by J.H. Smyth and B.W. Karaim

NORTHERN FOREST RESEARCH CENTRE
EDMONTON, ALBERTA
INTERNAL REPORT NOR-5

CANADIAN FORESTRY SERVICE DEPARTMENT OF THE ENVIRONMENT SEPTEMBER, 1971

1. Arrangement of first six pages should be as follows:

Inside Cover Table of Contents List of Tables List of Figures Introduction—— pp 1-2

2. Table 27, page 51

- under S & W, 1970: "Other" should read 85.3

Sub-total should read 1,700.7, Total should read 2,360.0 - under S & W, 1971:

J. H. Smyth

bу

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INTRODUCTION

One of the more formidable tasks confronting administrators of the Canadian Forestry Service is the allocation of the factors of production to programs and individual projects in a manner that maximizes the value of information generated by research relative to costs incurred. The skill and judgment of experienced administrators have in the past provided the basis for sound decisions in forest research administration in meeting the present and anticipated needs of the client. Until more sophisticated procedures are developed which will improve the quality of managerial decisions, skill and judgment will undoubtedly continue to dominate the decision-making process.

The Canadian Forestry Service's Northern Forest Research Centre at Edmonton, Alberta, serves Alberta, Saskatchewan, Manitoba, the Yukon and Northwest Territories. The immense size of the region and the number of potential clients makes the forestry research funding process a most difficult one.

This report provides a comprehensive breakdown of monies expended by the forest services of Alberta, Saskatchewan and Manitoba. By analyzing

Porest Economics and Analysis Section, Canadian Forestry Service, Department of the Environment, Edmonton, Alberta.

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the amounts of money expended by provincial agencies on various activities over a period of years, a basis for determining provincial program priorities may be inferred. In conjunction with the basic tools currently employed, it is hoped that the information contained in this report will assist administrators in the decision-making process and reduce some of the difficulty already inherent in the allocation of forestry research funds.

The report is divided into four sections, one each for Alberta, Saskatchewan, Manitoba and the Northern Forest Research Centre. All but the last section contain a few statistics concerning the forest area and forest resource administered by the province. In addition, a brief summary of the organization and functions of the various branches or sections within the respective forest service is given. The expenditures of each of the provincial forest services were obtained from provincial public accounts. In most cases, expenditures were combined into suitable categories for presentation.

It was proposed at the outset to include expenditures for the Yukon and Northwest Territories forest services; however, lack of data necessitated the omission of these two regions.

ALBERTA

ALBERTA

General

The 157,000 square miles of provincial forest land in Alberta are administered by the Alberta Forest Service of the Department of Lands and Forests at Edmonton. The Service, headed by the Director of Forestry, is comprised of six operating Branches; namely, Administration, Timber Management, Forest Protection, Construction and Maintenance, Forest Land Use and Training.

For ease of administration, Crown forest lands are divided into eleven Forests, each administered and managed separately with respect to the forest resources within its boundaries. Approximately 58.4 million acres, or 56 per cent, of the total area within the eleven Forests are classified as productive and 41.6 million acres, or 40 per cent, are classified as non-productive forest land. The remaining 4 per cent is represented by water.

Except for the forests of the Subalpine and Montane forest regions situated along the eastern slopes of the Rocky Mountains, most of Alberta's forest land is located in the Boreal forest region. The more common coniferous tree species are white spruce, lodgepole pine and jack pine. Less common are black spruce, balsam fir, alpine fir and larch. Deciduous species such as trembling aspen, balsam poplar and white birch are found throughout most of Alberta. In total, the eleven administrative Forests contain in excess of 59 billion cubic feet (gross) of wood material 4 inches in diameter breast height and over. Softwoods represent approx-

imately sixty per cent of the total growing stock volume.

Alberta Forest Service - Organization and Functions

To effectively administer the forest resources of the Province within the framework of its present policies and objectives, the Alberta Forest Service recognizes six main operating Branches. The functions of the individual Branches are described in the following paragraphs.

The <u>Administrative Branch</u> supervises all branches, maintains general control over revenue and expenditure, maintains the equipment inventory and deals with personnel.

The functions of the <u>Timber Management Branch</u> include the acceptance and approval of management and annual operating plans prepared for lease and licensed Crown lands, implementation of management plans prepared by the Department and the disposal of Crown timber. These activities extend to include the processing of timber applications, selection of timber to be sold, cruising of merchantable timber, inspection of cutting areas to ensure proper logging and utilization practices, measurement of forest products, collection of duesand fees and reforestation programs for areas denuded by fire and cutting. The Branch is also responsible for the implementation and supervision of the timber quota system.

The <u>Forest Protection Branch</u> has charge of all phases of protection including prevention, detection and suppression of forest and prairie fires.

Radio communications and aircraft operations are part of and under the direct charge of the Protection Branch. Prior to the establishment of the

Construction and Maintenance Branch in 1970, the Protection Branch planned, supervised and executed the construction and maintenance of all road and building programs on public forest lands.

The <u>Construction and Maintenance Branch</u> was established in 1970 incorporating all aspects of construction and maintenance of facilities such as: roads, airstrips, bridges, buildings and recreation areas. The purchase, maintenance and repair of mobile equipment and vehicles as well as the development of specialized equipment is an additional responsibility of this Branch.

The <u>Forest Land Use Branch</u> was formed early in the 1969-70 fiscal year. Previous to its establishment it was a section within the Timber Management Branch. The functions of the Branch are to co-ordinate the long term management planning and administration of the use of forest land and to correlate water, recreation and forage management with timber, fish and wildlife management; to supervise surface activities on public forest lands; to participate in forest land management applied research; and, to co-ordinate planning and data collection for integrated resource management programs, including land classification.

The <u>Training Branch</u> is responsible for preparing training material and conducting training programs for Department personnel and other persons concerned with activities of fire control, forest management, forest protection and conservation. It also provides the facilities and instruction for the second year of a two-year forest technology course provided by the Northern Alberta Institute of Technology at Edmonton, and supervises the Provincial Junior Ranger Program.

The <u>Forest Surveys and Planning Branch</u> was phased out as an operating program in 1970. During the period it functioned as a separate branch, it prepared and maintained detailed inventories by management units; prepared long and short term management plans; provided timber application forest-type maps; developed and supervised recreational area plans; provided regulation of geophysical activities in the forest area; and, provided mapping services to other branches, sections and public agencies.

During reorganization in 1970, the Timber Management Branch received and became responsible for the timber related activities of this Branch.

One Forest and part of two others on the east slopes of the Rockies of Alberta are included in the Rocky Mountain Forest Reserve.

The Reserve was established as a forest conservation area by legislation of both the Alberta legislative assembly and Canadian Parliament and placed under the Eastern Rockies Forest Conservation Board. The Board consists of one federal and two provincial members responsible to the Deputy-Minister, Department of Lands and Forests. The functions of policy setting and supervising the execution of programs are assigned to the Board by law. The application of policy through designated programs and performing administration is the responsibility of the Alberta Forest Service.

The Reserve is recognized as an important management unit since it includes part of the headwaters of the main Prairie Provinces river system.

Alberta Forest Service - Fiscal Expenditures

Tables 1-13 describe expenditures by the Alberta Forest

Service for the nine fiscal years 1962-70. Each table includes ordinary expenditure only, net of federal contributions. To facilitate comparison of the annual expenditure of monies within a particular branch, a percentage breakdown of the branch's annual budget has been calculated. Disbursement of funds for all recognized operating branches in the period under review are recorded.

Table 1 provides a summary of total annual spending by the Alberta Forest Service during the period 1962-70, including funds disbursed for the operational and maintenance costs of the Rocky Mountains Forest Reserve and the Eastern Rockies Forest Conservation Board. The summary has been derived from the more detailed breakdown of activity expenditures described in Tables 2-13. Figure 1 provides a graphical summary of expenditures using the data tabulated in Table 1.

Throughout the period, Table 1 reveals that the Forest Protection Branch accounted for a substantial portion of annual expenditures of the Alberta Forest Service. Compared to previous years, the decrease in expenditures as a percentage of total Service expenditures for the 1969-70 fiscal year can be partially attributed to the transfer of some of its functions to the newly created Construction and Maintenance Branch. This is reflected to some extent by the overall decrease in monies disbursed on various expenditure items within the Branch as shown in Table 4.

Prior to 1964-65, the total amount of funds expended by the Administration Branch was relatively insignificant. In 1964-65, expenditures increased sharply and since then have continued to rise to the point where they currently represent no less than one-fifth of the total Alberta Forest Service budget. Since 1965, the combined expenditures of the Administration and Forest Protection Branches have accounted for over 60 per cent of the total annual budget.

Tables 2-12 provide a detailed account of individual branch expenditures for the period 1962-70.

It should be noted that aircraft operations and communications fall under the jurisdiction of the Forest Protection Branch but since they provide services to other branches, the expenditures of these two activities have been recorded separately in Tables 5 and 6. It should also be noted that annual fire suppression costs are recorded separately in Table 4.

Funds appropriated under separate votes to "quota reforestation" and "silviculture" commencing in 1968 and 1970, respectively, have been combined with those funds appropriated to the Timber Management Branch.

Total expenditures for the three are shown in Table 3.

Table 13 provides an account of capital expenditures during the nine year period. The costs recorded are in respect of aerial photography, forest inventory, forestry and access road construction.

