212,504.84	1,212,504.84	48,735.76	4,067.85	52,803.61
Red pine	7,972		170,720.98	170,720.98	8,073.93	4,216.54	12,290.47
Spruce	4		47.18	47.18	1.79	.47	2.26
Piling							
Jack pine	53		1,229.43	1,229.43	60.48		60.48
Spruce	78		1,386.95	1,386.95	62.60		62.60
Total boom timber, poles, piling	169,317		2,377,681.96	2,377,681.96	105,812.95	9,060.52	114,873.47
Total cubic foot measure	2,287,194		14,406,819.19	14,406,819.19	505,378.70	39,550.45	544,929.15
Cordage							
Pulpwood							
Balsam	160,130.32			13,611,757.20	217,358.53	54,065.54	271,424.07
Balsam export levy	(6,518.44)			(554,067.40)		6,534.55	6,534.55
Jack pine	709,727.78			60,326,861.30	1,419,455.39	94,472.87	1,513,928.26
Jack pine export levy	(52,406.80)			(4,454,578.00)		26,202.44	26,202.44
Poplar	135,246.02			11,495,911.70	135,246.02	17,216.88	152,462.90
Poplar export levy	(26,983.53)			(2,293,600.05)		2,698.39	2,698.39
Spruce	1,888,866.55			160,553,656.75	5,232,900.33	634,704.62	5,867,604.95
Spruce export levy	(149,664.50)			(12,721,482.50)		149,672.76	149,672.76
Total pulpwood	2,893,978.67			245,988,186.95	7,004,960.27	985,588.05	7,990,528.32
Fuelwood							
Hardwood	21,204.54			1,802,385.90	21,204.54	1,596.08	22,800.62
Softwood	35,311.45			3,001,473.25	17,655.80	6,268.82	23,924.62
Total Fuelwood	56,515.99			4,803,859.15	38,860.34	7,864.90	46,725.24
Total cordage	2,950,494.66			250,792,046.10	7,043,820.61	993,432.95	8,037,253.56
Miscellaneous							
Car stakes - pieces - spruce	1,624			1,624.00	78.92		78.92
Lagging, lin. ft.	25,361		8,482,377	1,696,475.40	11,445.69		11,445.69
Piling, lin. ft.			4,920	2,460.00	100.08		100.08
Posts, lin. ft., cedar	76,626		1,003,166	501,533.00	6,200.19	210.47	6,410.66
Posts, pieces, cedar	3,036			3,643.20	276.64		276.64
Poles, pieces, poplar	4,008			60,120.00	68.00		68.00
Christmas trees	43,330			21,665.00	1,743.20		1,743.20
Total miscellaneous	153,985		9,490,463	2,287,520.60	19,912.72	210.47	20,123.19
Total Ontario Scale	6,288,654		328,841,603	61,493,379.71	1,490,257.64	1,389,233.75	2,879,491.39
Total Boyle Scale	577,485		16,896,776	5,826,039.01	75,468.08	100,436.77	175,904.85
Total cubic foot measure	2,287,194		14,406,819.19	14,406,819.19	505,378.70	39,550.45	544,929.15
Total cordage				250,792,046.10	7,043,820.61	993,432.95	8,037,253.56
Grand total	9,307,318		2,950,494.66	--	334,605,804.61	9,134,837.75	2,522,864.39

Chapleau

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
					\$	\$	\$
Board Foot Measure							
Ontario Scale							
Red and white pine	46,067		5,957,088	1,113,975.46	29,785.46	26,820.99	56,606.45
Jack pine	258,045		5,441,008	1,017,468.50	21,764.03	--	21,764.03
Spruce	18,791		344,915	64,499.10	1,379.67	13.00	1,392.67
Total Ontario Scale	322,903		11,743,011	2,195,943.06	52,929.16	26,833.99	79,763.15
Doyle Scale							
Red and white pine	1,262		41,145	10,286.25	205.73	246.87	452.60
Jack pine	104,626		1,911,265	837,134.07	7,466.33	4,857.16	12,323.49
Spruce	40,991		373,201	141,443.18	1,492.80	839.70	2,332.50
Total Doyle Scale	146,879		2,325,611	988,863.50	9,164.86	5,943.73	15,108.59
Cubic Foot Measure							
Sawlogs							
Jack pine	145,782	1,121,423.99		1,121,423.99	26,357.83	7,658.27	34,016.10
Spruce	2,804	20,634.96		20,634.96	681.34	89.47	770.81
Total sawlogs (cubic)	148,586	1,142,058.95		1,142,058.95	27,039.17	7,747.74	34,786.91
Boom Timber, Piling, Poles							
Booms							
Red and white pine	35		1,198.25	1,198.25	70.53	--	70.53
Jack pine	8,571		90,739.87	90,739.87	3,599.51	--	3,599.51
Total booms	8,606		91,938.12	91,938.12	3,670.04	--	3,670.04
Poles							
Jack pine	1,113		11,074.23	11,074.23	388.40	--	388.40
Total boom timber, piling, poles	9,719		103,012.35	103,012.35	4,058.44	--	4,058.44
Total cubic foot measure	158,305		1,245,071.30	1,245,071.30	31,097.61	7,747.74	38,845.35
Cordage							
Pulpwood							
Balsam		257.66		21,901.10	360.73	11.83	372.56
Jack pine	127,315.68			10,821,832.80	254,631.36	15,620.08	270,251.44
Poplar	11,571.93			983,614.05	11,571.93	532.00	12,103.93
Spruce	33,763.69			2,869,913.65	94,538.33	2,850.73	97,389.06
Spruce export levy	(3,542.13)			(301,081.05)	--	3,542.13	3,542.13
Total pulpwood	172,908.96			14,697,261.60	361,102.35	22,556.77	383,659.12
Fuelwood							
Hardwood		1,614.00		137,190.00	1,614.00	46.00	1,660.00
Softwood		1,412.00		120,020.00	706.00	576.00	1,282.00
Total fuelwood		3,026.00		257,210.00	2,320.00	622.00	2,942.00
Total cordage		172,934.96		14,954,471.60	363,422.35	23,178.77	386,601.12
Miscellaneous							
Car stakes (birch)	114			114.00	3.42	--	3.42
Total miscellaneous	114			114.00	3.42	--	3.42
Total Ontario Scale	322,903		11,743,011	2,195,943.06	52,929.16	26,833.99	79,763.15
Total Doyle Scale	146,879		2,325,611	988,863.50	9,164.86	5,943.73	15,108.59
Total cubic measure	158,305		1,245,071.30	1,245,071.30	31,097.61	7,747.74	38,845.35
Total cordage		175,934.96		14,954,471.60	363,422.35	23,178.77	386,601.12
Grand total	628,201	175,934.96		19,384,463.46	456,617.40	63,704.23	520,321.63

