1. *Courtenay Orchard of Crown Zellerbach*
5 acres cleared, fenced, drained and root stock planted 1961.
2. *B.C.F.S. Campbell River Orchard*
15 acres, $\frac{1}{2}$ of root stock in and portion grafted. Partial isolation obtained by falling D. Fir in adjacent alder-maple stand.
3. *Tahsis Company's Gold River Seed Orchards*
3 orchards: Low elevation (up to 1500'); High elevation (1500' +); and coastal (west coast of Vancouver Island only). Only the low elevation site was cleared. All orchards have been planted and some grafting has been done. These orchards feature near perfect isolation from D. fir, being located in a D. fir-free side valley.

An interesting use is made of rejected candidate plus trees. They are fertilized chemically for seed production, and felled when the seed crop is ready; the trees are recovered for sawlogs.

New arrivals to Vancouver Island section include Dave Arnold-Wallenger of B.C.F.S. Reforestation Division and Walt Leasing, formerly with Canada Creosote and now with MacMillan, Bloedel and Powell River Limited, Chemainus Division.

D. O. L. SCHON

CANADIAN INSTITUTE OF FORESTRY SALARY SURVEY - 1963

H. M. BABCOCK, A.W. BLYTH, AND J.E. MARSHALL

HIGHLIGHTS

- Usable replies totalled 1,580 - down considerably from the 1,619 received in 1962.
- Overall response rate was 82% - down 3% from that of last year.
- The median income was \$7,950 in 1962 compared to \$7,550 in 1961, an increase of 5.3%.
- The average income increased 6.4% in 1962, compared to an increase of 1.8% in 1961.
- The median income of industrial foresters increased at a rate 1.4 times that of government foresters.

This report presents the summarized data obtained from the 7th consecutive annual salary survey conducted by the Canadian Institute of Forestry. Again this year, the major portion of the work involved in conducting the survey and tabulating the information was carried out by the Economics and Research Branch of the Federal Department of Labour. The tabulated information was made available to the C.I.F. Salary Survey Committee for the preparation of this report. The Committee on behalf of the C.I.F. would like to express its appreciation to Mr. A. W. Cowan of the Department of Labour for the excellent co-operation received.

The survey results are presented in the same general form as previously. Tables 1 and 2 summarize the magnitude of response by region and class of employment. Table 3 shows that the number of years since bachelor graduation has increased by 0.2 years during a one year period. Regionally, British Colum-

TABLE 1
SUMMARY OF SURVEY RETURNS

Region	Questionnaires Sent Out		Replies Received		Per Cent Replying		Usable Replies		Per Cent Usable	
	1961	1962	1961	1962	1961	1962	1961	1962	1961	1962
Atlantic	232	231	200	194	86	84	181	174	78	75
Quebec	540	613	424	467	79	76	403	433	75	71
Ontario	661	670	595	561	90	84	571	525	86	78
Prairies	153	152	137	144	90	95	133	139	87	91
British Columbia	440	402	368	331	84	82	331	309	75	77
Canada	2,026	2,068	1,724	1,697	85	82	1,619	1,580	80	76

TABLE 2
REGIONAL RETURNS BY CLASS OF EMPLOYMENT

Region	University		Government		Industry	
	1961	1962	1961	1962	1961	1962
Atlantic	9	11	92	97	80	77
Quebec	12	18	116	122	271	287
Ontario	10	13	283	277	262	233
Prairies	2	1	101	102	30	30
British Columbia	11	11	117	114	200	183
Canada	44	54	709	712	843	810
Percentage Change	+22.7		+0.4		-3.1	

TABLE 3
INCOME BY REGIONS - 1962

Region	Median Income		Per Cent Change		Average Number of Years Since Graduation	
	1961	1962	1961	1962	1961	1962
Atlantic	\$6,950	\$7,350	3.0	5.8	15.0	15.5
Quebec	7,550	7,850	3.4	4.0	16.1	15.9
Ontario	7,850	8,200	6.1	4.5	15.4	15.6
Prairies	7,150	7,450	3.6	4.2	13.2	13.0
British Columbia	7,700	8,200	2.7	6.5	13.7	14.3
Canada	7,550	7,950	3.4	5.3	15.0	15.2
Canada	Average Income 8,600 9,150		1.8	6.4		

bia shows the only substantial change with an increase of 0.6 years. The median income of all foresters covered by the survey increased 5.3% in 1962; the largest increases being in the Atlantic and British Columbia regions with 5.8% and 6.5% respectively.