SUMMARY OF ANNUAL EXPENDITURES BY BRANCH 1962-1970

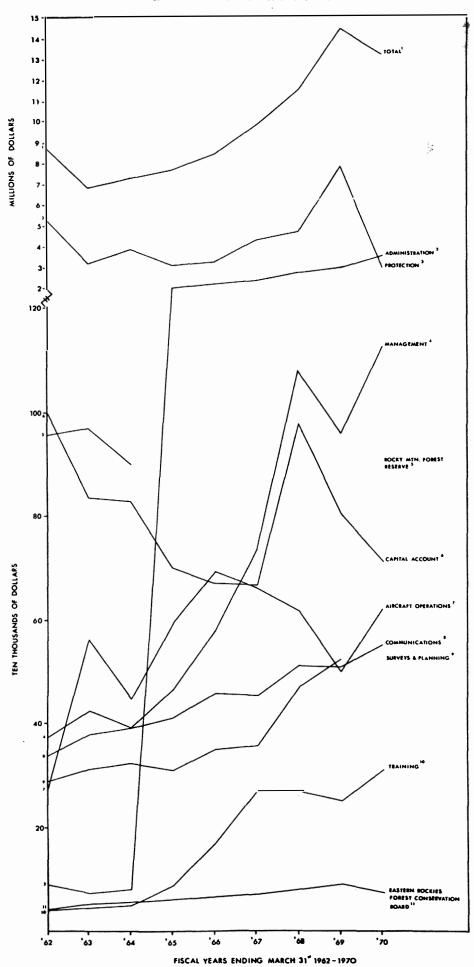
ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

BRANCH									FISCAL Y (dollar									
	1962	%	1963	15	1964	1/8	1965	%	1966	1 %	1967	1/5	1968	1/8	1969	1%	1970	15
Administration	89,797	ı	77,081	ı	83,469	ı	2,035,512	29	2,245,552	29	2,377,315	25	2,797,286	26	3,036,169	22	3,646,605	29
Timber Management	374,174	5	425,793	7	392,594	6	464,720	7	578,055	7	736,812	8	1,083,529	10	961,939	7	1,129,776	9
Forest Protection ²	5,932,579	77	4,179,085	69	4,743,603	72	4,144,072	. 58	4,449,547	57	5,497,028	59	5,907,311	56	8,948,700	65	4,170,613	33
Contr. & Maint.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,086,232	24
Forest Land Use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	197,321	2
Training	42,893	-	49,137	1	54,959	1	88,686	ı	168,292	2	271,519	3	269,876	3,	249,000	2	311,143	2
Surveys & Planning	289,837	4	317,169	5	321,918	5	308,254	4	348,828	4	356,172	4	470,068	4	524,283	4	-	-
Eastern Rockies Forest Copservation	1						_											
Board	1,003,391	13	1,023,621	17	959,527	15	62,951	<u> </u>	67,581	1	71,795	<u> </u>	80,383	_1	92,364		77,128	1
TOTAL .	7,732,671	100	6,071,886	100	6,556,070	100	7,104,195	100	7,857,855	100	9,310,641	100	10,608,453	100	13,812,455	100	12,618,818	100
Capital Account	1,025,903		838,607		830,976		699,897		671,253		667,050		984,825		805,929		713,368	
TOTAL EXPENDITURE	8,758,574		838,607 830, 6,910,493 7,387,				7,804,092		8,529,108		9,977,691		11,593,278		14,618,384		13,332,186	

ending March 31st of the year indicated.
 summation of "Total" from Tables 4, 5, and 6 respectively.
 summation of "Total" from Tables 11 and 12.

FIG. 1 ALBERTA FOREST SERVICE EXPENDITURES 1962-1970



ADMINISTRATION BRANCH EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS FISCAL YEAR (dollars) EXPENDITURE 1962 1964 % 1963 % 1965 % 1966 1967 1968 1969 1970 Contracts, Agreements & Rentals 15,611 6,994 14,529 12 186 Mail & Freight 3,328 2,655 2,637 2,734 5,086 49,088 2,207 24,678 38,896 Materials & Supplies 84,434 13,856 16 8,891 12 | 10,390 11,869 24,245 28,017 37,471 42,941 13 Miscellaneous² 28,149 2,061 2 2,523 969 10,909 29,181 31,997 22,548 30,388 1 Repairs & Maintenance 3,557 515 529 296 325 369 214 298 491 47,054 Salaries 1,951,583 97 2,304,606 97 2,684,089 96 2,912,761 96 3,172,780 65 | 51,364 2,173,600 52 | 50,426 Travelling Expenses 3,024 213,707 2,077 2 1,494 1,719 2,830 2,222 1,354 2,021 2 Utilities, Telephone & Telegraph 609 1 656 1 708 736 33,487 630 1 735 1,125 1,115 Vehicles⁴ 20,498 281 2,484 23 121 660 343 157 Wages 6 10,130 13 14,429 56,185 12,758 3,173 8,259 44,390 17 323 100 | 2,035,512 | 100 | 2,245,552 | 100 | 2,377,315 | 100 | 2,797,286 | 100 | 3,036,169 | 100 | 3,646,605 | 100 89,797 100 TOTAL 100 77,081 83,469

SOURCE: Public Accounts of Alberta.

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^{1.} ending March 31st of the year indicated.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.

^{3.} repairs and maintenance of furnishings, equipment, tools and office machines.

^{4.} includes expenditures for both purchase and maintenance of vehicles.

TABLE 3.

TIMBER MANAGEMENT BRANCH EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE											AL YEAR ^l llars)							
EXPENDITORE	1962	%	1963	%	1964	%	1965	%	1966	%	1967	%	1968	%	1969	%	1970	%
Contracts, Agreements & Rentals	43,727	12	48,526	11	44,740	11	86,257	19	121,419	21	197,077	27	372,730	35	252,373	26	243,185	22
Mail & Freight	895	-	258	-	151	-	1,913	-	2,027	-	3,722	1	8,936	1	5,714	1	8,581	1
Materials & Supplies	35,860	10	36,937	9	33,926	9	38,334	8	54,627	10	68,536	9	109,486	10	95,597	10	135,928	12
Miscellaneous ²	5,746	1	6,002	2	4,469	1	3,422	1	1,974	-	5,574	1	4,543	-	3,560	-	29,424	3
Repairs & Maintenance 3	676	-	1,147	-	1,428	-	1,160	-	2,070	-	2,160	4	3,562	-	2,350	-	2,333	-
Salaries	149,126	40	162,713	38	168,697	43	174,151	38	200,011	35	210,370	29	239,624	22	275,022	29	327,653	29
Travelling Expenses	24,839	7	25,570	6	21,729	6	23,188	5	25,693	4	31,497	14	33,163	3	31,987	3	28,607	2
Utilities, Telephone & Telegraph	1,283	-	1,722	-	1,386	-	1,993	-	2,848	1	3,165	-	4,362	-	5,057	•	6,099	-
Vehicles 4	3,801	1	7,129	2	3,661	1	9,578	2	1,696	-	5,840	1	6 ,23 8	1	8,857	1	28,819	3
Wages	108,221	29	135,789	32	112,407	29	124,724	27	165,690	29	208,871	_28	300,885	28	281,422	29	319,147	28
TOTAL	374,174	100	425,793	100	392,594	100	464,720	100	578,055	100	736,812	100	1,083,529	100	961,939	100	1,129,776	100

ending March 31st of the year indicated.
 includes items such as advertising, compensation, interest, grants, prizes, taxes etc.
 repairs and maintenance of furnishings, equipment, tools and office machines.
 includes expenditures for both purchase and maintenance of vehicles.

TABLE 4.

FOREST PROTECTION BRANCH EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

							F		L YEAR ^l lars)									
EXPENDITURE	1962	%	1963	%	1964	%	1965	1 %	1966	%	1967	%	1968	%	1969	%	1970	%
Contracts, Agree. & Rentals	1,581,945	30	242,485	8	499,938	13	551,940	18	623 , 870	19	1,122,088	26	1,359,136	28	3,503,449	44	1,283,927	43
Mail & Freight	35,388	1	40,639	1	32,130	1	56,846	2	69,260	2	120,825	3	81,399	2	230,070	3	57 , 960	2
Materials & Supp.	721,486	14	433,522	12	471,555	12	584,200	18	575,691	17	780,587	18	656,364	14	943,679	12	404,954	14
Miscellaneous ²	28,009	-	16,051	-	12,533	-	22,533	1	41,763	1	13,722	-	13,791	-	18,760	-	5,847	-
Repairs & Maint. 3	22,819	-	21,269	-	23,076	1	34,138	1	25,791	1	32,787	1	39,584	1	60,540	1	27,086	1
Salaries	1,140,763	21	1,283,057	40	1,431,396	37	139,509	5	209,563	5	209,563	5	291,714	6	326,140	4	164,977	6
Travel. Exp.	242,811	5	179,193	6	165,958	4	198,898	6	219,353	7	220,782	5	250,393	5	275,973	3	35,215	1
Util., Teleg. & Telegraph	57,706	1	75,020		83,573		104,575	3	96,615	l	104,235	2	130,242		142,722	2	12,367	
Vehicles	468,604	9	435,645	14	616,865	16	788,550	25	773,402	23	797,794	18	751,448	16	710,543	9	103,468	3
Wages	1,020,589	_19_	509,722	_16_	568,479	14	660,859	21	722,563	_22_	979,166	22	1,202,772	25	1,735,851	22	903,434	30
TOTAL	5,320,120	100	3,236,603	100	3,905,966	100	3,142,048	100	3,299,518	100	4,381,549	100	4,776,843	100	7,947,727	100	2,999,235	100
					-											,		
Suppression Costs	2,452,000	46	207,497	64	650,540	17	459,039	15	602,904	18	1,547,824	35	2,382,731	50	5,472,306	69	2,671,021	89

^{1.} ending March 31st of the year indicated.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.

^{3.} repairs and maintenance of furnishings, equipment, tools and office machines.

includes expenditures for both purchase and maintenance of vehicles.
 although included in "TOTAL", these costs are presented separately to reveal monies spent on direct suppression activities.