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Cochrane

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Balsam	172		6,891	1,288.62	27.56	2.41	29.97
Birch	10,013		262,189	49,029.34	766.58	3.54	790.12
Red and white pine	3,534		292,621	54,720.13	1,463.12	1,028.92	2,492.04
Jack pine	287,037		8,239,907	1,540,862.61	32,959.63	11,873.02	44,832.65
Poplar	4,182		160,036	29,926.73	480.20	92.47	572.67
Spruce	110,179		2,537,869	474,581.50	10,151.49	3,957.64	14,109.13
Total Ontario Scale	415,117		11,499,513	2,150,408.93	45,868.58	16,958.00	62,826.58
Doyle Scale							
Birch	1,547		35,784	13,025.38	107.35		107.35
Red and white pine	1,819		128,537	32,134.25	642.69	778.20	1,420.89
Jack pine	115,426		1,992,140	872,557.32	7,968.56	10,956.77	18,925.33
Poplar	975		15,806	6,306.59	47.42		47.42
Spruce	87,025		1,241,335	470,465.96	4,965.34	6,828.60	11,793.94
Total Doyle Scale	206,792		3,413,602	1,394,489.50	13,731.36	18,563.57	32,294.93
Cubic Foot Measure							
Sawlogs							
Birch	149		1,045.25	1,045.25	31.38		31.38
Cedar	59		419.41	419.41	12.59		12.59
Jack pine	277,173		1,784,524.44	1,784,524.44	63,903.49		63,903.49
Poplar	2,661		20,477.18	20,477.18	423.41		423.41
Spruce	97,679		565,901.26	565,901.26	21,008.30	2.29	21,010.59
Tamarac	71		290.40	290.40	8.71		8.71
Total sawlogs (cubic)	377,792		2,372,657.94	2,372,657.94	85,387.68	2.29	85,390.17
Boom Timber, Piling, Poles							
Booms							
Jack pine	25		480.90	480.90	21.08		21.08
Spruce	1,011		29,047.72	29,047.72	1,563.87		1,563.87
Poles							
Cedar	924		13,496.84	13,496.84	586.38		586.38
Total boom timber, piling, poles	1,960		43,025.46	43,025.46	2,171.33		2,171.33
Total cubic foot measure	379,752		2,415,683.40	2,415,683.40	87,559.21	2.29	87,561.50
Cordage							
Pulpwood							
Balsam			29,581.99	2,514,469.15	41,414.79	3,835.07	45,249.86
Balsam export levy			(3,579.41)	(304,249.85)			3,579.41
Jack pine			44,861.46	3,813,224.10	89,722.92	4,570.98	94,293.90
Poplar			921.17	78,299.45	921.17	240.33	1,161.50
Spruce			411,003.71	34,935,315.35	1,098,865.56	150,788.78	1,249,654.34
Spruce export levy			(4,187.08)	(355,901.80)			4,187.08
Total pulpwood			486,368.33	41,341,308.05	1,230,924.44	167,201.65	1,398,126.69
Fuelwood							
Hardwood			1,734.84	147,461.40	1,734.84	890.39	2,625.23
Softwood			10,007.47	850,634.95	5,003.78	3,607.56	8,611.34
Total fuelwood			11,742.31	998,096.35	6,738.62	4,497.95	11,236.57
Total cordage			498,110.64	42,339,404.40	1,237,663.06	171,699.60	1,409,362.66
Miscellaneous							
Posts							
Cedar, 1in. ft.	555		4,438	2,219.00	44.19		44.19
Cedar pieces	2,986			3,583.20	271.64		271.64
Total miscellaneous	3,541		4,438	5,802.20	315.83		315.83
Total Ontario Scale	415,117		11,499,513	2,150,408.93	45,868.58	16,958.00	62,826.58
Total Doyle Scale	206,792		3,413,602	1,394,489.50	13,731.36	18,563.57	32,294.93
Total cubic measure	379,752		2,415,683.40	2,415,683.40	87,559.21	2.29	87,561.50
Total cordage			498,110.64	42,339,404.40	1,237,663.08	171,699.60	1,409,362.66
Grand total	1,005,202		498,110.64	48,305,788.43	1,385,138.06	207,223.46	1,592,361.50

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - .85.

Permits included in the above

Fort Frances

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
					\$	\$	\$
<u>Board Foot Measure</u>							
<u>Ontario Scale</u>							
Balsam	621		19,832	3,708.58	79.32	37.02	116.34
Red and white pine	16,239		832,745	155,723.31	4,163.74	4,251.64	8,415.38
Jack pine	95,084		2,840,864	531,241.57	11,363.47	217.67	11,581.14
Poplar	6,427		271,654	50,799.30	814.87	125.87	940.74
Spruce	12,323		156,105	29,191.64	1,424.42	533.12	1,957.54
Total Ontario Scale	130,694		4,121,200	770,664.40	17,845.82	5,165.32	23,011.14
<u>Cubic Foot Measure</u>							
<u>Boom Timber, Piling, Poles</u>							
<u>Booms</u>							
Red and white pine	157		7,628.54	7,628.54	451.20		451.20
Jack pine	844		5,436.93	5,436.93	186.41		186.41
Spruce	138		3,239.24	3,239.24	168.08		168.08
Total boom timber, piling, poles	1,139		16,304.71	16,304.71	805.69		805.69
Total cubic foot measure	1,139		16,304.71	16,304.71	805.69		805.69
<u>Cordage</u>							
<u>Pulpwood</u>							
Balsam		698.82		59,399.70	978.34	266.74	1,245.08
Jack pine		40,317.58		3,426,994.30	80,635.19	4,570.83	85,206.02
Jack pine, export levy		(38,709.19)		(3,290,281.15)		19,354.61	19,354.61
Poplar		28,872.51		2,454,163.35	28,872.51	4,126.60	32,999.11
Poplar, export levy		(11,205.87)		(952,498.95)		1,120.60	1,120.60
Spruce		27,805.02		2,363,426.70	77,854.06	8,121.55	85,975.61
Total pulpwood		97,693.93		8,303,984.05	188,340.10	37,560.93	225,901.03
<u>Fuelwood</u>							
Softwood		590.28		50,173.80	295.14	42.08	337.22
Total fuelwood		590.28		50,173.80	295.14	42.08	337.22
Total cordage		98,284.21		8,354,157.85	188,635.24	37,603.01	226,238.25
<u>Miscellaneous</u>							
<u>Posts</u>							
Cedar, lin. ft.	824		5,768	2,884.00	57.68		57.68
Total miscellaneous	824		5,768	2,884.00	57.68		57.68
Total Ontario Scale	130,694		4,121,200	770,664.40	17,845.82	5,165.32	23,011.14
Total cubic measure	1,139		16,304.71	16,304.71	805.69		805.69
Total cordage		98,284.21		8,354,157.85	188,635.24	37,603.01	226,238.25
Total	132,657	98,284.21		9,144,010.96	207,344.43	42,768.33	250,112.76

Conversion factor - Ontario Scale to cubic measure - 5.35

Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Geraldton

Summary of Volume and Value of Timber Cut During Period April 1, 1954 to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
					\$	\$	\$
Cubic Foot Measure							
Sawlogs							
Balsam	35		200.77	200.77	3.31	.60	3.91
Jack pine	295		1,091.73	1,091.73	25.66	7.64	33.30
Spruce	408		1,442.02	1,442.02	47.59	10.09	57.68
Total sawlogs (cubic)	738		2,734.52	2,734.52	76.56	18.33	94.89
Boom Timber, Piling, Poles							
Booms							
Spruce	106		1,400.73	1,400.73	58.18		58.18
Poles							
Jack pine	2,046		35,658.01	35,658.01	1,535.16		1,535.16
Total boom timber, piling, poles	2,152		37,058.74	37,058.74	1,593.34		1,593.34
Total cubic foot measure	2,890		39,793.26	39,793.26	1,669.90	18.33	1,688.23
Cordage							
Pulpwood							
Balsam		25,266.38		2,147,642.30	35,368.95	8,938.09	44,307.04
Balsam export levy		(275.36)		(23,405.60)		275.36	275.36
Jack pine		137,799.37		11,712,946.45	275,598.54	12,460.72	288,059.26
Jack pine export levy		(628.75)		(53,443.75)		314.38	314.38
Poplar		49,906.28		4,242,033.80	49,906.28	4,962.67	54,868.95
Spruce		284,866.01		24,213,610.85	796,782.82	73,109.46	869,892.28
Spruce export levy		(1,504.55)		(127,886.75)		1,504.55	1,504.55
Total pulpwood		497,838.04		42,316,233.40	1,157,656.59	101,565.23	1,259,221.82
Fuelwood							
Hardwood		85.49		7,266.65	85.49		85.49
Softwood		3,487.08		296,401.80	1,743.54	907.00	2,650.54
Total fuelwood		3,572.57		303,668.45	1,829.03	907.00	2,735.03
Total cordage		501,410.61		42,619,901.85	1,159,485.62	102,472.23	1,261,957.85
Miscellaneous							
Posts							
Cedar, lin. ft.	131		1,048	524.00	10.48		10.48
Total miscellaneous	131		1,048	524.00	10.48		10.48
Total cubic foot measure	2,890		39,793.26	39,793.26	1,669.90	18.33	1,688.23
Total cordage		501,410.61		42,619,901.85	1,159,485.62	102,472.23	1,261,957.85
Grand total	3,021	501,410.61		42,660,219.11	1,161,166.00	102,490.56	1,263,656.56