Tables 4 and 5 present a detailed breakdown of income by region, type of employment, and years since bachelor graduation. The reader is invited to compare these tables with those of previous surveys. The Atlantic region in particular shows substantial increases in all categories.

Table 6 gives median annual earnings by province and the two major classes of employment. It should be noted that for the country as a whole the income of industrial foresters increased at approximately one and one-half times the rate of those employed in government, except in the case of British Columbia where a general revision in provincial government salaries took place in 1962. The large increase in earnings for Nova Scotia and New Brunswick industrial foresters represents a major change from previous years.

The starting salaries for new graduates are given by regions in Table 7. A comparison with last year's data shows little change in these figures. As only a small number of usable replies were received the information in this table must be viewed with reservations.

Table 8 is intended to show only the general trend in the purchasing power of wages in comparison with the retail price index. Shown are the Nation-wide average wages and salaries earned by the total work force and the median annual earnings of foresters in Canada as shown by the C.I.F. salary survey. One purpose of this table is to compare the earnings of foresters with those of the average Canadian. During the period from 1958 to 1962, the median income of foresters was increased by 16.2% while those of the entire working force has increased 14.4%. At the same time the cost of living as represented by the retail price index has risen 4.5%. The increase in foresters' earnings

TABLE 4
REGIONAL MEDIAN INCOME BY YEAR OF BACHELOR GRADUATION
AND CLASS OF EMPLOYMENT - 1962

Region and Class of Employment	No. of People	Median Income	Median Income by Year of Bachelor Graduation				
			Before 1922	1922- 1931	1932- 1941	1942- 1951	1952- 1961
ATLANTIC							
Industry -----	77	\$8,250	-	\$12,500	\$10,250	\$7,900	\$7,100
Government -----	97	6,750	-	-	8,150	7,150	6,000
QUEBEC							
Industry -----	266	8,750	-	13,000	12,250	9,150	6,650
Government -----	122	6,700	-	7,150	7,700	7,350	5,550
ONTARIO							
Industry -----	223	9,350	-	17,200	14,500	9,600	7,250
Government -----	277	7,500	-	10,000	9,900	7,850	6,400
PRAIRIES							
Industry -----	25	9,250	-	-	-	10,000	-
Government -----	102	7,250	-	9,500	-	7,950	6,450
BRITISH COLUMBIA							
Industry -----	176	8,700	-	14,850	11,500	9,350	7,300
Government -----	114	7,600	-	-	9,300	7,750	5,850

TABLE 5

REGIONAL INCOME BY YEAR OF BACHELOR GRADUATION;
ALL CLASSES OF EMPLOYMENT - 1962

Region	Year of Bachelor Graduation	Lower Decile	First Quartile	Median	Third Quartile	Upper Decile
ATLANTIC	1922 - 1931	\$7,050	\$7,850	\$11,400	\$12,850	\$19,200
	1932 - 1941	6,950	7,800	9,250	11,000	14,900
	1942 - 1951	5,550	6,350	7,500	8,750	9,700
	1952 - 1961	4,400	5,000	6,050	7,000	8,650
	Total	5,150	6,100	7,400	9,100	11,850
	Percentage Change	2.0	4.6	6.5	10.3	10.2
QUEBEC	before 1922	-	6,750	7,650	12,150	-
	1922 - 1931	6,350	7,100	11,000	17,500	27,650
	1932 - 1941	6,650	7,850	10,050	12,750	16,400
	1942 - 1951	6,550	7,550	8,850	10,700	13,350
	1952 - 1961	5,000	5,450	6,200	7,400	8,900
	Total	5,350	6,350	7,900	10,500	12,900
ONTARIO	Percentage Change	1.9	1.6	4.6	4.5	-12.8
	1922 - 1931	7,100	8,750	11,400	16,500	22,350
	1932 - 1941	7,150	9,400	12,300	15,150	19,100
	1942 - 1951	6,650	7,450	8,750	10,000	11,650
	1952 - 1961	5,300	5,950	6,600	7,600	8,800
	Total	5,900	6,800	8,200	10,300	14,350
PRAIRIES	Percentage Change	8.3	6.2	4.5	5.1	9.1
	1922 - 1931	-	8,100	9,750	10,900	-
	1932 - 1941	-	6,350	7,000	8,750	-
	1942 - 1951	6,650	7,350	8,150	9,350	11,250
	1952 - 1951	4,900	5,650	6,450	7,200	8,550
	Total	5,400	6,400	7,450	8,850	10,700
BRITISH COLUMBIA	Percentage Change	1.9	2.4	4.2	7.9	4.4
	1922 - 1931	7,800	10,500	13,350	15,600	24,000
	1932 - 1941	6,050	8,300	9,800	11,350	15,900
	1942 - 1951	6,450	7,300	8,500	10,100	11,800
	1952 - 1961	4,750	5,600	6,700	8,200	9,950
	Total	5,550	6,750	8,250	10,300	12,900
	Percentage Change	1.8	2.3	7.1	6.2	4.9