AIRCRAFT OPERATIONS EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE									FISCAL	L YEAF lars)	R							
	1962	%	1963	%	1964	%	1965	%	1966		1967	%	1968	%	1969	%	1970	%
Contracts, Agreements & Rentals	217,286	80	443,136	79	385,882	86	423,497	72	497,519	71	408,225	62	467,203	75	372,270	75	376 , 20 6	61
Mail & Freight	212	-	103	-	-	-	250	-	1,032	-	691	-	1,796	-	1,011	-	1,117	-
Materials & Supplies	10,003	4	9,933	2	15,559	3	13,448	2	18,350	3	21,817	3	16,828	3	4,862	1	20,709	3
Miscellaneous ²	19,753	7	12,499	2	7 , 455	2	7,623	1	4,728	1	11,318	2	22,634	4	4,153	1	34,473	6
Repairs & Maintenance ³	2	-	-	-	-	-	-	-	1,167	-	649	-	300	-	-	-	135	-
Salaries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Travelling Expenses	230	-	41	-	479	-	497	-	769	-	2,350	-	1,217	-	1,549	-	-	-
Utilities, Telephone & Telegraph	748	-	108	-	101	-	-	-	-	-	3,203	-	10,614	2	l 645	-	564	-
Vehicles 4	14,240	5	90,343	16	35,041	8	145,346	25	165,240	24	196,004	33	84,210	14	113,453	23	186,754	30
Wages	10,126	4	6,700	1	2,793	<u> </u>	2,015	<u> </u>	4,283	1	17,433	3	14,101	2	161		255	<u> </u>
TOTAL	272,600	100	562 , 863	100	447,310	100	592,676	100	693,088	100	661,690	100	618,903	100	498,104	100	620,213	100

ending March 31st of the year indicated.
 includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.
 repairs and maintenance of furnishings, equipment, tools and office machines.
 includes expenditures for both purchase and maintenance of vehicles.

COMMUNICATIONS SECTION EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE									SCAL YEAR dollars)	,1								
	1962	%	1963	%	1964	%	1965	1 %	1966	%	1967	%	1968	%	1969	%	1970	%
Contracts, Agreements & Rentals	439	-	248,242	66	692	-	1,038	-	8,741	2	16,920	4	9,922	2	10,678	2	4,844	1
Mail & Freight	2,492	1	785	-	1,149	-	8 03	-	789	-	554	-	837	-	864	-	319	-
Materials & Supplies	121,617	36	27,525	7	21,952	6	14,181	4	12,700	3	29 ,2 60	6	33,777	6	26,858	5	21,589	4
Miscellaneous ²	2,812	1	2,440	1	175	-	26	-	101	-	10	-	4	-	157	-	1	-
Repairs & Maintenance ³	11,033	3	5,176	1	7,405	2	10,119	3	3,957	2	9,718	2	10,854	2	8,294	2	7,509	2
Salaries	134,512	40	54,052	14	53,631	14	57,583	14	59,487	13	56,589	13	61,452	12	69,322	14	65,995	12
Travelling Expenses	17,884	5	3,514	1	4,471	1	4,602	1	4,881	1	3,646	1	3,571	1	3,997	1	2,483	-
Utilities, Telephone & Telegraph	31,469	9	33,969	9	292,311	75	316,897	77	358,831	79	332,038	73	383,813	15	375,527	75	442,778	80
Vehicles 4	9,841	3	387	-	5,937	2	1,324	-	260	-	1,601	-	3,460	1	906	-	374	-
Wages	7,760	2	3,529	1	2,604		2,775	1	1,194		3,453	<u>1</u>	3,870	<u> </u>	6,266	<u>1</u>	5,273	1
TOTAL	339,859	100	379,619	100	390,327	100	409,348	100	456,941	100	453,789	100	511,565	100	502,869	100	551,165	100

^{1.} ending March 31st of the year indicated.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.

^{3.} repairs and maintenance of furnishings, equipment, tools and office machines.
4. includes expenditures for both purchase and maintenance of vehicles.

CONSTRUCTION AND MAINTENANCE BRANCH* EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE							FISCAI	JILKI	(dol:	lars)								
	1962	%	1963	%	1964	%	1965	%	1966	%	1967	%	1968	%	1969	76	1970	%
Contracts, Agreements & Rentals																	1,319,143	43
Mail & Freight																	10,864	-
Eterials & Supplies																	192,816	6`
fiscellaneous ²																	11,117	-
Repairs & Maintenance ³																	21,109	1
Salaries																	271,619	9
ravelling Expenses																	22,793	1
tilities, Telephone & Telegraph																	114,027	4
ehicles 4			1														734,030	24
ages																	388,714	12
TOTAL		l				ł									i	3	3,086,232	100

^{1.} ending March 31st of the year indicated.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.

repairs and maintenance of furnishings, equipment, tools and office machines.
 includes expenditures for both purchase and maintenance of vehicles.

^{*} Organized and functioned as a separate branch during 1969-70 fiscal year.

FOREST LAND USE BRANCH* EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE					FISC	AL YEA		llars)										
B X I B W D I I O N B	1962	%	1963	%	1964	i %	1965	%	1966	%	1967	%	1968	%	1969	%	1970	%
Contracts, Agreements & Rentals	·																19,699	10
Mail & Freight] [1,288	1
Materials & Supplies																	6,252	3
Miscellaneous ²			l														1,010	-
Repairs & Maintenance ³																	-	-
Salaries																	145,370	74
Travelling Expenses																	7,476	4
Utilities, Telephone & Telegraph																	2,237	1
Vehicles 4																	1,253	1
Wages																	12,736	6
TOTAL																	197,321	100

^{1.} ending March 31st of the year indicated.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.

^{3.} repairs and maintenance of furnishings, equipment, tools and office machines.

^{4.} includes expenditures for both purchase and maintenance of vehicles.

^{*} Formerly Land Use Section in Timber Management Branch but became an independent branch during 1969-70 fiscal year.

TRAINING BRANCH EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE							FISCA	L YEA										
	1962	%	1963	%	1964	%	1965	%	19665	%	1967	%	1968	%	1969	%	1970	1 %
Contracts, Agreements & Rentals	22	-	158	•	450	1	1,008	1	3,821	2	7,138	3	7,129	3	7,651	3	8,268	3
Mail & Freight	1,260	3	550	1	743	1	1,092	1	1,289	1	2,160	1	3,05	1	1,825	1	2,396	1
Materials & Supplies	10,999	26	13,352	27	12,636	23	27,426	31	60,522	36	87,925	32	71,148	26	53,378	21	61,982	20
Miscellaneous ²	154	-	618	1	1,051	2	574	1	1,349	1	1,001	-	1,11	-	909	-	1,091	-
Repairs & Maintenance 3	83	-	-	-	128	-	223	-	560	-	30,386	11	25,739	10	8,820	4	21,352	7
Salaries	20,835	49	22,815	47	24,383	44	27,784	31	53,298	32	68,266	25	84,510	31	101,457	41	110,383	36
Travelling Expenses	2,968	7	4,583	9	3 , 678	7	4,897	6	7,181	4	21,001	8	14,480	6	18,501	7	21,108	7
Utilities, Telephone & Telegraph	374	1	496	1	543	1	674	1	1,363	1	1,414	1	1,846	1	2,255	1	3,085	1
Vehicles 4	1,478	3	-	-	1,960	4	7,099	8	9,881	6	10,854	4	17,273	6	7,690	3	28,179	9
Wages	4,720	11	6,565	14	9,388	17	17,909	20	29,028	17	41,374	_15	43,584	<u> 16</u>	46,514	19	53,299	17
TOTAL	42,893	100	49,137	100	54,959	100	88,686	100	168,292	100	271,519	100	269,876	100	249,000	100	311,143	100

^{1.} ending March 31st of the year indicated.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.

^{3.} repairs and maintenance of furnishings, equipment, tools and office machines.

^{4.} includes expenditures for both purchase and maintenance of vehicles.

^{5.} commencing in 1965-66, funds appropriated to the Junior Forest Ranger Program (Vote 1829) were combined with those of the Forestry Training School (Vote 1828)

FOREST SURVEYS AND PLANNING BRANCH EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE							FISCAL Y		dollars)		-							
	1962	%	1963	%	1964	%	1965	%	1966	%	1967	%	1968	%	1969	%	1970 ⁵	%
Contracts, Agreements & Rentals	1,194	•	6 , 562	2	2,076	1	172	-	283	,-	1,944	1	14,277	3	16,297	3	-	-
Mail & Freight	198	-	391	-	121	-	1,010	-	189	-	501	-	470	-	1,735	-	-	-
Materials & Supplies	22,537	8	34 , 433	11	37,509	12	27,803	9	31,797	9	32,615	9	37,846	8	42,922	9	-	-
Miscellaneous ²	349	-	1,632	1	240	-	271	-	485	-	617	-	15,519	3	6,610	1	-	-
Repairs & Maintenance ³	829	-	961	-	690	-	879	-	748	-	-660	-	658	-	952	-	-	-
Salaries	173,030	60	179,704	57	204,046	63	227,972	74	259,195	75	265,581	75	294,080	63	344,579	66	-	-
Travelling Expenses	10,931	4	10,602	3	4,054	1	5 , 763	2	10,069	3	7,500	2	9,735	2	15,245	3	-	-
Utilities, Telephone & Telegraph	707	-	532	-	506	-	438	-	629	-	626	-	739	-	1,710	-	-	-
Vehicles 4	7,431	3	8,014	3	27,666	9	13,871	5	18,127	5	16,405	5	22,133	5	16,484	3	-	-
Wages	72,631	25	74,338	23	45,010	14	30,075	10	27,306	8	30,023	8	74,611	16	77,749	15		
TOTAL	289,837	100	317,169	100	321,918	100	308,254	100	348,828	100	356,172	100	470,068	100	524,283	100	<u> </u>	-

^{1.} ending March 31st of the year indicated.

SOURCE: Public Accounts of Alberta.

.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.

^{3.} repairs and maintenance of furnishings, equipment, tools and office machines.

^{4.} includes expenditures for both purchase and maintenance of vehicles.

^{5.} no longer functions as a separate branch within the Alberta Forest Service.

ROCKY MOUNTAIN FOREST RESERVE EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE	FISCAL YEAR ¹ (dollars)																	
	1962	%	1963	96	1964	%	1965	%	1966	%	1967	96	1968	96	1969	%	1970	96
Contracts, Agreements & Rentals	74.769	8	74,665	8	84,323	9												
Mail & Freight	2,983	-	2,861	-	2,498	-												
Materials & Supplies	129,666	14	104,171	11	94,680	10										١.		
Miscellaneous ²	0,651	-	2,131	-	1,936	-	ĺ											
Repairs & Maintenance ³	3,055	-	5,607	1	4,193	-												
Salaries	363,215	38	385,619	40	392 , 855	45						ı						
Travelling Expenses	36,060	4	18,813	2	15,747	2												
Utilities, Telephone & Telegraph	10,958] 1	12,214	1	10,597	1												
Vehicles ⁴	217,002	23	223,735	23	156,330	17												
Wages	117,694	12	139,911	14	139,291	16												
TOTAL	958,053	100	969,727	100	902,450	100												

^{1.} ending March 31st of the year indicated.