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Gogama

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
					\$	\$	\$
Board Foot Measure							
Ontario Scale							
Red and white pine	64,787		6,444,233	1,205,071.57	32,221.18	31,481.43	63,702.61
Jack pine	294,190		7,788,136	1,456,381.43	31,152.57	14,051.85	45,204.42
Poplar	181		7,167	1,340.23	21.50		21.50
Spruce	122,182		2,149,534	401,962.86	8,598.13	1,637.55	10,235.68
Total Ontario Scale	481,340		16,389,070	3,064,756.09	71,993.38	47,170.83	119,164.21
Doyle Scale							
Red and white pine	1,188		85,525	21,381.25	427.63	513.15	940.78
Jack pine	87,015		1,864,100	816,475.80	7,456.40	10,252.55	17,708.95
Spruce	25,783		330,886	125,405.79	1,323.54	1,819.87	3,143.41
Total Doyle Scale	113,986		2,280,511	963,262.84	9,207.57	12,585.57	21,793.14
Cubic Foot Measure							
Sawlogs							
Jack pine	43,070		425,581.27	425,581.27	10,929.20		10,929.20
Total sawlogs (cubic)	43,070		425,581.27	425,581.27	10,929.20		10,929.20
Boom Timber, Piling, Poles							
Booms							
Red and white pine	49		627.49	627.49	24.68		24.68
Jack pine	1,063		18,744.71	18,744.71	825.96		825.96
Spruce	328		7,213.19	7,213.19	357.47		357.47
Poles							
Jack pine	13,446		100,397.89	100,397.89	3,464.71		3,464.71
Total boom timber, piling, poles	14,886		126,983.28	126,983.28	4,672.82		4,672.82
Total cubic foot measure	57,956		552,564.55	552,564.55	15,602.02		15,602.02
Cordage							
Pulpwood							
Balsam		138.92		11,808.20	194.49	12.45	206.94
Jack pine		17,786.26		1,511,832.10	35,572.52	1,778.44	37,350.96
Poplar		2,311.70		196,494.50	2,311.70		2,311.70
Spruce		38,650.15		3,285,262.75	103,850.72	14,018.14	117,868.86
Spruce export levy		(4,008.45)		(340,718.25)		4,008.45	4,008.45
Total pulpwood		58,887.03		5,005,397.55	141,929.43	19,817.48	161,746.91
Fuelwood							
Hardwood		203.00		17,255.00	203.00		203.00
Softwood		2,075.00		176,375.00	1,037.50		1,037.50
Total fuelwood		2,278.00		193,630.00	1,240.50		1,240.50
Total cordage		61,165.03		5,199,027.55	143,169.93	19,817.48	162,987.41
Miscellaneous							
Posts							
Cedar, lin. ft.	20				2.00		2.00
Total miscellaneous	20				2.00		2.00
Total Ontario Scale	481,340		16,389,070	3,064,756.09	71,993.38	47,170.83	119,164.21
Total Doyle Scale	113,986		2,280,511	963,262.84	9,207.57	12,585.57	21,793.14
Total cubic foot measure	57,956		552,564.55	552,564.55	15,602.02		15,602.02
Total cordage		61,165.03		5,199,027.55	143,169.93	19,817.48	162,987.41
Grand total	653,302	61,165.03		9,779,611.03	239,974.90	79,573.88	319,548.78

Conversion factor - Ontario Scale to cubic measure - 5.35

Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Kapuskasing

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Balsam	7,422		91,944	17,193.53	367.78	49.02	416.80
Red and white pine	493		37,946	7,095.90	189.74	186.28	376.02
Jack pine	725		19,550	3,655.05	78.20	13.69	91.89
Poplar	7,875		318,402	59,541.17	955.20		955.20
Spruce	201,218		2,877,875	538,162.62	11,511.50	1,838.00	13,349.50
Tamarac	13		226	42.26	.68		.68
Total Ontario Scale	217,746		3,345,943	625,691.33	13,103.10	2,086.99	15,190.09
Cubic Foot Measure							
Sawlogs							
Balsam	16,201		208,187.07	208,187.07	4,775.72	870.45	5,646.17
Birch	132		942.99	942.99	11.32		11.32
Jack pine	15,576		84,989.04	84,989.04	2,096.43	1,424.71	3,521.14
Poplar	21,956		207,553.18	207,553.18	4,026.24		4,026.24
Spruce	1,094,761		5,316,702.26	5,316,702.26	193,621.40	9,786.07	203,407.47
Tamarac	250		1,345.52	1,345.52	29.57		29.57
Total sawlogs (cubic)	1,148,876		5,819,720.06	5,819,720.06	204,560.68	12,081.23	216,641.91
Boom Timber, Piling, Poles							
Booms							
Spruce	6,391		68,015.08	68,015.08	3,039.59		3,039.59
Total boom timber, piling, poles	6,391		68,015.08	68,015.08	3,039.59		3,039.59
Total cubic foot measure	1,155,267		5,887,735.14	5,887,735.14	207,600.27	12,081.23	219,681.50
Cordage							
Pulpwood							
Balsam		25,062.80		2,130,338.00	35,087.93	16,108.14	51,196.07
Balsam export levy		(1,340.58)		(113,932.30)		1,340.58	1,340.58
Jack pine		1,157.57		98,393.45	2,315.14	71.70	2,386.84
Jack pine export levy		(3.77)		(320.45)		1.88	1.88
Poplar		7,948.56		675,627.60	7,948.56	3,573.04	11,521.60
Poplar export levy		(5.96)		(506.60)		.60	.60
Spruce		389,291.99		33,089,819.15	1,091,370.50	170,655.25	1,262,025.75
Spruce export levy		(109,792.20)		(9,332,337.00)		109,792.20	109,792.20
Total pulpwood		423,460.92		35,994,178.20	1,136,722.13	301,543.39	1,438,265.52
Fuelwood							
Hardwood		3,122.59		265,420.15	3,122.59	292.31	3,414.90
Softwood		2,962.98		251,853.30	1,481.50	739.04	2,220.54
Total fuelwood		6,085.57		517,273.45	4,604.09	1,031.35	5,635.44
Total cordage		429,546.49		36,511,451.65	1,141,326.22	302,574.74	1,443,900.96
Miscellaneous							
Posts							
Cedar, 1in. ft.	7,586		58,340	29,170.00	583.40	3.83	587.23
Total miscellaneous	7,586		58,340	29,170.00	583.40	3.83	587.23
Total Ontario Scale	217,746		3,345,943	625,691.33	13,103.10	2,086.99	15,190.09
Total cubic measure	1,155,267		5,887,735.14	5,887,735.14	207,600.27	12,081.23	219,681.50
Total cordage		429,546.49		36,511,451.65	1,141,326.22	302,574.74	1,443,900.96
Grand total	1,380,599	429,546.49		43,054,048.12	1,362,612.99	316,746.79	1,679,359.78

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Kenora

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
					\$	\$	\$
Board Foot Measure							
Ontario Scale							
Balsam	12		442	82.65	1.77	.22	1.99
Red and white pine	44,502	2,369	163	443,033.48	11,845.84	14,870.32	26,716.16
Jack pine	18,252		461,876	86,370.81	1,847.50	1,387.47	3,234.97
Poplar	570		14,274	2,669.23	42.82	18.67	61.49
Spruce	10,933		530,997	99,296.44	2,124.00	2,024.24	4,148.24
Total Ontario Scale	74,269		3,376,752	631,452.61	15,861.93	18,300.92	34,162.85
Cubic Foot Measure							
Sawlogs							
Balsam	199		1,474.59	1,474.59	27.55	1.65	29.20
Birch	565		1,430.11	1,430.11	31.15	1.06	32.21
Cedar	442		10,653.05	10,653.05	490.10	12.06	502.16
Red and white pine	11		6,090.04	6,090.04	365.16		365.16
Jack pine	59,985		342,929.91	342,929.91	8,907.62	4,546.51	13,454.13
Poplar	4,914		23,475.36	23,475.36	289.59	48.45	338.04
Spruce	8,900		91,703.39	91,703.39	2,976.73	1,509.85	4,486.58
Total sawlogs (cubic)	75,016		477,756.45	477,756.45	13,687.90	6,119.58	19,207.48
Boom Timber, Piling, Poles							
Booms							
Red and white pine	597		22,402.06	22,402.06	1,296.51		1,296.51
Jack pine	441		7,459.50	7,459.50	329.58		329.58
Spruce	1,073		32,996.88	32,996.88	1,852.96		1,852.96
Poles							
Cedar	6,870		56,538.36	56,538.36	1,938.25	224.05	2,162.30
Jack pine	5,420		84,639.10	84,639.10	3,592.51		3,592.51
Spruce	4		47.18	47.18	1.79	.47	2.26
Total boom timber, piling, poles	14,405		204,083.08	204,083.08	9,011.60	224.52	9,236.12
Total cubic foot measure	89,421		681,839.53	681,839.53	22,099.50	6,344.10	28,443.60
Cordage							
Pulpwood							
Balsam		5,935.51		504,518.35	7,813.26	1,071.78	8,885.04
Balsam export levy		(456.21)		(38,777.85)		456.21	456.21
Jack pine		116,079.09		9,866,722.65	232,158.18	27,680.50	259,838.68
Jack pine export levy		(5,092.66)		(432,876.10)		2,545.35	2,545.35
Poplar		1,112.39		94,553.15	1,112.39	134.80	1,247.19
Poplar export levy		(12,319.56)		(1,047,162.60)		1,231.96	1,231.96
Spruce		92,393.43		7,853,441.55	258,701.63	31,843.01	290,544.64
Spruce export levy		(4,192.52)		(356,364.20)		4,192.52	4,192.52
Total pulpwood		215,520.42		18,319,235.70	499,785.46	69,156.13	568,941.59
Fuelwood							
Hardwood		117.87		10,018.95	117.87	10.36	128.23
Softwood		1,238.08		105,236.80	619.05	313.83	932.88
Total fuelwood		1,355.95		115,255.75	736.92	324.19	1,061.11
Total cordage		216,876.37		18,434,491.45	500,522.38	69,480.32	570,002.70
Miscellaneous							
Posts							
Cedar, 1in. ft.	3,156		24,175	12,087.50	241.75	96.43	338.18
Cedar pieces	50			60.00	5.00		5.00
Total miscellaneous	3,206		24,175	12,147.50	246.75	96.43	343.18
Total Ontario Scale	74,269		3,376,752	631,452.61	15,861.93	18,300.92	34,162.85
Total cubic foot measure	89,421		681,839.53	681,839.53	22,099.50	6,344.10	28,443.60
Total cordage		216,876.37		18,434,491.45	500,522.38	69,480.32	570,002.70
Grand total	166,896	216,876.37		19,759,931.09	538,730.56	94,221.77	632,952.33

