## Result of British Columbia Fisheries for 1913

This Province Produced \$14,455,488 from the Fishing Industry Last Year, Which Is More than the Combined Value of the Three Maritime Provinces Fisheries The Salmon Pack Was the Chief Factor in the Total, Amounting to \$9,540,368.

The Provincial Fisheries Report for 1913, Hon. W. J. Bowser, Commissioner, which has just been made public, covers the fishing activities of the year throughout the Province, and is replete with valuable information to this valuable and increasingly important industry of British Columbia.

Some of the most important scientific investigations now being carried on in the Dominion are being undertaken by the Provincial Government's Fisheries Department. Under the supervision of Mr. N. D. McIntyre, Deputy Commissioner, this scientific work has proceeded favorably. Mr. J. P. Babcock has investigated the spawning-beds of the Fraser River. Mr. G. P. Napier has reported on the obstructed condition of the Fraser River. Dr. C. H. Gilbert has contributed the most important paper yet Printed on the Life-history of the Sockeye Salmon. Dr. Joseph Stafford has reported on the native oyster of British Columbia. Mr. W. F. Thompson has reported on the Shell-fish Beds of British Columbia, and also on the Abalone of British Columbia. Dr. C. F. and W. A. Newcombe have reported on British Columbia Sea Lions. The Department has also included a valuable map showing the Halibut Grounds of British Columbia, with general remarks on the best chances of success in catching this important fish.

The fisheries of British Columbia for the fiscal year ending March 31st, 1913, totalled \$14,455,488 in value, an increase of \$778,363 over those of the preceding twelve months. This exceeds the value of the fisheries of the three Maritime Provinces combined, and is almost half the total value of the fisheries of Canada, which for that period amounted to \$33,389,464.

The figures by Provinces follow:

British Columbia	\$14,455,480
Nova Scotia	7,384,054
New Brunswick	4,264,054
Ontario	0010070
Quebec	1,988,241
Prince Edward Island	1 270 000
Manitoba	800,149
Saskatchewan	111,839
	111,239
Yukon Territory	51,616
Alberta	,

The salmon-pack of British Columbia constitutes the chief factor in the total, amounting to \$9,540,368. Through ties, for which reason less of the latter were packed, the total value of the salmon is less than that of the preceding

twelvemonth, \$9,851.897.

The chief increases in production are in halibut and herring. For the year quoted, halibut valued at \$2,461,208 was landed at the ports of the Province, as compared with quantities valued at \$1,845,135 in the previous year. An enormous increase in the value of the herring taken is also shown, this being figured at \$1,017,417, as compared with \$414,730 for the preceding year.

1912-13 is comprised as follows:

Salmon	\$9,540,368
Cod	208,606
	11,282
Oysters	1.017,417
Herring	3,675
Octopus	3,073

Whiting	5,000
Perch	13,060
Halibut	2,461,208
Flounders	13,628
Smelts	42,090
Trout	40,142
Oolachans	78,950
Sturgeon	75,765
Soles	35,200
Skate	
Shrimp	7,184
Shrimp	540
Mixed fish	53,990
Clams	47,200
Crabs, cockles, other shell-fish	202,520
Salmon roe	10,000
Whales and whale products	536,774
Fur-seal skins	6,150
Hair-seal skins	569
Guano	5,097
Fish-oil	29,075

\$14,455,480

The glowing future for the fisheries of British Columbia, which everything portends, accentuates the need for fuller investigation of the habits and distribution of the food-fishes of this Coast. No attempts on any worthy scale have as yet been made in this direction, and aside from the investigations conducted by this Department in the past few years, the results of which have been given to the public in the annual reports, there is but scanty literature dealing with this very important subject. Efforts should be made to determine the life-history of the herring and halibut, to note their seasonal migrations, whether for food or breeding purposes, and the banks and areas they frequent at different months should be charted. Experiments to determine methods of fish-drying and fish-curing suitable to this Coast should be made, and also methods of curing approved in the Orient and in Europe should be demonstrated, and an effort made to secure a market for the other species of food-fishes which now are not utilized.

An adequate faunistic survey of the waters of the Coast should be preliminary to the launching of investigations along the lines indicated. Study of the individual species of fishes valuable for food would recommend itself attendant upon such a survey. But no delay attendant upon the launching of such an ambitious undertaking should intervene to prevent grappling with the problems of pressing import. In the case of the halibut, prediction is made that the fishery will be depleted, although the success of the catch in recent years would not seem to warrant this. Immediate study should be given its life-history, however, in order that protective or other measures be taken to conserve it. The belief held by many that should the halibutfishing be depleted, other varieties of food-fish not now in favor would take its place, is not warranted. It must be remembered that for one halibut taken and marketed, probably ten other food-fishes are caught and destroyed.

The growth of the deep-sea fisheries must be viewed with great satisfaction, since, in this way, stability of employment may be offered to a population subsisting by this industry. The salmon-fisheries, while the chief source of wealth to the fisherman and packer of the Province in the past, are open to the objection that they last but from two to four months.

Added impetus to all branches of the fisheries has been lent by the removal of the duty upon fresh fish entering the United States. Halibut, herring, cod, and other fisheries have benefited by this. The demand for pickled herring is a noticeable feature in this connection, and already one firm