TABLE 6
MEDIAN ANNUAL INCOME BY PROVINCE AND CLASS OF EMPLOYMENT - 1962

Province	Number	Total	Government		Industry	
		Median Income	Median Income	% Change Since 1961	Median Income	% Change Since 1961
Newfoundland	28	\$7,800	\$6,000	-7.7	\$9,250	8.8
Nova Scotia	51	6,350	5,600	6.7	8,500	13.3
New Brunswick	94	7,700	7,500	5.6	8,000	11.1
Quebec	388	7,850	6,700	5.5	8,750	3.6
Ontario	500	8,200	7,500	2.7	9,350	6.9
Manitoba	40	8,100	7,900	6.0	-	-
Saskatchewan	24	7,450	7,350	7.3	-	-
Alberta	63	6,950	6,850	4.6	8,000	6.7
British Columbia	290	8,200	7,600	9.4	8,700	5.5
Canada	1,478	7,900	7,250	4.3	8,900	6.0

TABLE 7
ANNUAL INCOME OF 1960 GRADUATES IN 1961, AND 1961 GRADUATES IN 1962

	1960 Graduates in 1961	1961 Graduates in 1962
Lower Decile	\$4,050	\$4,000
First Quartile	4,400	4,500
Median	5,050	5,150
Third Quartile	5,600	5,600
Upper Decile	5,900	5,900
Average Income	4,850	4,900

(Based on 35 replies in 1961 and 32 replies in 1962)

since 1958 is weighted downward by the 0.6% decline shown for Quebec; a figure which is not realistic for that province because data for the Quebec Corporation of Forest Engineers were not included until the year 1960. In other words the increase in median foresters' income for Canada as a whole very likely is considerably higher than that shown—perhaps in the vicinity of 19%.

Table 9 is new this year and shows a comparison of median annual earnings by years from bachelor graduation for forestry, engineering, and natural science. The reader is invited to compare his own income with that of the appropriate median for his own and the other two professions.

TABLE 8
AVERAGE YEARLY WAGES AND SALARIES — INDUSTRIAL COMPOSITE¹
(ENTIRE CANADIAN WORKING FORCE)

Province	1958 Income	1959		1960		1961		1962		% In- crease over 1958
		% In- crease	Income	% In- crease	Income	% In- crease	Income	% In- crease	Income	
Nfld.	\$3,243	2.1	\$3,311	6.6	\$3,531	5.2	\$3,716	2.6	\$3,811	17.5
Prince Edward Is.	2,660	7.0	2,847	0.5	2,860	3.7	2,965	2.1	3,027	13.8
Nova Scotia	3,033	3.2	3,129	4.1	3,258	2.1	3,327	2.8	3,419	12.7
New Brunswick	3,023	3.9	3,140	3.8	3,258	1.4	3,305	3.4	3,416	13.0
Quebec	3,520	4.2	3,669	3.5	3,796	3.2	3,917	3.5	4,056	15.2
Ontario	3,806	4.4	3,972	3.1	4,093	3.1	4,219	3.1	4,351	14.3
Manitoba	3,476	5.0	3,648	2.2	3,729	2.4	3,820	2.8	3,927	13.0
Sask.	3,543	2.9	3,647	2.9	3,751	2.9	3,858	3.8	4,005	13.0
Alberta	3,790	3.8	3,933	2.9	4,047	3.4	4,184	0.2	4,191	10.6
British Columbia	3,946	5.6	4,165	3.6	4,314	2.7	4,430	0.2	4,438	12.5
Canada	3,662	4.3	3,820	3.2	3,943	3.0	4,062	3.1	4,189	14.4