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Lindsay

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
<u>Ontario Scale</u>							
Ash	205		12,857	2,404.26	64.30	48.45	112.75
Balsam	4,450		85,838	16,051.71	343.34	240.15	583.49
Basswood	3,555		214,213	40,057.83	1,071.09	770.05	1,841.14
Beech	1,043		85,948	16,072.28	257.85	182.01	439.86
Birch	26,446		2,719,764	508,595.87	13,456.23	18,671.35	32,127.58
Cedar	2,854		64,797	12,117.04	194.39	71.86	266.25
Cherry	376		30,326	5,670.96	151.63	30.32	181.95
Elm	1,219		109,036	20,389.73	545.20	261.95	807.15
Hemlock	30,932		1,964,872	367,431.06	5,894.64	2,575.57	8,470.21
Maple	41,984		4,057,269	758,709.30	20,286.38	6,156.05	26,442.43
Oak	1,245		81,176	15,179.91	405.88	354.39	760.27
Red and white pine	39,830		2,724,743	509,526.94	13,623.76	22,928.95	36,552.71
Poplar	9,038		328,934	61,510.66	986.80	556.04	1,542.84
Spruce	32,167		1,656,975	309,854.32	6,627.91	5,213.07	11,840.98
Tamarac	320		9,242	1,728.25	27.73	8.51	36.24
Total Ontario Scale	195,664		14,145,990	2,645,300.12	63,937.13	58,068.72	122,005.85
Cubic Foot Measure							
<u>Boom timber, piling, poles</u>							
Booms							
Cedar	1		7.68	7.68	23		23
Spruce	171		4,670.21	4,670.21	248.41		248.41
Total boom timber, piling, poles	172		4,677.89	4,677.89	248.64		248.64
Total cubic foot measure	172		4,677.89	4,677.89	248.64		248.64
Cordage							
<u>Fuelwood</u>							
Balsam		54.50		4,632.50	76.30	5.45	81.75
Poplar		419.00		35,615.00	419.00	79.45	498.45
Total pulpwood		473.50		40,247.50	495.30	84.90	580.20
<u>Fuelwood</u>							
Hardwood		338.50		28,772.50	338.50	22.25	360.75
Softwood		133.72		11,366.20	66.86	19.44	86.30
Total fuelwood		472.22		40,138.70	405.36	41.69	447.05
Total cordage		945.72		80,386.20	900.66	126.59	1,027.25
Miscellaneous							
<u>Posts</u>							
Cedar, lin. ft.	4,226		37,800	18,900.00	378.00	4.88	382.88
Total miscellaneous	4,226		37,800	18,900.00	378.00	4.88	382.88
Total Ontario Scale	195,664		14,145,990	2,645,300.12	63,937.13	58,068.72	122,005.85
Total cubic foot measure	172		4,677.89	4,677.89	248.64		248.64
Total cordage		945.72		80,386.20	900.66	126.59	1,027.25
Grand total	200,062	945.72	--	2,749,264.21	65,464.43	58,200.19	123,664.62

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

North Bay

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues \$	Bonus \$	Value \$
Board Foot Measure							
<u>Ontario Scale</u>							
Ash	313		27,929	5,222.72	138.67	66.94	205.61
Balsam	1,039		29,012	5,425.24	116.05	98.51	214.56
Basswood	324		19,788	3,700.36	98.95	74.78	173.73
Birch	63,468		5,218,909	975,935.98	25,482.33	44,239.19	69,721.52
Cedar	200		7,418	1,387.17	22.26	5.53	27.79
Elm	261		28,880	5,400.56	144.40	28.88	173.28
Hemlock	11,255		626,328	117,123.34	1,879.00	820.79	2,699.79
Maple	4,015		314,367	58,786.63	1,571.85	319.83	1,891.68
Oak	295		26,652	4,983.92	133.27	53.31	186.58
Red and white pine	644,689		59,623,526	11,149,599.36	299,127.80	298,545.13	597,672.93
Jack pine	40,423		1,370,124	256,213.19	5,480.50	2,633.62	8,114.12
Poplar	5,572		188,675	35,282.22	566.03	80.91	646.94
Spruce	67,891		2,943,488	550,432.26	11,773.98	10,033.93	21,807.91
Tamarac	3,997		67,046	12,537.60	201.14	67.05	268.19
Total Ontario Scale	843,742		70,492,142	13,182,030.55	346,736.23	357,068.40	703,804.63
<u>Doyle Scale</u>							
Red and white pine	75,255		6,471,543	1,617,885.75	32,357.72	39,021.16	71,378.88
Spruce	1,497		62,149	23,554.47	248.60	279.67	528.27
Total Doyle Scale	76,752		6,533,692	1,641,440.22	32,606.32	39,300.83	71,907.15
Cubic Foot Measure							
<u>Sawlogs</u>							
Birch	8,575		139,062.68	139,062.68	9,039.07		9,039.07
Maple	180		2,493.23	2,493.23	162.06		162.06
Red and white pine	83		1,832.98	1,832.98	119.14		119.14
Jack pine	4,152		36,153.26	36,153.26	849.60	415.76	1,265.36
Spruce	1,587		18,989.23	18,989.23	769.44	121.78	891.22
Total sawlogs (cubic)	14,577		198,531.38	198,531.38	10,939.31	537.54	11,476.35
<u>Boom Timber, Piling, Poles</u>							
<u>Booms</u>							
Cedar	174		2,000.79	2,000.79	74.75		74.75
Red and white pine	2,885		69,922.04	69,922.04	3,540.21	16.23	3,556.44
Jack pine	5,548		73,913.10	73,913.10	2,951.24		2,951.24
Spruce	1,637		31,808.03	31,808.03	1,526.74		1,526.74
<u>Poles</u>							
Cedar	1,192		17,051.96	17,051.96	704.26		704.26
Total boom timber, piling, poles	11,436		194,695.92	194,695.92	8,797.20	16.23	8,813.43
Total cubic foot measure	26,013		393,227.30	393,227.30	19,736.51	553.77	20,290.28
Cordage							
<u>Pulpwood</u>							
Balsam			17.94	1,524.90	25.12	18.43	43.55
Jack pine			2,987.95	253,975.75	5,975.90	312.74	6,288.64
Poplar			3,660.85	311,172.25	3,660.85	157.41	3,818.26
Spruce			1,354.39	115,123.15	3,792.30	164.19	3,956.49
Spruce export levy			(16.51)	(1,403.35)		24.77	24.77
Total pulpwood	8,021.13			681,796.05	13,454.17	677.54	14,131.71
<u>Fuelwood</u>							
Hardwood			3,247.00	275,995.00	3,247.00		3,247.00
Softwood			1.10	93.50	.55		.55
Total fuelwood	3,248.10			276,088.50	3,247.55		3,247.55
Total cordage	11,269.23			957,884.55	16,701.72	677.54	17,379.26
Miscellaneous							
<u>Posts</u>							
Cedar - lin. ft.	35,215		286,519	143,259.50	2,865.19		2,865.19
<u>Lagging</u>							
Spruce, lin. ft.	1,733		87,035	17,407.00	870.35		870.35
Total miscellaneous	36,948		373,554	160,666.50	3,735.54		3,735.54
Ontario Scale	843,742		70,492,142	13,182,030.55	346,736.23	357,068.40	703,804.63
Doyle Scale	76,752		6,533,692	1,641,440.22	32,606.32	39,300.83	71,907.15
Cubic measure	26,013		393,227.30	393,227.30	19,736.51	553.77	20,290.28
Cordage			11,269.23	957,884.55	16,701.72	677.54	17,379.26
Grand total	983,455		11,269.23	16,335,249.12	419,516.32	397,600.54	817,116.86