^{2.} includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.
3. repairs and maintenance of furnishings, equipment, tools and office machines.
4. includes expenditures for both purchase and maintenance of vehicles.

^{*}Until 1964, funds were appropriated under Vote 1817 to the Rocky Mountain Forest Reserve. Since 1964, funds for the management and administration of the Reserve are primarily allocated from the Timber Management Branch budget.

EASTERN ROCKIES FOREST CONSERVATION BOARD EXPENDITURES 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE		FISCAL YEAR (dollars)																
	1962	1 %	1963	%	1964	%	1965	%	1966	1 %	1967	%	1968	3 %	1969	7 %	1970 - 156 2,339 1,901 - 38,790 3,702 538 1,374 28,328 77,128	1 %
Contracts, Agreements & Rentals	346	1	1,231	2	867	2	1,366	2	1,168	2	771	1	533	ı	550	1	-	-
Mail & Freight	1.39	-	101	-	125	-	125	-	240	-	117	-	130	-	130	-	156	_
Materials & Supplies	3,627	8	2,683	5	2,820	5	2,086	3	3,012	5	3,827	5	2,728	3	3,051	3	2,339	3
Miscellaneous ²	2,049	3	1,450	3	1,600	3	1,691	3	1,607	2	2,110	3	1,449	2	1,474	2	1,901	2
Repairs & Maintenance	123	-	116	-	-	-	-	-	128	-	-	-	165	-	709	1	-	-
Salaries	-	-	<u> </u>	-	-	-	-	-	-		6,253	9	36,051	45	41,854	45	38,790	50
Travelling Expenses	2,791	6	3,848	7	3,096	5	3,666	6	4,219	6	3,244	4	4,460	6	6,066	6	3,702	5
Utilities, Telephone & Telegraph	179	-	277	1	273	1	365	1	417	1	510	1	528	1	571	1	538	1
Vehicles 4	74	-	416	1	1,298	2	4,826	8	2,092	3	2,131	3	1,076	1	4,559	5	1,374	2
Wages	37,010	82	43,772	81	46,998	82	48,826	77	54,698	81	52,832	74	33,263	41	33,400	36	28,328	_37_
TOTAL	45,338	100	53,894	100	57,077	100	62,951	100	67,581	100	71,795	100	80,383	100	92,364	r00	77,128	100

ending March 31st of the year indicated.
 includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.
 repairs and maintenance of furnishings, equipment, tools and office machines.

^{4.} includes expenditures for both purchase and maintenance of vehicles.

CAPITAL ACCOUNT 1962-1970

ALBERTA FOREST SERVICE

DEPARTMENT OF LANDS AND FORESTS

EXPENDITURE		FISCAL YEAR ¹ (dollars)														
	1962	1963	1964	1965	1966	1967	1968	1969	1970							
Contract, Agreements & Rentals	721,420	633,667	639,976	485,594	458,717	501,262	581,348	488,173	409,447							
Mail & Freight	65	-	414	9,689	15,445	14,332	18,549	13,536	10,356							
Materials & Supplies	142,587	112,952	107,785	120,076	88,794	69,486	227,713	174,792	146,633							
Miscellaneous ²	2,593	1,332	728	4,955	3,938	3,751	7,195	16,572	10,671							
Repairs & Maintenance ³	638	199	552	-	-	205	469	511	279							
Salaries	-	-	-	-	-	-	-	-	-							
Travelling Expenses	1,739	249	-	52	190	397	2,896	379	879							
Utilities, Telephone & Telegraph	l h 1,111	285	614	644	851	7,705	679	1,001	1,327							
Vehicles 4	5,703	979	1,976	1,918	1,493	436	12,198	4,695	12,920							
Wages	150,047	88,944	78,931	76,969	101,825	69,476	133,778	106,270	120,856							
TOTAL	1,025,903	838,607	830,976	699,897	671,253	667,050	984,825	805,929	713,368							

ending March 31st of the year indicated.
 includes items such as advertising, compensation, interest, grants, prizes, taxes, etc.
 repairs and maintenance of furnishing, equipment, tools and office machines.
 includes expenditure for both purchase and maintenance of vehicles.

SASKATCHEWAN

SASKATCHEWAN

General

The public forests of Saskatchewan are managed by the Forestry Branch of the Department of Natural Resources located at Prince Albert. The Branch is responsible for developing and evaluating forest policies and management programs; the responsibility for implementing such policies and programs rests with the various regional administrative authorities. In addition to the operating Divisions within the Branch², there are a number of support services including personnel, administration, legal, etc. The objectives of the Forestry Branch are to provide maximum annual harvests on a sustained yield basis from provincial forests and to promote sound forest management on privately-owned woodlands.

The forests of Saskatchewan are located mainly in the northern half of the province and cover some 118,000 square miles, or 54 per cent, of Saskatchewan's total land area. Provincial forest lands constitute approximately 71 million acres, or 94 per cent, of all forest land in the province. Of provincial forest land, approximately 23 million acres, or 32 per cent, are classified as productive while the remaining portion of 48 million acres is classified as non-productive.

Prior to 1971, the Forestry Branch consisted of the following Divisions - Management, Inventory, Research, Silviculture and Fire Control. Research and Silviculture were combined in 1969 to form the Silviculture Division. Early in 1971, the Forestry Branch underwent a reorganization and presently consists of three Divisions - Management, Inventory and Silviculture. Fire Control now functions independently as the Forest Protection Branch within the Department of Natural Resources. This report will describe activity within the Forestry Branch prior to reorganization.

The more common coniferous tree species are black spruce, jack pine and white spruce. Less common species are larch and balsam fir. Of the total softwood volume growing in provincial forests, black spruce and jack pine comprise 74 per cent of the volume with the greater percentage being in the 4" - 9" d.b.h. class.

Trembling aspen, balsam poplar and white birch constitute the common deciduous species and represent almost 100 per cent of the total volume of growing stock. Less common and relatively insignificant are maple, elm and ash. As with softwoods, the greater percentage of the volume is to be found in the 4" - 9" d.b.h. class. All species combined, hardwoods represent approximately 40 per cent of the total volume of growing stock in Saskatchewan's public forests.

Forestry Branch - Organization and Functions

The main operating Divisions of the Forestry Branch and their functions are briefly described below.

The Forest Management Division is responsible for the preparation of forest management plans for each of the administrative districts in the province and for the preparation of annual operating plans for pulpwood and logging operations. These activities extend to include cruising of merchantable timber, selection and marking of timber to be harvested, inspection of cutting areas to ensure proper logging and utilization practices, and measurement of forest products.

The basic responsibility of the <u>Forest Inventory Division</u> is to maintain current forest statistics on present volume, increment and

depletion. To accomplish this, the Division conducts aerial photography surveys, initiates field surveys, maps, blueprints and compiles data.

The Canada Land Inventory forestry capability program is also a part of the Inventory Division.

The <u>Silviculture Division</u> is responsible for reforestation of cut and burned-over provincial forest lands. Land-use studies are part of the Division's responsibility and are implemented for purposes of determining the best use of provincial forest lands in specified areas. Research and assessment of results are the charge of the Silviculture Division.

The <u>Fire Control Division</u> is responsible for all phases of protection including prevention, detection, and suppression of forest and prairie fires. Radio communications and aircraft operations are two additional, but important, activities that fall under the jurisdiction of the Division.

Forestry Branch - Fiscal Expenditures

Tables 14-22 describe expenditures of the Forestry Branch for the ten fiscal years 1961-70. Each table includes ordinary expenditure only, net of federal contributions and capital expenditures. Besides maintaining an account of monies disbursed by each Division, the Department's accounting procedures require that records be kept for the following: Central Services, Transportation and the Canada Land Inventory. Because of the difficulty of prorating expenditures incurred by Central Services and Transportation among the Divisions, they have been

recorded separately in presentation of the tables.

Costs associated with the operation of the Canada Land Inventory program can be combined with those of the Inventory Division for a complete picture of annual expenditures for the Division.

Table 14 provides a summary of total annual spending for the period 1961-70. The summary has been obtained from the detailed breakdown of expenditures recorded in Tables 15-22. Figure 2 provides a graphical representation of expenditures employing the data tabulated in Table 14. Summary data reveal that throughout the 10-year period the Fire Control Division accounted for a considerable portion of annual expenditures. It has, in fact, expended not less than 50 per cent of the annual budget in any year during the period. Figure 2 clearly emphasizes the level of expenditures created by fire protection activities.

As shown in Figure 2, monies expended for silviculture and inventory activity have risen sharply during the 10-year period which places them second and third, respectively, among activity expenditures. The sharp increase and sudden decline of Management expenditures during the period 1966-70 is attributed to the efforts of the Division in collecting pulpwood cruise data of designated timber blocks. The cruise data collected were used in the preparation of operating plans for Saskatchewan Pulpwood Limited. The project was completed late in 1969.

Prior to 1969, Research was recognized and funded as a separate Division. In 1969, the Division was absorbed by and became part of the Silviculture Division. The amalgamation of these two Divisions accounts for the sharp rise in expenditures for Silviculture and the termination

of expenditures for Research.

Tables 15-22 provide a detailed account of Forestry Branch expenditures during the period 1961-70. It should be noted that in Table 16, it was possible to present a separate account of costs associated directly with fire suppression activity.

TABLE 14.