RETAIL PRICE INDEX²

Canada
(base year
1949

125.1 1.1 126.5 1.2 128.0 0.9 129.2 1.2 130.7 4.5

MEDIAN ANNUAL INCOME OF FORESTERS BY REGIONS

Region	1958 Income	1959		1960		1961		1962		% In- crease Over 1958
		% In- crease	Income	% In- crease	Income	% In- crease	Income	% In- crease	Income	
Atlantic	\$6,500	0.8	\$6,550	3.1	\$6,750	3.0	\$6,950	6.5	\$7,400	13.8
Quebec ³	7,950	-6.9	7,400	-1.4	7,300	3.4	7,550	4.6	7,900	-0.6
Prairies	6,200	5.6	6,550	5.3	6,900	3.6	7,150	4.2	7,450	20.2
British Columbia	6,900	4.4	7,200	4.2	7,500	2.7	7,700	7.1	8,250	19.6
Canada	6,800	2.9	7,000	4.3	7,300	3.4	7,550	4.4	7,900	16.2

¹ From "Employment and Payrolls", Dominion Bureau of Statistics, Ottawa, 1962.

² From "Prices and Price Indexes", Dominion Bureau of Statistics, Ottawa, January, 1963.

³ Salary information regarding members of the Quebec Corporation of Forest Engineers is included only for the years 1960 and 1961. Only figures for these two years are suitable for comparisons.

TABLE 9
MEDIAN ANNUAL EARNINGS BY YEARS FROM BACHELOR GRADUATION;
ENGINEERING, NATURAL SCIENCE, AND FORESTRY — 1962

Years from Bachelor Graduation	Engineering** Median*	¹ /Natural Science** Median*	Forestry*** Median
1	5,700	5,400	5,150
2	6,300	5,500	5,400
3	6,600	5,800	5,800
4	6,900	6,300	6,050
5	7,500	7,000	6,400
6-10	8,400	7,700	7,050
11-15	9,700	9,100	8,350
16-20	10,700	10,400	9,050
21-25	11,600	10,900	10,200
26-30	11,400	10,800	10,850
31-35	11,700	11,800	11,800
36-40	12,500	11,700	11,350
Total, All Years	9,000	8,800	8,000

* Excludes self-employed respondents.

** Source: Professional Manpower Bulletin, Economics and Research Branch, Department of Labour, Canada, May, 1963.

*** C.I.F. Members only.

¹ Includes: Biology, Chemistry, General, Geology, Mathematics, Mathematics and Physics, and Physics.

Figure 6, also new this year, shows an interesting comparison of the median annual salaries of foresters in government, industry and university with those of a few other professions. Although the picture is far from bright as far as foresters are concerned, it should be noted that the average number of years since bachelor graduation is not shown by profession.

Excluded from the survey tabulation were all respondents who were students, retired, not engaged in forestry, worked less than 10 months during the year, or whose questionnaires contained insufficient information to tabulate. Foresters employed in the Northwest and Yukon Territories are included with British Columbia for tabulating purposes.

Your committee would like to draw particular attention to the fact that response to the Salary Survey Questionnaire is continually declining despite an increasing Institute membership. The advisability of continuing the survey with an indicated decreasing interest in the survey is a problem that might warrant discussion at the next Annual Meeting.

NOTE

- (a) Upper Decile — The figure above which 10% of the reporting returns fall.
- (b) Upper Quartile — The figure above which 25% of the reporting returns fall.
- (c) Median — The middle item when all items are arranged according to size.
- (d) Lower Quartile — The figure above which 75% of the reporting returns fall.
- (e) Lower Decile — The figure above which 90% of the reporting returns fall.

Figure 3 Income Rates by Year of Bachelor Graduation - 1962
(CIF Members only)

Figure 4 Median Income by Type of Duty - 1962

Figure 5 Median Income by Level of Education - 1962

For your convenience The Forestry Chronicle offers a free employment service. Prospective employers or applicants should write to Mr. George A. Sinclair, Ontario Department of Lands & Forests, Tweed, Ontario, who will prepare applications for publication. Applicants are requested to include their own advertisement giving the following information: University granting degree, year of graduation, years and type of experience and type of employment preferred.

ANNOUNCEMENT

The B.C. Institute of Technology, 3700 Willingdon Avenue, Burnaby 2, B.C., is seeking applications for staff positions in the Forest Products Utilization and Forestry Technologies. University and/or Technical Institute graduates or holders of a Higher National Certificate or equivalent with experience in industry preferred. Application forms sent on request.

Employment Wanted

Graduate forester, B.Sc. in forestry, Edinburgh University, 1962. Experience in practical British Forestry. Desires a position preferably but not necessarily in management or surveys. Please refer to Code No. F. M. 13.