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Parry Sound

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Ash	167		13,614	2,545.82	68.08	61.04	129.12
Balsam	461		11,112	2,077.94	44.45	51.32	95.77
Basawood	5,787		406,119	75,944.25	2,030.65	2,380.77	4,411.42
Beech	170		14,420	2,696.54	43.27	34.07	77.34
Birch	110,958		10,895,053	2,037,374.91	54,455.44	70,057.74	124,513.18
Cedar	58		1,816	339.59	5.44	2.34	7.78
Cherry	615		38,666	7,230.54	193.33	38.67	232.00
Elm	2,128		189,520	35,440.24	947.63	553.34	1,500.97
Hemlock	128,076		7,902,123	1,477,697.00	23,706.39	17,448.95	41,155.34
Maple	34,766		3,095,377	578,835.50	15,476.97	5,355.15	20,832.12
Oak	371		37,817	7,071.78	189.11	119.05	308.16
Red and white pine	10,885		934,525	174,756.18	4,650.94	5,885.89	10,536.83
Jack pine	5,234		116,548	21,794.48	466.19	432.15	898.34
Poplar	781		20,715	3,873.70	62.15	34.77	96.92
Spruce	21,459		1,076,517	201,308.68	4,290.31	4,212.85	8,503.16
Total Ontario Scale	321,916		24,753,942	4,628,987.15	106,630.35	106,668.10	213,298.45
Cubic Foot Measure							
Boom Timber, Piling, Poles							
Booms							
Cedar	344		3,691.07	3,691.07	139.86		139.86
Hemlock	44		691.18	691.18	29.69		29.69
Red and white pine	217		3,786.35	3,786.35	167.45	74.91	242.36
Spruce	154		5,062.82	5,062.82	246.66		246.66
Total boom timber, piling, poles	759		13,231.42	13,231.42	583.66	74.91	658.57
Total cubic foot measure	759		13,231.42	13,231.42	583.66	74.91	658.57
Cordage							
Pulpwood							
Balsam		151.62		12,887.70	212.27	16.08	228.35
Jack pine		1,316.86		111,933.10	2,633.72	800.09	3,433.81
Poplar		2,486.52		211,354.20	2,486.52	971.60	3,458.12
Spruce		24.52		2,084.20	68.66	4.90	73.56
Total pulpwood		3,979.52		338,259.20	5,401.17	1,792.67	7,193.84
Fuelwood							
Hardwood		2,076.04		176,463.40	2,076.04	195.46	2,271.50
Softwood		44.00		3,740.00	22.00	22.00	44.00
Total fuelwood		2,120.04		180,203.40	2,098.04	217.46	2,315.50
Total cordage		6,099.56		518,462.60	7,499.21	2,010.13	9,509.34
Miscellaneous							
Posts							
Cedar, lin. ft.	430		3,440	1,720.00	34.40		34.40
Piling							
Spruce, lin. ft.			4,920	2,460.00	100.08		100.08
Total miscellaneous	430		8,360	4,180.00	134.48		134.48
Total Ontario Scale	321,916		24,753,942	4,628,987.15	106,630.35	106,668.10	213,298.45
Total cubic measure	759		13,231.42	13,231.42	583.66	74.91	658.57
Total cordage		6,099.56		518,462.60	7,499.21	2,010.13	9,509.34
Grand total	323,105	6,099.56	--	5,164,861.17	114,847.70	108,753.14	223,600.84

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Pembroke

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues \$	Bonus \$	Value \$
Board Foot Measure							
Ontario Scale							
Ash	258		21,168	3,958.42	105.85	48.16	154.01
Balsam	3,480		103,138	19,286.81	412.55	313.31	725.86
Basswood	3,755		203,660	38,084.42	1,018.30	2,074.27	3,092.57
Beech	493		28,585	5,345.40	85.76	161.70	247.46
Birch	65,479		6,014,919	1,124,789.85	29,658.13	39,992.52	69,650.65
Cedar	237		11,166	2,088.04	33.50	17.11	50.61
Elm	315		33,980	6,354.26	169.91	34.26	204.17
Hemlock	91,022		6,314,610	1,180,832.07	18,943.86	15,884.98	34,828.84
Maple	12,223		1,002,663	187,497.98	5,013.34	2,850.59	7,863.93
Oak	465		25,271	4,725.68	125.66	341.90	467.56
Red and white pine	298,455		19,352,853	3,618,983.51	96,764.36	126,739.76	223,504.12
Jack pine	104,043		3,475,908	649,994.80	13,953.62	13,284.56	27,238.18
Poplar	42,219		2,124,454	397,272.90	6,373.36	3,040.50	9,413.86
Spruce	50,477		2,603,280	486,813.36	10,413.10	13,136.08	23,549.18
Total Ontario Scale	672,921		41,315,655	7,726,027.50	183,071.30	217,919.70	400,991.00
Doyle Scale							
Basswood	4		491	139.94	2.46	.565	8.11
Birch	15,620		1,542,052	561,306.93	7,707.15	17,733.59	25,440.74
Elm	9		1,215	301.32	6.08	13.97	20.05
Hemlock	2,724		234,945	62,260.42	704.84	1,057.25	1,762.09
Maple	515		49,348	12,287.65	246.74	567.50	814.24
Red and white pine	217		29,466	7,366.50	147.33	338.86	486.19
Spruce	1,513		88,650	33,598.35	354.60	709.20	1,063.80
Total Doyle Scale	20,602		1,946,167	677,261.11	9,169.20	20,426.02	29,595.22
Cubic Foot Measure							
Sawlogs							
Oak	15		213.93	213.93	9.52		9.52
Red and white pine	6,622		71,555.52	71,555.52	4,210.62		4,210.62
Jack pine	833		5,238.02	5,238.02	199.04		199.04
Poplar	5,189		44,698.89	44,698.89	581.09		581.09
Spruce	2,496		22,220.46	22,220.46	988.81		988.81
Total sawlogs (cubic)	15,155		143,926.82	143,926.82	5,989.08		5,989.08
Boom Timber, Piling, Poles							
Booms							
Red and white pine	52		643.19	643.19	26.42		26.42
Spruce	217		5,632.47	5,632.47	295.34		295.34
Poles							
Jack pine	28,355		326,757.41	326,757.41	12,886.04	4,002.30	16,888.34
Red pine	7,972		170,720.98	170,720.98	8,073.93	4,216.54	12,290.47
Total boom timber, piling, poles	36,595		503,754.05	503,754.05	21,281.73	8,218.84	29,500.57
Total cubic foot measure	51,751		647,680.87	647,680.87	27,270.81	8,218.84	35,489.65
Cordage							
Pulpwood							
Balsam		1,524.75		129,603.75	2,134.65	455.15	2,589.80
Jack pine		744.19		63,256.15	1,488.38	27.68	1,516.06
Poplar		3,903.80		331,823.00	3,903.80	309.10	4,212.90
Poplar (export levy)		(1,302.00)		(110,670.00)		130.20	130.20
Spruce		9,373.75		796,768.75	26,246.50	1,893.87	28,140.37
Total pulpwood		15,546.49		1,321,451.65	33,773.33	2,816.00	36,589.33
Fuelwood							
Hardwood		151.00		12,835.00	151.00		151.00
Total fuelwood		151.00		12,835.00	151.00		151.00
Total cordage		15,697.49		1,334,286.65	33,924.33	2,816.00	36,740.33
Miscellaneous							
Posts							
Cedar (lin. ft.)	484		3,872	1,936.00	38.72	9.68	48.40
Car stakes (pieces) (birch)	1,510			1,510.00	75.50		75.50
Total miscellaneous	1,994		3,872	3,446.00	114.22	9.68	123.90
Total Ontario Scale	672,921		41,315,655	7,726,027.50	183,071.30	217,919.70	400,991.00
Total Doyle Scale	20,602		1,946,167	677,261.11	9,169.20	20,426.02	29,595.22
Total cubic measure	51,751		647,680.87	647,680.87	27,270.81	8,218.84	35,489.65
Total cordage		15,697.49		1,334,286.65	33,924.33	2,816.00	36,740.33
Grand total	747,268	15,697.49	--	10,388,702.13	253,549.86	249,390.24	502,940.10