SUMMARY OF ANNUAL EXPENDITURES BY ACTIVITY 1961-1970

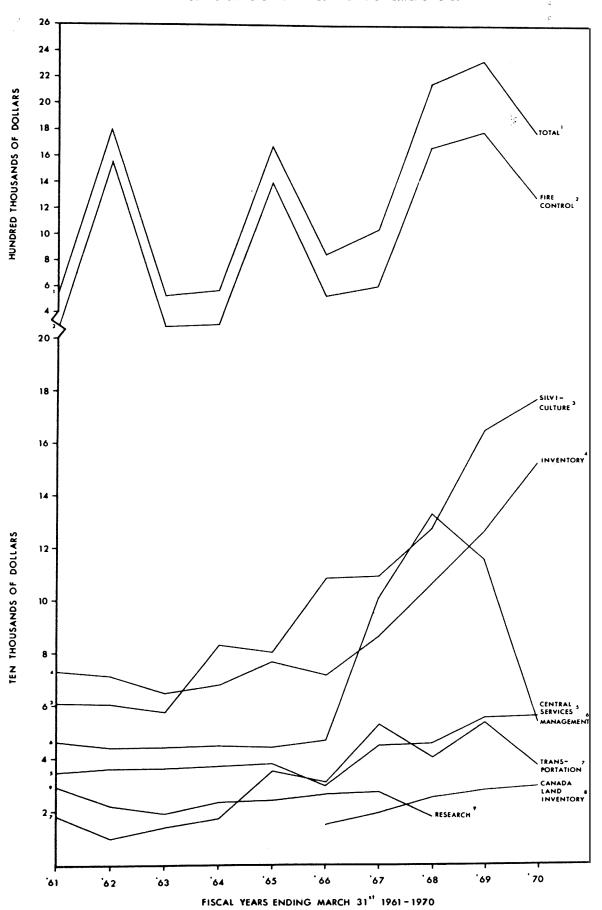
FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

ACTIVITY	FISCAL YEAR ¹ (dollars)																			
	1961	%	1962	1 %	1963	%	1964	%	1965	%	1966	%	1967	%	1968	%	1969	%	1970	%
Central Services	34,177	6	35 , 874	2	35 , 967	7	36,522	6	37,932	2	29,436	3	44,288	4	45,952	2	54,672	2	55 , 975	3
Fire Control	268,267	51	1,558,859	87	295,003	55	306,826	53	1,389,669	82	525,224	62	600,727	58	1,661,407	77	1,785,759	77	1,288,506	72
Management	46,178	9	43,682	2	43,961	8	44,545	8	43,723	3	46,464	5	101,467	10	133,247	6	115,773	5	54,242	3
Research	28,617	5	21,963	1	19,183	4	23,239	4	23 , 985	1	26,064	3	27,202	3	18,013	1	-		-	
Transportation	17,684	3	9,674	1	14,219	3	17,253	3	34,479	2	30,812	4	52,554	5	40,333	2	53,461	2	37,011	2
Inventory	73,269	14	71,250	4	64,546	12	67,705	12	76,476	5	71,450	8	86,155	8	106,194	5	126,458	6	152,708	8
Silviculture	60,908	12	60,185	3	57,343	11	82,653	14	80,382	5	108,300	13	109,189	10	127,063	6	164,927	7	177,417	10
Canada Land Inventory					-				-		14,966	2	19,120	2_	24,954	1	26,871	1	29,594	2
TOTAL	529,100	100	1,801,487	100	530,222	100	578,743	100	1,686,646	100	852,716	100	1,040,702	100	2,157,158	100	2,327,921	100	1,795,453	100

^{1.} ending March 31st of the year indicated.

FIG. 2 SASKATCHEWAN FORESTRY BRANCH EXPENDITURES 1961-1970



CENTRAL SERVICES EXPENDITURES 1961-1970

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

								AL YE					· ·							
EXPENDITURE	1961	1 %	1962	1 %	1963	%	1964	1 %	1965	1 %	1966	1 %	1967	1 %	1968	%	1969	18	1970	1 %
Contracts, Prof.&	11	-	536	2	22	-	11	-	11	-	23	-	16	-	290	1	123	-	675	1
Equipment ²	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
Freight, Mail & Communications	411	1	402	1	395	1	422	1	563	2	925	3	1,863	4	2,105	4	2,195	4	2,618	5
Materials & Supplies	320	1	297	1	306	1	388	1	466	1	226	1	218	-	319	1	795	2	427	1
Miscellaneous 4	5,224	15	5,481	15	3,530	10	2,631	7	5,098	13	5 , 637	19	6 ,5 85	15	7,362	16	7,691	14	5,299	10
Motor Vehicles & Trailers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	. 6	-	6	-	36	-
Rents, Utilities, Insur. & Fuels	-	-	-	-	-	-	9	-	-	-	. 60	-	-	-	67	-	. 21 ,	-	198	-
Repairs & Maint.	-	-	-	-	· -	-	2	-	-	-	-	-		-	•	-	8	-	-	l
Travel, Sust. & Vehicle Expense	2,153	7	1,891	5	2,954	8	4,104	11	2,394	6	3,004	10	2,764	6	2,416	5	2,866	5	2,853	5
Salaries	26,058	76	27,133	76	28,336	79	28,722	79	28,993	77	19,291	66	28,205	64	31,089	58	40,155	73	39,714	71
Wages	-		134	-	424	1	233	1	407	1	270	1	4,637	<u> 11</u>	2,.398	5	812	2	4,155	7_
TOTAL	34,177	100	35,874	100	35,967	100	36 , 52 2	100	37,932	100	29,436	100	44,288	100	45,952	100	54,672	100	55,975	100

SOURCE: Public Accounts of Saskatchewan.

Accounts Division,

Department of Natural Resources, Regina.

ending March 31st of the year indicated.
 includes furniture, furnishings, educational, scientific and construction equipment, etc.

includes stationery, office, educational and scientific supplies, etc.
 includes sundry, taxes, licences, clothing, etc.

FIRE CONTROL EXPENDITURES 1961-1970

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

							FISC		EAR ^l ars)											
EXPENDITURE	1961	1 9	1962	%	1963	96	1964	1 %	19655	18	1966	1 %	1967	%	1968	%	1969	1/8	1970	%
Contracts, Prof.&	720	-	77,350	5	5,006	2	10,539	4	113,828	8	4,640	1	14,580	3	346,095	21	333,302	18	140,847	11
Equipment ²	-	-	14,882	1	-	-	-	-	72,548	5	26,438	5	2,928	-	25,712	.1	70,773	4	41,570	3
Freight, Mail & Communications	467	-	903	-	304	-	164	-	1,630	-	1,124	-	1,210	-	1,169	-	2,048	-	959	-
Materials & Supplies	1,937	1	13,795	1	2,181	1	1,301	-	39,519	3	24,908	5	26,128	4	25,956	1	30,109	2	24,552	2
Miscellaneous 4	7,391	3	72,535	4	13,347	5	15,688	5	62,194	4	18,597	3	16,090	3	64,655	4	74,528	4	35,138	3
Motor Vehicles & Trailers	534	-	11,223	1	3,657	1	3 , 952	1	24,323	2	13,821	3	7,221	1	17,998	1	30,125	2	15,036	1
Rents, Utilities, Insur. & Fuels	153,951	57	712,610	46	171,101	58	171,603	56	479,414	34	269,624	51	291,408	49	543,273	33	692,253	39	742	-
Repairs & Maint.	-	-	471	-	· -	-	-	-	972	-	294	-	74	-	295	-	52	-	556,9 60	43
Travel, Sust. & Vehicle Expense	34,861	13	230,032	15	27,243	9	28,962	10	147,857	11	21,056	4	37,310	6	159,742	10	137,055	8	102,365	8
Salaries	-	-		-	-	-	-	-	44,025	3	47,115	9	51,853	9	50,648	3	51,986	3	57,062	5
Wages	68,406	26	425.058	27	72.164	24	74,617	24		29	97,607	19	151,925	25	425,864		364,028	20	313,275	
TOTAL	268,267	100	1,558,859	100	295,003	100	306,826	100	1,389,669	100	525,224	100	600,727	100	1,661,407	100	1,785,759	100	1,288,506	100
FIRE SUPPRESSIO	n ⁵ 268,267	100	1,558,859	100	295,003	100	306,826	100	1,211,504	87	357,849	68	485,141	81	1,549,985	93	1,611,703	90	1,135,249	88

^{1.} ending March 31st of the year indicated.

^{2.} includes furniture, furnishings, educational, scientific and construction equipment, etc.

^{3.} includes stationery, office, educational and scientific supplies, etc.

^{4.} includes sundry, taxes, licences, clothing, etc.

^{5.} information available up to 1964 reflected suppression expenditures only. Information sources since 1965 included all expenditures associated with fire control.

SOURCE: Public Accounts of Saskatchewan. Accounts Division, Department of Natural Resources, Regina.

FOREST MANAGEMENT EXPENDITURES 1961-1970

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

							FISC	AL Y												
EXPENDITURE	1961	9	1962	1 %	1963	1 %	1964	1/5	1965	1 %	1966	1 %	1967	1 %	1968	1 %	1969	1 %	1970	T \$
Contracts, Prof.&	645	1	21	-	1,501	4	48	-	26	-	377	1	1,912	2	3,372	3	391	-	436	1
Equipment ²	-		54	-	60	-	515	ı	-	-	1,451	3	-	-	34	_	106	-	77	-
Freight, Mail & Communications	27 2	1	67	-	85	-	159	-	102	-	206	-	161	-	77	-	1	-	8	-
Materials & Supplies	1,275	3	503	1	192	-	884	2	276	1	250	1	1,593	2	890	1	642	1	128	-
Miscellaneous	1,854	4	107	-	85	-	91	-	50	-	323	1	1,790	2	402	-	1,258	1	1,167	2
Motor Vehicles & Trailers	64	-	-	-	6	-	2	-	5	-	15	-	239	-	229	-	4,244	4	63	-
Rents, Utilities, Insur. & Fuels	187	-	115	-	7 0	-	171	1	58	-	533	1	1,241	1	2,871	2	4,332	4	1,180	2
Repairs & Maint.	3	-	11	-	13	-	22	-	13	-	8	-	13	-	214	-	85	-	1 9 0	-
Travel, Sust. & Vehicle Expense	3,162	7	1,655	4	1,872	4	2,597	6	2,424	6	2,408	5	16,333	16	18,003	13	12,094	10	5,502	10
Salaries	30,291	66	35,114	81	34,982	во	34,666	78	34,231	78	30,291	65	24,951	25	27,795	21	36,316	31	22,314	42
Wages	8,425	18	6,035	14	5,095	12	5,390	12	6,538		10,602	23	53,234	52	79,460	60	56.304	49	23,177	43
TOTAL	46,178	100	43,682	100	43 ,9 61	100	44,545	100	43,723	100	46,464	100	101,467	100	133,247	100	115,773	100	54,242	100

^{1.} ending March 31st of the year indicated.

