

## NOTES

### SALMON INVESTIGATIONS ON THE WHALE RIVER, UNGAVA IN 1960 AND THE DEVELOPMENT OF AN ESKIMO FISHERY FOR SALMON IN UNGAVA BAY

A study of the Atlantic salmon populations breeding in the Ungava Bay watershed, which commenced in 1956 on the George River and in 1957 on the Koksoak River, was continued during the summer of 1960 on the Whale River. The two principal collecting stations were at the site of the old Hudson's Bay Company's post, in tidal waters, and in a rapid section of the river 15 miles above the post, in non-tidal waters.

In spite of a very wet summer, which resulted in high water levels all season, a good sample of salmon was obtained. Almost 900 specimens were examined, of which 185 were adults that had entered the river to spawn, 32 were spent fish from the run of the previous year, and the rest were juvenile smolts and parr. Most of the large fish were captured in gill nets of 4-, 6-, and 8-inch mesh, about one-half of the juveniles were taken in 1.5-inch-mesh gill nets, and the remainder by angling. The spawning run in Whale River began about August 6 and continued until the end of the month, when catches at the post fell to almost nothing. The 1960 run in the Koksoak River followed a similar pattern. Whale River salmon were the same size as those examined from other Ungava rivers. The majority are between 9 and 13 lbs. in weight and have spent 2 years or longer feeding at sea. The grilse, after 1 or more years at sea, are between 3.5 and 6 lbs. in weight. Analysis of the data on the juveniles is not yet complete, but indicates a growth and age range similar to that found previously in the George and Koksoak

rivers, that is, they migrate to the sea when they are 3 to 7 years old and between 18 and 26 cms. long.

In addition to the work on the salmon, specimens and data were collected of other species of fish inhabiting the river. Fourteen species were recorded, all of which have been previously collected from the Ungava Bay drainage. Specimens of most of these species were deposited in the collection of the Royal Ontario Museum. Mr. Malcolm Telford, who assisted the writer during the summer, began a study of the round whitefish *Prosopium cylindraceum*, but was unfortunately hampered by shortage of specimens.

The information that has been accumulated during this series of investigations on Ungava salmon is now proving to be of practical importance. During the summer of 1961 the Department of Northern Affairs and National Resources plans to initiate an experimental Eskimo fishery for salmon on the Koksoak River and possibly also on the Whale River. Fresh salmon are to be flown from Chimo to Montreal for sale. It has been possible to provide the Department with information on desirable mesh sizes for the nets and on the probable weight distribution of the catch.

By continuing to collect data during the course of the fishing and following closely any changes in the composition of the catch it will be possible to find out whether the expected fishing pressure (removal of 10,000 lbs. of fish per river per year) is having any effect on the population. In this way it can be discovered whether the salmon inhabiting these northern waters can maintain themselves against both the physical handicap of their environment and the stress of fishing. The scanty and probably unreliable evidence from the

records of the Hudson's Bay Company fishery started in the 1880's and abandoned in the 1930's indicates that catches may decline after a period of fishing. It is hoped that by employing university students to assist with the project accurate records can be obtained of the size and age composition of the catches

and that a careful watch can be maintained on any effects of the planned fishery.

I should like to thank both the Arctic Institute of North America and the Provincial Department of Fisheries of Quebec for the financial support that made this work possible. G. POWER

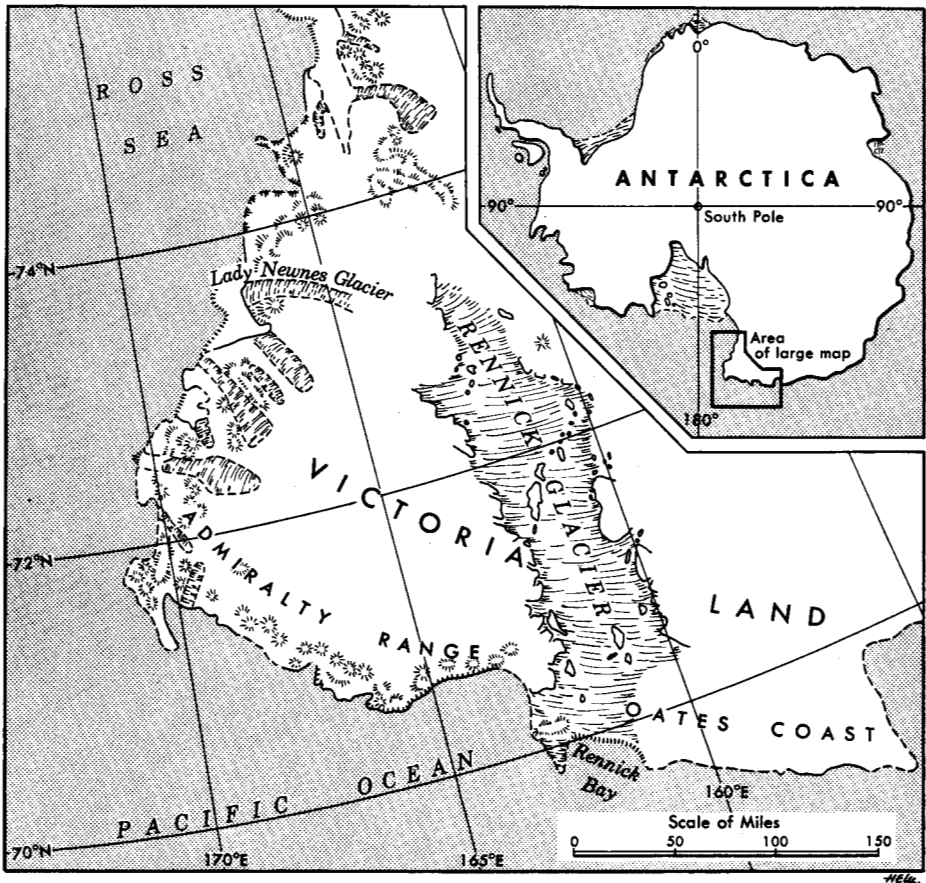


Fig. 1. Sketch map showing the newly discovered Rennick Glacier flowing into Rennick Bay, Victoria Land.

## TWO RECENTLY DISCOVERED GLACIERS, ANTARCTICA

The purpose of this paper is to make available preliminary information on two recently discovered glaciers in Victoria Land, Antarctica.

As a continuation of the International

Geophysical Year scientific effort in Antarctica, two ground traverses were organized by the United States Antarctic Research Program and administered by the Arctic Institute of North America. The first of these traverses left Scott Base on October 16, 1959 in three tracked Sno-Cats, traversing parts of