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Port Arthur

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
					\$	\$	\$
Board Foot Measure							
Ontario Scale							
Balsam	3,525		93,901	17,559.48	375.61	255.96	631.57
Birch	304		6,635	1,240.74	19.90	6.55	26.45
Cedar	3,021		104,633	19,566.37	313.90	.18	314.08
Red and white pine	36,710		1,966,721	367,776.83	9,833.63	11,472.40	21,306.03
Jack pine	62,499		1,643,811	307,392.66	6,575.25	4,330.82	10,906.07
Poplar	6,071		238,827	44,660.65	716.49	81.89	798.38
Spruce	20,166		672,689	125,792.84	2,690.76	1,989.50	4,680.26
Total Ontario Scale	132,296		4,727,217	883,989.57	20,525.54	18,137.30	38,662.84
Cubic Foot Measure							
Sawlogs							
Balsam	10,881		42,687.40	42,687.40	1,229.30	2.77	1,232.07
Birch	50		200.71	200.71	2.46		2.46
Cedar	765		3,011.15	3,011.15	36.75		36.75
Red and white pine	2,486		19,788.18	19,788.18	1,037.80		1,037.80
Jack pine	225,535		1,047,280.72	1,047,280.72	28,085.45	1,731.87	29,817.32
Poplar	11,792		54,259.14	54,259.14	691.44	21.70	713.14
Spruce	27,565		165,495.12	165,495.12	6,125.44	122.31	6,247.75
Total sawlogs (cubic)	279,074		1,332,722.42	1,332,722.42	37,208.64	1,878.65	39,087.29
Booms, Timber, Poles, Piling							
Booms							
Red and white pine	5		216.19	216.19	12.97		12.97
Jack pine	1,064		9,483.06	9,483.06	326.82		326.82
Spruce	40		502.12	502.12	21.17	5.10	26.27
Poles							
Cedar	119		2,963.13	2,963.13	153.39		153.39
Jack pine	49,173		596,427.04	596,427.04	23,760.48		23,760.48
Total boom timber, piling, poles	50,401		609,591.54	609,591.54	24,274.83	5.10	24,279.93
Total cubic foot measure	329,475		1,942,313.96	1,942,313.96	61,483.47	1,883.75	63,367.22
Cordage							
Pulpwood							
Balsam		33,289.36		2,829,595.60	46,605.52	14,780.16	61,385.68
Balsam export levy		(836.36)		(71,090.60)		852.47	852.47
Jack pine		64,635.03		5,493,977.55	129,270.06	8,358.71	137,628.77
Jack pine export levy		(7,972.43)		(677,656.55)		3,986.22	3,986.22
Poplar		12,822.90		1,089,946.50	12,822.90	498.25	13,321.15
Poplar export levy		(1,588.52)		(135,024.20)		158.86	158.86
Spruce		297,276.71		25,268,520.35	832,374.81	108,743.44	941,118.25
Spruce export levy		(4,798.39)		(407,863.15)		4,798.39	4,798.39
Total pulpwood		408,024.00		34,682,040.00	1,021,073.29	142,176.50	1,163,249.79
Fuelwood							
Hardwood		1,176.30		99,985.50	1,176.30		1,176.30
Softwood		20.00		1,700.00	10.00		10.00
Total fuelwood		1,196.30		101,685.50	1,186.30		1,186.30
Total cordage		409,220.30		34,783,725.50	1,022,259.59	142,176.50	1,164,436.09
Miscellaneous							
Posts							
Cedar, lin. ft.	14,943		119,544	59,722.00	1,195.44		1,195.44
Christmas trees	43,330			21,665.00	1,743.20		1,743.20
Total miscellaneous	58,273		119,544	81,387.00	2,938.64		2,938.64
Total Ontario Scale	132,296		4,727,217	883,989.57	20,525.54	18,137.30	38,662.84
Total cubic foot measure	329,475		1,942,313.96	1,942,313.96	61,483.47	1,883.75	63,367.22
Total cordage		409,220.30		34,783,725.50	1,022,259.59	142,176.50	1,164,436.09
Grand total	520,044	409,220.30	--	37,691,416.03	1,107,207.24	162,197.55	1,269,404.79

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Sault Ste. Marie

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Ash	132		12,795	2,392.66	64.00	39.59	103.59
Balsam	130		4,518	844.87	18.07	9.42	27.49
Birch	109,346		10,498,101	1,963,144.89	52,220.35	98,007.99	150,228.34
Cedar	30		3,181	594.85	9.52	7.58	17.10
Elm	1,045		122,252	22,861.12	611.29	307.58	918.87
Hemlock	8,275		807,839	151,065.89	2,423.46	1,446.51	3,869.97
Maple	21,578		1,900,876	355,463.81	9,504.46	5,738.00	15,242.46
Oak	1,241		155,234	29,028.76	776.25	685.58	1,461.83
Red and white pine	376,460		38,237,470	7,150,406.89	191,186.99	210,399.40	401,586.39
Jack pine	15,023		699,872	130,876.06	2,799.48	1,169.51	3,968.99
Poplar	17		2,004	374.75	6.01	3.38	9.39
Spruce	16,727		961,088	179,723.46	3,844.36	3,858.74	7,703.10
Total Ontario Scale	550,004		53,405,230	9,986,778.01	263,464.24	321,673.28	585,137.52
Cubic Foot Measure							
Sawlogs							
Cedar			9,771.87	9,771.87	383.09		383.09
Tamarac			1,968.00	1,968.00	59.04		59.04
Total sawlogs			11,739.87	11,739.87	442.13		442.13
Boom Timber, Piling, Poles							
Booms							
Jack pine	367		9,151.64	9,151.64	499.28	4.51	503.79
White pine	734		18,303.28	18,303.28	998.55	9.05	1,007.60
Spruce	417		5,360.23	5,360.23	274.63	13.33	287.96
Poles							
Cedar	1,356		16,355.54	16,355.54	670.31	3.94	674.25
Total boom timber, piling, poles	2,874		49,170.69	49,170.69	2,442.77	30.83	2,473.60
Total cubic foot measure	2,874		60,910.56	60,910.56	2,884.90	30.83	2,915.73
Cordage							
Pulpwood							
Balsam		1,851.68		157,392.80	2,592.35	479.54	3,071.89
Jack pine		5,775.12		490,885.20	11,550.24	518.41	12,068.65
Poplar		2,615.57		222,323.45	2,615.57	10.88	2,626.45
Spruce		6,470.89		550,025.65	18,118.49	606.20	18,724.69
Total pulpwood		16,713.26		1,420,627.10	34,876.65	1,615.03	36,491.68
Fuelwood							
Hardwood		1,633.00		138,805.00	1,633.00	52.00	1,685.00
Total fuelwood		1,633.00		138,805.00	1,633.00	52.00	1,685.00
Total cordage		18,346.26		1,559,432.10	36,509.65	1,667.03	38,176.68
Miscellaneous							
Posts							
Cedar, lin. ft.	484		387,200	193,600.00	38.72	5.08	43.80
Total miscellaneous	484		387,200	193,600.00	38.72	5.08	43.80
Total Ontario Scale	550,004		53,405,230	9,986,778.01	263,464.24	321,673.28	585,137.52
Total cubic foot measure	2,874		60,910.56	60,910.56	2,884.90	30.83	2,915.73
Total cordage		18,346.26		1,559,432.10	36,509.65	1,667.03	38,176.68
Grand total	553,362	18,346.26		11,800,720.67	302,897.51	323,376.22	626,273.73