SOURCE: Public Accounts of Saskatchewan.

Accounts Division, Department of Natural Resources, Regina.

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^{2.} includes furniture, furnishings, educational, scientific and construction equipment, etc.

^{3.} includes stationery, office, educational and scientific supplies, etc.

^{4.} includes sundry, taxes, licences, clothing, etc.

RESEARCH EXPENDITURES 1961-1968

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

								AL YI												
EXPENDITURE	1961	19	1962	1 %	1963	1 %	1964	1 %	1965	1 %	1966	1 %	1967	1 %	1968	9,5	19697	%	1970	3
Contracts, Prof.&	200	1	282	1	-	-	178	1	4	-	-	-	1	-	26	-				
Equipment ²	-	-	-	-	-	-	-] -	158	1	-	-	-	-	-	-				
Freight, Mail & Communications	91	-	128	1	112	1	116		105	-	108	-	11	-	-	-				
Materials & Supplies	658	2	420	2	246	1	290	1	306	1	180	1	263	1	76	-				
Miscellaneous 4	322	1	551	2	5	1	27	1 4	143	1	306	1	7	-	119	1				
Motor Vehicles & Trailers	11	-	-	-	-	-	-		-	-	-	-	4	-	-	-				
Rents, Utilities, Insur. & Fuels	22	-	43	-	19	-	7		85	-	263	1	465	2	455	3				
Repairs & Maint.	66	-	8	-	-	-	5	1 -	5	-	12	-	. 3	-	-	-				
Travel,Sust. & Vehicle Expense	1,299	5	837	4	795	4	1,299	· 6	1,613	7	1,613	6	1,610	6	1,286	7				
Salaries	22,773	80	18,132	83	17,906	93	19,477	84	20,304	85	21,462	83	23,460	86	14,:04	78				
<u> W</u> ages	3,175	11	1,562	7	100	1	1,840	8	1,262	5	2,120	8	1,378	5	1,947	11				
TOTAL	28,617	100	21,963	100	19,183	100	23,239	100	23,985	100	26,064	100	27,202	100	18,013	100				<u> </u>

^{1.} ending March 31st of the year indicated.

SOURCE: Public Accounts of Saskatchewan.

Accounts Division, Department of Natural Resources, Regina.

^{2.} includes furniture, furnishings, educational, scientific and construction equipment, etc.

^{3.} includes stationery, office, educational and scientific supplies, etc.

^{4.} includes sundry, taxes, licences, clothing, etc.

^{5.} prior to 1969 research was funded as a separate activity. In 1969 it became part of the Silviculture Division and since that time funds for research have been allocated from the silviculture budget.

TRANSPORTATION EXPENDITURES 1961-1970

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

							FISC	AL Y												
_EXPENDITURE	1961	1 9	1962	1 %	1963	1 %	1964	%	1965	1/5	1966	1 %	1967	1 %	1968	%	1969	1 %	1970	1 %
Contracts, Prof.&	-	-	-	-	-	-	23	-	20	-	-	-	809	2	707	2	388	1	1,357	4
Equipment ²	-	-	-	-	-	-	-	-	-	-	16	-	-	-	-	-	19	-	77	-
Freight, Mail & Communications	60	-	4	-	7	-	5	-	4	-	302	1	269	1	6	-	10	-	-	-
Materials & Supplies	-	-	-	-	-	-	7	-	244	1	-	-	235	-	39	-	90	-	117	-
Miscellaneous 4	321	2	2 66	3	370	3	534	3	859	2	1,004	3	612	1	813	2	2,228	4	22	-
Motor Vehicles & Trailers	8 , 475	48	2,001	21	5,675	40	7,019	41	16,670	48	10,432	34	9,844	19	496	1	6 ,9 06.	13	579	2
Rents, Utilities, Insur. & Fuels	436	3	508	5	587	4	460	3	946	3	. 767	3	247	-	470	1	221	-	1,076	3
Repairs & Maint.	2	-	-	-	-	-	-	-	-	-	-	-	55	-	85	[-]	264	1	120	-
Travel, Sust. & Vehicle Expense	8,390	47	6 , 895	71	7,580	53	9,205	53	15,736	46	18,291	59	40,483	77	37,73.7	94	43,335	81	33,663	91
Salaries	-	-	,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wages	-	-	-	-	-	-	-	<u> </u>	-	-	-	<u> - </u>		<u> </u>		-	-	-	-	<u> -</u>
TOTAL	17,684	100	9,674	100	14,219	100	17,253	100	34,479	100	30,812	100	52,554	100	40,333	100	53,461	100	37,011	100

SOURCE: Public Accounts of Saskatchewan.
Accounts Division, Department of Natural Resources, Regina.

ending March 31st of the year indicated.
 includes furniture, furnishings, educational, scientific and construction equipment, etc.

includes stationery, office, educational and scientific supplies, etc.
 includes sundry, taxes, licences, clothing, etc.

FOREST INVENTORY EXPENDITURES 1961-1970

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

								AL YE												
EXPENDITURE	1961	1 9	1962	1 %	1963	1 %	1964	dolla	1965	8	1966	1/2	1967	1 %	1968	%	1969	1 %	1970	18
Contracts, Prof.&	17,005	23	9,932	14	10,170	16	9,692	15	11,284	15	13,914	20	15,284	18	16,409	15	21,421	17	31,591	21
Equipment ²	543	1	1,279	.2	62	-	152] -]	2,743	4	-	-	830	1	197	-	1,035	1	2,620	2
Freight, Mail & Communications	151	-	114	-	206	-	227	-	336	1	285	-	105	-	138	-	166	-	77	-
Materials & Supplies	1,581	2	1,249	2	1,137	2	2,443	4	3,069	4	3 , 918	6	2,582	3	2,907	3	3,645	3	2,870	2
Miscellaneous 4	331	-	131	-	393	1	226	-	1,766	2	1,424	2	1,142	1	714	1	564	-	1,790	1
Motor Vehicles & Trailers	763	1	14	-	37	-	7	-	244	-	-	-	21	-	277	-	308	-	479	-
Rents, Utilities, Insur. & Fuels	9	-	19	-	5	-	19	-	1,652	2	44	-	17	-	2,353	2	776	1	34	-
Repairs & Maint.	121	-	2	-	75	-	4	-	102	-	236	-	8	-	-	-	71	-	63	-
Travel, Sust. & Vehicle Expense	2,411	3	1,453	2	1,413	2	1,447	2	2,131	3	1,522	2	2,356	3	4,357	4	4,468	4	6,044	4
Salaries	39,797	55	47,916	67	45,948	71	50,601	75	51,383	67	48,773	68	52,077	60	66,354	63	80,862	64	89,440	58
Wages	10,557	15	9,141	13	5,100	8	2,887	4	1,766	2	1,334	2	11,733	14	12,488	12	13,142	10	17,700	12
TOTAL	73,269	100	71,250	100	64,546	100	67,705	100	76,476	100	71,450	100	86,155	100	106,194	100	126,458	100	152,708	100

^{1.} ending March 31st of the year indicated.

SOURCE: Public Accounts of Saskatchewan.

Accounts Division, Department of Natural Resources, Regina.

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^{2.} includes furniture, furnishings, educational, scientific and construction equipment, etc.

^{3.} includes stationery, office, educational and scientific supplies, etc.

^{4.} includes sundry, taxes, licences, clothing, etc.

SILVICULTURE EXPENDITURES 1961-1970

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESOURCES

			ŗ				_	AL YE	-											-
EXPENDITURE	1961	1 4	1962	1 %	1963	1 %	1964	1 %	1965	1 %	1966	1 %	1967	1 %	1968	冕	1969	1	1970	d'b
Contracts, Prof.& Tech. Services	8,259	14	5,505	9	820	1	3,902	5	3,785	5	11,002	10	5,995	6	4,878	4	5,732	Įt.	2,609	2
Equipment ²	2,734	4	527	1	101	-	287	-	1,224	2	5,766	6	2,058	2	11,080	9	4,456	3	5,388	3
Freight, Mail & Communications	250	-	302	-	386	1	493	1	1,161	1	657	1	336	-	729	1	555	-	503	-
Materials & Supplies	1,537	3	2,753	5	1,982	4	2,278	3	2,564	3	7,819	7	4,852	ξţ	5,078	4	6,086	4	8,733	5
Miscellaneous 4	5112	1	117	-	41	-	317	-	107	-	371	-	89	-	723	1	660	-	642	-
Motor Vehicles & Trailers	119	-	29 8	-	232		5,532	7	708	1	4,558	4	835	1	1,319	1	8,849	5	449	-
Rents, Utilities, Insur. & Fuels	888	1	1,665	3	2,885	5	4,754	6	2,622	3	5,596	5	5,479	5	6,941	5	11,955	7	1,805	1
Repairs & Maint.	61	-	76	-	87	-	258	-	99	-	366	-	102	-	419	-	773	-	9,621	6
Travel, Sust. & Vehicle Expense	1,663	3	1,530	3	1,172	2	2,813	3	2,522	3	3,306	3	4,053	4	3,888	3	4,655	3	5,700	3
Salaries	30,878	51	29,904	49	31,274	55	32,739	40	30,427	38	28,542	27	37,320	34	41,382	32	52,223	32		32
Nages	13,977	23	18,508	30	18,363	β2	29,280	35	35,163	144	40,317	37	48,070	44	50,631	40	68,983	42	1 ''	148
TOTAL	60,908	100	61,185	100	57,343	100	82,653	100	80,382	100	108,300	100	109,189	100	127,068	100	164,927	100	177,417	100

SOURCE: Public Accounts of Saskatchewan. Accounts Division, Department of Natural Resources, Regina.

ending March 31st of the year indicated.
 includes furniture, furnishings, educational, scientific and construction equipment, etc.
 includes stationery, office, educational and scientific supplies, etc.
 includes sundry, taxes, licences, clothing, etc.

TABLE 22.