Conversion factor - Ontario Scale to cubic measure - 5.35

Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Sloux Lookout

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Balsam	4,273		120,038	22,447.11	480.14	190.83	670.97
Red and white pine	17,657		1,064,929	199,141.72	5,324.66	2,963.35	8,288.01
Jack pine	219,720		7,853,277	1,468,562.40	31,413.10	7,901.23	39,314.33
Poplar	1,987		247,006	46,190.12	741.02	6.17	747.19
Spruce	134,925		6,454,234	1,206,941.76	25,816.94	8,714.20	34,531.14
Total Ontario Scale	378,562		15,739,484	2,943,283.51	63,775.86	19,775.78	83,551.64
Doyle Scale							
Jack pine	5,955		172,639	75,615.88	690.55	1,596.06	2,286.61
Spruce	6,519		224,554	85,105.97	698.22	2,020.99	2,719.21
Total Doyle Scale	12,474		397,193	160,721.85	1,588.77	3,617.05	5,005.82
Cubic Foot Measure							
Boom Timber, Piling, Poles							
Booms							
Red and white pine	115		4,120.21	4,120.21	233.70		233.70
Jack pine	2,413		46,848.36	46,848.36	2,128.74		2,128.74
Spruce	6,801		182,337.19	182,337.19	9,613.01		9,613.01
Piling							
Jack pine	53		1,229.43	1,229.43	60.48		60.48
Spruce	78		1,386.95	1,386.95	62.60		62.60
Total boom timber, piling, poles	9,460		235,922.14	235,922.14	12,098.53		12,098.53
Total cubic foot measure	9,460		235,922.14	235,922.14	12,098.53		12,098.53
Cordage							
Pulpwood							
Balsam		21,002.74		1,785,232.90	23,068.73	2,833.82	25,902.55
Balsam export levy		(30.52)		(2,594.20)		30.52	30.52
Jack pine		49,348.56		4,194,627.60	98,697.12	6,467.10	105,164.22
Spruce		146,802.38		12,478,202.30	411,046.67	25,012.22	436,058.89
Spruce export		(17,622.67)		(1,497,926.95)		17,622.67	17,622.67
Total pulpwood		217,153.68		18,458,062.00	532,812.52	51,966.33	584,778.85
Fuelwood							
Hardwood		100.00		8,500.00	100.00		100.00
Softwood		10,789.00		917,065.00	5,394.50		5,394.50
Total fuelwood		10,889.00		925,565.00	5,494.50		5,494.50
Total cordage		228,042.68		19,383,627.80	538,307.02	51,966.33	590,273.35
Miscellaneous							
Lagging							
Spruce, lin. ft.	23,628		8,395,342	1,679,068.40	10,575.34		10,575.34
Posts							
Cedar, lin. ft.	100		800	400.00	8.00		8.00
Total miscellaneous	23,728		8,396,142	1,679,468.40	10,583.34		10,583.34
Total Ontario Scale	378,562		15,739,484	2,943,283.51	63,775.86	19,775.78	83,551.64
Total Doyle Scale	12,474		397,193	160,721.85	1,588.77	3,617.05	5,005.82
Total cubic measure	9,460		235,922.14	235,922.14	12,098.53		12,098.53
Total cordage		228,042.68		19,383,627.80	538,307.02	51,966.33	590,273.35
Grand total	424,224	228,042.68	--	24,403,023.70	628,325.52	75,359.16	701,712.68

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Sudbury

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent In Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Ash	3		651	121.74	3.26	2.55	5.81
Balsam	1,118		14,401	2,707.95	57.93	41.19	99.12
Basswood	1,826		109,991	20,566.32	540.22	74.05	614.27
Birch	2,094		152,158	28,453.55	676.67	476.18	1,152.85
Cedar	791		16,960	3,171.52	50.88	48.80	99.68
Elm	32		5,040	942.48	25.20	9.07	34.27
Hemlock	3,503		375,508	70,220.00	1,126.53	644.45	1,770.98
Oak	18		1,571	293.78	7.86	4.12	11.98
Maple	81		3,133	585.87	15.67	8.81	24.48
Red and white pine	70,221		5,162,165	965,324.86	25,810.88	22,692.06	48,502.94
Jack pine	46,503		883,413	165,198.23	3,533.66	1,969.99	5,503.65
Poplar	2,073		59,016	11,035.99	177.05	118.13	295.18
Spruce	13,444		448,553	83,879.41	1,794.21	1,382.80	3,177.01
Tamarac	4		34	6.72	.94	1.27	2.21
Total Ontario Scale	141,776		7,232,954	1,352,562.42	33,820.96	27,473.47	61,294.43
Cubic Foot Measure							
Boom Timber, Piling, Poles							
Booms							
White pine	10		272.98	272.98	14.73		14.73
Jack pine	18		221.39	221.39	8.41		8.41
Spruce	126		2,347.79	2,347.79	110.94		110.94
Poles							
Jack pine	2,024		21,688.39	21,688.39	1,229.93		1,229.93
Total boom timber, piling, poles	2,180		24,530.55	24,530.55	1,364.01		1,364.01
Total cubic foot measure	2,180		24,530.55	24,530.55	1,364.01		1,364.01
Cordage							
Pulpwood							
Balsam		529.71		45,025.35	741.59	10.17	751.76
Jack pine		36,664.68		3,116,497.80	73,329.36	4,024.87	77,354.23
Poplar		655.87		55,748.95	655.87	304.49	960.36
Spruce		8,912.41		757,554.85	24,954.75	2.86	24,957.61
Total pulpwood		46,762.67		3,974,826.95	99,681.57	4,342.39	104,023.96
Fuelwood							
Hardwood		2,760.00		234,600.00	2,760.00		2,760.00
Softwood		91.86		7,808.10	45.93		45.93
Total fuelwood		2,851.86		242,408.10	2,805.93		2,805.93
Total cordage		49,614.53		4,217,235.05	102,487.50	4,342.39	106,829.89
Miscellaneous							
Poles							
Jack pine (pieces)	4,008			60,120.00	68.00		68.00
Posts							
Cedar, lin. ft.	5,324		40,478	20,239.00	404.78	2.91	407.69
Total miscellaneous	9,332		40,478	80,359.00	472.78	2.91	475.69
Total board foot measure (Ont.)	141,776		7,232,954	1,352,562.42	33,820.96	27,473.47	61,294.43
Total cubic measure	2,180		24,530.55	24,530.55	1,364.01		1,364.01
Total cordage		49,614.53		4,217,235.05	102,487.50	4,342.39	106,829.89
Grand total	153,288	49,614.53		5,674,687.02	138,145.25	31,818.77	169,964.02

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Swastika

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues \$	Bonus \$	Value \$
Board Foot Measure							
Ontario Scale							
Balsam	121		7,077	1,323.40	28.31	30.77	59.06
Birch	5,783		104,597	19,559.64	313.79	1.74	315.53
Red and white pine	19,560		1,914,822	358,071.71	9,574.13	7,218.78	16,792.91
Jack pine	735,835		18,716,288	3,499,945.86	74,850.61	59,892.77	134,743.38
Poplar	27,599		1,090,929	204,003.72	3,262.46	607.32	3,869.78
Spruce	150,181		3,966,082	741,657.33	15,859.98	13,980.76	29,840.74
Tamarac	756		23,512	4,396.74	70.53	30.60	101.13
Total Ontario Scale	939,835		25,823,307	4,828,958.40	103,959.81	81,762.74	185,722.55
Cubic Foot Measure							
Boom Timber, Piling, Poles							
Booms							
Jack pine	2,200		31,380.07	31,380.07	1,262.27	420.24	1,682.51
Spruce	45		643.95	643.95	29.20	4.30	33.50
Polea							
Jack pine	975		35,862.77	35,862.77	1,878.53	65.55	1,944.08
Total boom timber, piling, poles	3,220		67,886.79	67,886.79	3,170.00	490.09	3,660.09
Total cubic foot measure	3,220		67,886.79	67,886.79	3,170.00	490.09	3,660.09
Cordage							
Pulpwood							
Balsam		3,643.28		309,678.80	5,100.58	1,429.09	6,529.67
Jack pine		2,793.70		237,464.50	5,587.40	485.13	6,072.53
Poplar		4,274.45		363,328.25	4,274.45	1,145.75	5,420.20
Poplar export levy		(106.22)		(9,028.70)		10.62	10.62
Spruce		25,524.20		2,169,557.00	71,467.76	11,655.39	83,123.15
Total pulpwood		36,235.63		3,080,028.55	86,430.19	14,725.98	101,156.17
Fuelwood							
Hardwood		2,170.41		184,484.85	2,170.41	87.31	2,257.72
Softwood		1,942.39		165,103.15	971.20	7.37	978.57
Total fuelwood		4,112.80		349,588.00	3,141.61	94.68	3,236.29
Total cordage		40,348.43		3,429,616.55	89,571.80	14,820.66	104,392.46
Miscellaneous							
Posts							
Cedar, lin. ft.	1,695		13,560	6,780.00	135.60	84.75	220.35
Total miscellaneous	1,695		13,560	6,780.00	135.60	84.75	220.35
Total Ontario Scale	939,835		25,823,307	4,828,958.40	103,959.81	81,762.74	185,722.55
Total cubic foot measure	3,220		67,886.79	67,886.79	3,170.00	490.09	3,660.09
Total cordage		40,348.43		3,429,616.55	89,571.80	14,820.66	104,392.46
Grand total	944,750	40,348.43	--	8,333,241.74	196,837.21	97,158.24	253,995.45

Conversion factor - Ontario Scale to cubic measure - 5.35

Conversion factor - cordage to cubic measure - 85.

Permits included in the above

Tweed

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues \$	Bonus \$	Value \$
Board Foot Measure							
Ontario Scale							
Ash	900		41,478	7,756.39	207.44	97.52	304.96
Balsam	19,166		623,655	116,623.48	2,494.63	1,081.14	3,575.77
Basswood	6,719		495,639	92,684.49	2,478.27	2,049.43	4,527.70
Beech	1,728		96,726	18,087.76	290.19	262.28	552.47
Birch	6,073		422,135	78,939.24	1,907.56	2,583.87	4,491.43
Cedar	8,677		309,439	57,876.31	928.53	224.19	1,152.72
Elm	2,183		169,020	30,858.74	825.13	219.29	1,044.42
Hemlock	49,883		2,375,622	444,241.31	6,755.81	3,646.23	10,402.04
Maple	18,951		1,657,696	309,989.15	8,288.57	3,160.25	11,448.82
Oak	1,402		90,438	16,911.91	452.22	286.69	738.91
Red and white pine	75,841		5,127,575	958,856.52	25,638.00	34,209.85	59,843.85
Jack pine	58		1,516	283.49	6.06	7.58	13.64
Poplar	11,968		815,162	152,435.29	2,445.51	677.74	3,123.25
Spruce	49,693		1,971,922	368,749.41	7,887.68	7,419.02	15,306.70
Tamarac	291		19,789	2,952.54	47.37	33.91	81.28
Total Ontario Scale	253,533		14,209,872	2,657,246.03	60,652.97	55,954.99	116,607.96
Cubic Foot Measure							
Sawlogs							
Ash			946	9.46	.68		.68
Balsam			1,103.81	1,103.81	27.26	53.90	81.16
Basswood			628.88	628.88	135.55		135.55
Birch			272.85	272.85	12.41	4.67	17.08
Cedar			221.67	221.67	5.33	11.56	16.89
Elm			12.00	12.00	1.02		1.02
Maple			425.45	425.45	63.24		63.24
Oak			199.19	199.19	17.53		17.53
Red and white pine	46		6,747.43	6,747.43	1,407.00		1,407.00
Poplar			1,829.34	1,829.34	65.86		65.86
Spruce			1,779.29	1,779.29	119.89	41.26	161.15
Total sawlogs (cubic)	46		13,229.37	13,229.37	1,855.77	111.39	1,967.16
Boom Timber, Piling, Poles							
Booms							
White pine	40		575.96	575.96	24.60		24.60
Spruce	1,211		65,459.18	65,459.18	5,629.57		5,629.57
Total boom timber, piling, poles	1,251		66,035.14	66,035.14	5,654.17		5,654.17
Total cubic foot measure	1,297		79,264.51	79,264.51	7,509.94	111.39	7,621.33
Cordage							
Pulpwood							
Balsam		1,472.22		125,138.70	2,061.11	426.77	2,487.88
Poplar		1,760.97		149,682.45	1,760.97	170.51	1,931.48
Poplar export levy		(455.40)		(38,709.00)		45.55	45.55
Spruce		621.95		52,865.75	1,618.99	91.36	1,710.35
Total pulpwood		3,875.14		327,686.90	5,441.07	742.19	6,175.26
Fuelwood							
Hardwood		5.50		467.50	5.50		5.50
Softwood		15.00		1,275.00	7.50	8.75	16.25
Total fuelwood		20.50		1,742.50	13.00	8.75	21.75
Total cordage		3,875.64		329,429.40	5,454.07	742.94	6,197.01
Miscellaneous							
Posts							
Cedar, lin. ft.	125		5,560	2,780.00	55.60	2.91	58.51
Total miscellaneous	125		5,560	2,780.00	55.60	2.91	58.51
Total board foot measure (Ont.)	253,533		14,209,872	2,657,246.03	60,652.97	55,954.99	116,607.96
Total cubic measure	1,297		79,264.51	79,264.51	7,509.94	111.39	7,621.33
Total cordage		3,875.64		329,429.40	5,454.07	742.94	6,197.01
Grand total	254,955	3,875.64		3,068,719.94	73,872.58	56,812.23	130,484.81

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

White River

Summary of Volume and Value of Timber Cut During Period April 1, 1954, to March 31, 1955

Species	Pieces	Cords	Feet	Equivalent in Cu. Ft.	Dues	Bonus	Value
Board Foot Measure							
Ontario Scale							
Jack pine	216,235		6,515,675	1,218,431.22	26,062.70	8,202.21	34,264.91
Spruce	101		4,646	868.80	18.58	13.01	31.59
Total Ontario Scale	216,336		6,520,321	1,219,300.02	26,081.28	8,215.22	34,296.50
Cubic Foot Measure							
Sawlogs							
Balsam	294		1,180.48	1,180.48	19.27	28.44	47.71
Jack pine	11,000		68,910.92	68,910.92	1,494.46	1,474.65	2,969.11
Poplar	7		30.47	30.47	.73		.73
Spruce	3,646		18,356.31	18,356.31	534.97	490.09	1,025.06
Total sawlogs (cubic)	14,947		88,478.18	88,478.18	2,049.43	1,993.18	4,042.61
Boom Timber, Piling, Poles							
Booms							
Jack pine	316		9,703.13	9,703.13	544.60		544.60
Total boom timber, piling, poles	316		9,703.13	9,703.13	544.60		544.60
Total cubic foot measure	15,263		98,181.31	98,181.31	2,594.03	1,993.18	4,587.21
Cordage							
Pulpwood							
Balsam		9,658.44		820,967.40	13,521.82	3,366.78	16,888.60
Jack pine		60,144.68		5,112,297.80	120,289.36	6,724.89	127,014.25
Poplar		1.55		131.75	1.55		1.55
Spruce		114,731.35		9,752,164.75	321,247.78	35,143.27	356,391.05
Total pulpwood		184,536.02		15,685,561.70	455,060.51	45,234.94	500,295.45
Fuelwood							
Hardwood		669.00		56,865.00	669.00		669.00
Softwood		501.49		42,626.65	250.75	25.75	276.50
Total fuelwood		1,170.49		99,491.65	919.75	25.75	945.50
Total cordage		185,706.51		15,785,053.35	455,980.26	45,260.69	501,240.95
Miscellaneous							
Posts							
Cedar, 1in. ft.	1,328		10,624	5,312.00	106.24		106.24
Total miscellaneous	1,328		10,624	5,312.00	106.24		106.24
Total Ontario Scale	216,336		6,520,321	1,219,300.02	26,081.28	8,215.22	34,296.50
Total cubic measure	15,263		98,181.31	98,181.31	2,594.03	1,993.18	4,587.21
Total cordage		185,706.51		15,785,053.35	455,980.26	45,260.69	501,240.95
Grand total	232,927	185,706.51	--	17,107,846.68	484,761.81	55,469.09	540,230.90

Conversion factor - Ontario Scale to cubic measure - 5.35
 Conversion factor - cordage to cubic measure - 85.

Permits included in the above

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