CANADA LAND INVENTORY EXPENDITURES /1965-1970

FORESTRY BRANCH

SASKATCHEWAN DEPARTMENT OF NATURAL RESO RCES

			, ,					AL Y	EAR ^l ars)		/									
_EXPENDIT RE	1961	ď	1962	- 9	1963	op op	1964	9,	1965	7%	19665	1 %	1967	96	1968	1 %	1969	1	1970	18
Contracts, Prof.& Tech. Services			uningdiage sulveyingger - bediterestitis								6	-	•	-		-	52	-	329	1
Equipment ²											2,984	50	327	2	1,988	8		-	7	-
Freight, Mail & Cormunications											22	-	38	-	. 49	-	25	-	61	-
Materials & Supplies											576	4	711	4	751	3	471	2	629	2
::iscellaneous										1	42	-	975	5	340	1	685	3	353	1
%otor Vehicles & Trailers											-	-	-	-	49	-	229	1	1,116	4
Rents, Utilitics, Insur. & Fuels											245	2	3,841	20	3,552	14	4,349	16	-	-
Repairs & Maint.											-	-	. 28	-	-	-	-		2,177	7
Travel, Sust. & Vehicle Expense											1,057	7	1,614	8	1,096	5	1,199	4	2,296	8
Salaries											10,034	67	11,586	61	14,140	57	16,522	62	17,280	59
<u>¥</u> azes											_	-	-	-	2,989	12	3,339	15	5,348	18
TOTAL											14,966	100	19,120	100	24,954	100	26,871	100	29,594	100

^{1.} ending March 31st of the year indicated.

SOURCE: Public Accounts of Saskatchewan.

Accounts Division, Department of Natural Resources, Regina.

includes furniture, furnishings, educational, scientific and construction equipment, etc.
 includes stationery, office, educational and scientific supplies, etc.

^{4.} includes sundry, taxes, licences, clothing, etc.
5. forest land capability classification commenced during 1965-66 as part of the Inventory Division.

MANITOBA

MANITOBA

General

The administration of Manitoba forests is controlled by the Forestry Branch of the Department of Mines and Natural Resources. The Forestry Branch co-ordinates control measures for the propagation, improvement and management of the forests, the harvest of forest products, and forest inventory surveys.

For ease of administration, the Province is divided into four regions, each under a Regional Director who is responsible for the field administration of forests in his region. The Regional Director works under policy guidelines established by the Forestry Branch, relating to timber disposal, reforestation and fire protection.

More than 60 per cent of the total land area of Manitoba is covered with forests. Of the 129,000 square miles of forested land, approximately 66,000 square miles, or 51 per cent, are classified as productive. Ninety-two per cent of the area classified as productive is provincial Crown land.

The more common coniferous species are black spruce, jack pine, white spruce and, to a lesser extent, balsam fir. Of the total softwood

Early in 1971, the Department of Mines and Natural Resources underwent reorganization resulting in the formation of the Department of Mines, Resources and Environmental Management. The former department no longer exists. As a result of the reorganization, there is no longer a Forestry Branch as such in Manitoba. The new department consists of five divisions: (1) Research and Planning Division; (2) Resource Management Division; (3) Mines and Departmental Services Division; (4) Air, Radio and Technical Services Division and; (5) Water Resources Division. Forestry operates within all divisions except Water Resources. This report describes activity within the Forestry Branch prior to reorganization.

Tollung growing in provincial forests, block spruce and jack pine comprise 75 per cent of the volume with the greater percentage being in the 4" - 9" ā.b.h. class.

Trembling aspen, balsam poplar and white birch constitute the characteristic deciduous species and represent almost 100 per cent of the total volume of growing stock. Trembling aspen represents about 65 per cent of the total volume of hardwood growing stock. As with softwoods, the greater percentage of the total volume is to be found in the 4" - 9" d.b.h. class. All species combined, hardwoods constitute approximately 37 per cent, or 3.2 billion cubic feet, of the total 11.9 billion cubic feet of growing stock in Manitoba's public forests.

Forestry Branch - Organization and Functions

The Forestry Branch for purposes of administration and policy implementation is divided into two recognized sections; namely, Forest Management and Forest Protection.

The <u>Forest Management</u> section is responsible for the forest resources inventory, timber cruising, mapping, preparation of management plans, silviculture, tree nurseries and reforestation. It is also responsible for the administration of timber sales via the "quota system" introduced in 1966.

The <u>Forest Protection</u> section is responsible for forest fire prevention, detection and suppression including related activities such as: construction of fire lookout towers, the building and maintenance of telephone lines and radio networks, the training of personnel in fire

detection and suppression techniques, and the construction and maintenance of access roads, trails and bridges.

Forestry Branch - Fiscal Expenditures

Tables 23-26 describe expenditures of the Forestry Branch for the nine fiscal years 1961-69. Each table includes ordinary expenditure only, net of federal contributions and capital expenditures. There are four divisions under which Forestry Branch expenditures are recorded by the Department; namely, Management, Protection, Equipment, Construction and Maintenance, and Salaries. The totals shown for salaries in Table 23 represent monies paid to all continuing full time employees and are not included as an expenditure item in either of the remaining accounting divisions.

Table 23 provides a synopsis of total annual spending for the period 1961-69. The summary has been obtained from the detailed breakdown of expenditures recorded in Tables 24-26. Figure 3 provides a graphical summary of expenditures employing the data tabulated in Table 23.

The summary data reveal that Protection expenditures accounted for a considerable portion of total annual expenditures throughout the period. Fluctuations in monies expended from year to year are, to a large extent, due to the amount spent on suppression activity as indicated in Table 25.

The rise in Management expenditures during the 1965-66 fiscal year is the result of an exceedingly sharp increase in monies expended on "materials and repairs" (see Table 24).

TABLE 23.

SUMMARY OF ANNUAL EXPENDITURES BY ACTIVITY 1961-1969

FORESTRY BRANCH

MANITOBA DEPARTMENT OF MINES AND NATURAL RESOURCES

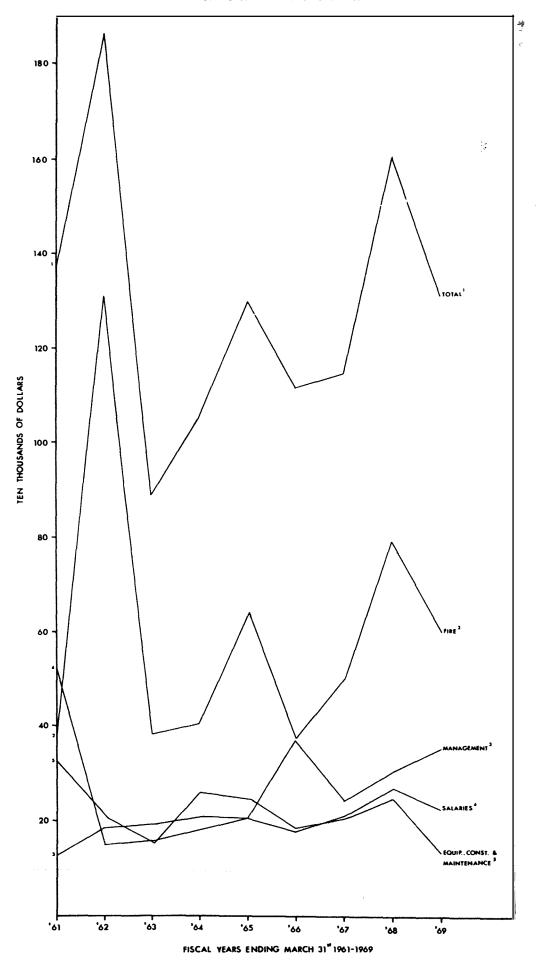
									SCAL YEAR Dollars									
ACTIVITY	1961	%	1962	%	1963	%	1964	%	1965	%	1966	%	1967	%	1968	%	1969	1 %
Management	130,062	9	186,383	10	193,513	22	208,130	20	202,564	15	381,734	34	239,813	21	302,720	19	352,370	27
Protection	383,524	28	1,313,748	71	383,549	43	407,971	38	648,105	50	375,611	34	500,043	43	794,679	49	600,109	46
Equip.,Constr. & Maint.	330,077	24	212,430	11	152,839	17	261,330	25	245,836	19	183,361	16	203,518	18	248,935	15	133,822	10
Salaries	529,654	39	149,417	8	156,389	18	183,418	17	204,517	16	179,119	16	204,291	18	268,475	17	225,099	17
TOTAL	1,373,317	100	1,861,978	100	886,290	100	1,060,849	\mathbf{m}	1,301,022	100	1,119,825	100	1,147,665	100	1,614,809	100	1,311,400	100

1. ending March 31st of the year indicated.

SOURCE: Public Accounts of Manitoba.

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FOREST MANAGEMENT EXPENDITURES 1961-1969

FORESTRY BRANCH

MANITOBA DEPARTMENT OF MINES AND NATURAL RESOURCES

EXPENDITURE									FISC.	AL YE								
	1961	7	1962	%	1963	%	1964	%	1965	%	1966	%	1967	%	1968	%	1969	1 8
Automobiles ²	5,046	4	4,940	3	4,293	2	5,699	3	4,776	2	6,807	2	4,380	2	5,352	2	7,565	a
Freight, Communications and Utilities	978	ו	2,591	1	1,815	1	2,269	1	1,705	1	1,383	-	1,942	1	2,469	1	2,454	1
Machinery and Equipment ³	14,066	11	29,430	16	47,561	25	34,738	17	42,840	21	56,776	15	72,632	30	103,101	34	78,721	22
Material and Repairs 4	22,382	17	15,027	8	5,139	3	20,036	9	7,792	4	155,520	41	12,867	6	16,837	6	10,818	3
Miscellaneous ⁵	3,534	3	9,194	5	25,978	13	24,571	12	17,278	6	26,510	7	3,169	ı	10,911	4	18,231	5
Subsistence and Travellin	ng 8,031	6	8,147	4	8,703	4	5,460	3	6,242	3	6,093	1	2,910	1	6,611	2	9,070	3
Wages	76,025	<u>58</u>	117,054	63	100,024	52	115,357	_55	121,931	60 ·	128,645	34	141,917	59	157,439	52	225,511	64
TOTAL	130,062	100	186,383	100	193,513	100	208,130	100	202,564	100	381,734	100	239,813	100	302,720	100	352,370	100

SOURCE: Public Accounts of Manitoba,

^{1.} ending March 31st of the year indicated.

^{2.} including gas and oil.

^{3.} including furniture and furnishings.

^{4.} includes household requisites, materials and construction costs, construction contracts, etc.

^{5.} includes advertising, exhibits, books, newspapers, periodicals, fees, grants, etc.

FOREST FIRE PROTECTION EXPENDITURES 1961-1969

FORESTRY BRANCH

MANITOBA DEPARTMENT OF MINES AND NATURAL RESOURCES

EXPENDITURE									SCAL YEA	R ¹							-	
	1961	%	1962	%	1963	%	1964	%	1965	%	1966	%	1967	%	1968	%	1969	%
Automobiles ²	5,903	1	20,679	2	14,652	4	14,722	4	17,989	3	10,802	3	12,324	2	22,845	3	14,609	2
Freight, Communications & Utilities	3,504	1	18,060	1	3,138	1	3,187	1	3 , 546	1	1,152	-	1,479	-	3,634	-	1,974	-
Machinery & Equipment ³	2,163	1	10,325	1	4 , 856	1	12,777	3	42,162	6	6,502	2	154,229	31	234,869	30	176,555	30
Material & Repairs	25,295	7	508,525	39	16,830	4	52,758	13	106,612	16	82,714	22	2,136	-	9,057	1	5,195	1
Miscellaneous ⁵	5,120	1	15,886	1	36,565	10	32,726	8	64,643	10	21,108	6	2,948	1	11,283	2	6,707	1
Subsistence & Travelling	60,650	16	136,659	10	34,997	9	21,088	5	64,365	10	13,273	3	27,790	6	81,917	10	31,052	5
Wages	280,889	73	603,614	46	272,511	71	270,713	66	348,788	54	240,060	64	299,137	60	431,074	<u>54</u>	364,017	61
TOTAL	383,524	100	1,313,748	100	383,549	100	407,971	100	648,105	100	375,611	100	500,043	100	794,679	100	600,109	100
									, !]							
Suppression Costs	203,438	53	1,097,108	84	167,818	44	115,676	28	302,152	47	56,138	15	139,036	28	513,511	65	141,745	24

SOURCE: Public Accounts of Manitoba. Annual Reports, Department of Mines and Natural Resources.

^{1.} ending March 31st of the year indicated.

^{2.} including gas and oil.

including furniture and furnishings.
 includes household requisites, materials and construction costs, construction contracts, etc.

^{5.} includes advertising, exhibits, books, newspapers, periodicals, fees, grants, etc.

^{6.} although included in "TOTAL", these costs are presented separately to reveal monies spent on direct suppression activities.

EQUIPMENT, CONSTRUCTION AND MAINTENANCE EXPENDITURES 1961-1969

FORESTRY BRANCH

MANITOBA DEPARTMENT OF MINES AND NATURAL RESOURCES

EXPENDITURE									FISCAL Y		1	-				-		_
	1961	%	196	P %	1963	%	1964	%	1965	%	1966	%	1967	%	1968	7 0	1969	1%
Automobiles ²	78,123	23	15,285	7	10,468	7	16,874	6	17,333	7	15,421	9	16,213	8	20,009	8	12,023	9
Freight, Communications and Utilities	21,503	7	5,320	3	1,972	1	2,128	1	4,125	2	2,228	1	6,813	3	2,697	1	7,025	5
Machinery and Equipment	95,412	29	114,504	54	95,156	62	197,968	76	149,828	61	108,598	59	112,276	55	142,752	57	86,397	65
Material and Repairs	67,166	20	30,275	14	23,982	16	20,326	8	30,356	12	20,750	11	20,402	10	21,478	9	19,333	14
Miscellaneous ⁵	5,217	1	6,030	3	1,080	1	1,432	-	13,709	6	13,142	7	17,619	9	27,100	11	1,930	2
Subsistence and Travelli	ng 19,768	6	11,367	5	3,529	2	4,315	2	5,093	2	4,197	2	7 , 935	4	5,581	2	6,735	5
Wages	45,888	· 14	29,649	14	16,652	11	18,287	7	25,392	10	19,025	11	22,260	11	29,318	12	389	<u> </u>
TOTAL	333,077	100	212,430	100	152,839	100	261,330	100	245,836	100	183,361	100	203,518	100	248,935	100	133,822	100

1. ending March 31st of the year indicated.

2. including gas and oil.

3. including furniture and furnishings.

4. includes household requisites, materials and construction costs, construction contracts, etc.

5. includes advertising, exhibits, books, newspapers, periodicals, fees, grants, etc.

SOURCE: Public Accounts of Manitoba.

PORTHERN FOREST RESEARCH CENTRE

CANADIAN FORESTRY SERVICE

NORTHERN FOREST RESEARCH CENTRE

General

The Northern Forest Research Centre, located at Edmonton, Alberta, serves Alberta, Saskatchewan, Manitoba, the Yukon and Northwest Territories. This region contains an estimated land area of 2.3 million square miles of which 674 thousand square miles, or 34 per cent, is classified as forest land.

Prior to 1970, this same area was served by two forest research laboratories, operating independently of each other. These laboratories, one located in Calgary and the other in Winnipeg, represented the Alberta-Territories Region and the Manitoba-Caskatchewan Region, respectively. In the early part of 1970, the two research establishments were amalgamated and accommodated at Edmonton. Because of the size of the area served by the Centre, satellite liaison stations are maintained at Winnipeg and Prince Albert.

Northern Forest Research Centre - Fiscal Expenditures

Table 27 contains forest research expenditures of the Northern Forest Research Centre over the three-year period 1968-71. Estimates of

Also represents the summation of the Manitoba-Saskatchewan and Alberta-Territories Regional expenditures prior to amalgamation.

ANNUAL EXPENDITURES OF THE
CANADIAN FORESTRY SERVICE, 1968-1972, NORTHERN FOREST RESEARCH CENTRE

Activity	Fiscal Year ¹ (OOO's dollars)							
	1969 ²		1970 ²		1971		1972 ⁵	
	ом&Е ³	S&W ¹	OM&E	S&W	OM&E	S&W	OM&E	S&W
Administration	112.6	363.0	137.7	408.4	408.4	423.8	257.3	
Forest Resources Research Soils Research Inventory and Mensuration Silviculture	11.3	41.0 34.8 271.2	5.2 3.2 40.5	31.9 18.9	5.5 2.6 20.3	41.8 33.6 139.1	5.5 5.2 10.9	
Hydrology Tree Biology	49.2 - 34.0	180.8	27.8	291.4 - 214.4	26.4 20.1	105.0	14.0	
Forest Protection Research Fire Research Entomology Pathology Forest Insect and Disease Survey	21.5 40.1 32.3 64.3	69.8 283.9 205.3 351.1	18.6 32.1 19.8 49.5	81.2 307.6 217.3 430.1	23.7 7.5 9.4 22.0	108.3 148.1 102.2 160.7	15.2 5.7 6.6 15.2	
Liaison and Development	52.2	179.4	39.5	232.9	57.5	218.1	38.3	
Land Classification (C.L.I.)	19.4	91.1	5.9	81.4	16.7	18.7	12.0	
Economics	1.7	26.9	2.4	34.2	.9	25.5	1.7	
Other ⁶	16.1	59.8	21.1	35.3	38.3	62.4	41.8	
Forest Products Production and Research	8.0	21.4	4.7	31.2	-	_	_	
Forest Product Utilization	-	_	-		-	1.2	-	
Environment Quality	-	-	-	-	-	~	28.2	
Sub-total	466.4	2,179.5	408.0	2,466.2	659.3	1,698.7	467.5	1,619.5
Total	2,645.9		2,874.2		2,358.0		2,087.0	

ending March 31 of the year indicated.

SQURCE: Northern Forest Research Centre, Edmonton, 1971.

² includes the combined expenditures of the Manitoba-Saskatchewan and Alberta-Territories Region.

³funds expended on operation, maintenance and equipment with respect to individual activities; e.g., travel, telephone, telegraph, transportation, rentals, utilities, materials and supplies, repairs, etc.

 $^{^{\}mathrm{t}}$ salaries and wages expended as a result of the activity.

figures indicate monies allocated to individual activities for OM&E. Estimates for salaries and wages by activity are not available although total amount expected to be expended during the fiscal year is indicated.

 $^{^{}m 6}$ includes support services such as biometrics, library, photographic, etc.

total expenditures expected to occur in the current fiscal year are also recorded. To provide additional information concerning the allocation of research monies within the establishment, expenditures are recorded by unit of activity.

Very obvious is the fact that salaries and wages (S & W) accounted for a substantial portion of total annual expenditures during the three-year period 1968-71. More specifically, they accounted for 82, 86 and 72 per cent, respectively, of the total budget. Preliminary estimates indicate that salaries and wages will consume a similar proportion of the budget during the current fiscal year.

The Centre's forest research activities fall into two broad categories - forest management research and forest protection research.

Both program areas, including related activities, are shown in Table 27.

Prior to consolidation in 1970, it can be observed from activity expenditures that research within the Forest Protection Research program absorbed a considerable portion of total research funds. At that time, the two regions had a combined staff of approximately 24 in Entomology, 24 in Pathology and 42 in the Forest Insect and Disease Survey. Fire research staff totalled approximately 10 - five in each region. Subsequent to amalgamation, curtailment of staff reduced Entomology to 7, Pathology to 11, and the Porent Insect and Disease Survey to 13. The reduction in staff accounts for the sharp decrease noted in Table 27 of monies expended by these activities during the 1971 fiscal year. Personnel in Fire research numbers the same as that prior to amalgamation.

buring the first year of consolidation, total expenditures of the Forest Protection program, as in the two previous years, exceeded those of Forest Management. However, it is worthwhile to note that total operation, maintenance and equipment (OM & E) expenditures incurred by the Forest Management program were greater than those of Forest Protection - an indication of changing priorities among research activities. Estimated CM & E expenditures for the Forest Management Research program in the current fiscal year indicate that they will again be in excess of those of Forest Protection.