

LETTER FROM COPENHAGEN



## Threat to salmon fishing

**Catches in the North Atlantic are raising an international conflict**

by H. J. Barnes

Salmon are famous for their habit of living in the ocean but going upstream in fresh water to spawn. And most salmon fishing is done in fresh water, or close offshore where the swarms of mature fish gather to move toward the spawning grounds.

Over the past 10 years, however, growing numbers of salmon have been taken from the high seas, particularly in feeding grounds in Greenland's inshore waters and in the fishing banks of the Davis Strait. Most of the catches are being made by fishermen from Denmark and Greenland.

Officials on both sides of the Atlantic are afraid that North Atlantic salmon are facing extinction if some international control measures, or even a total ban on high-seas extraction, are not adopted.

The dispute centers on the cost-benefit ratio of maintaining the salmon breeding cycle. Fisheries that have traditionally prepared and supervised salmon breeding in the coastal regions of Canada, Britain and some European countries resent high-seas extraction. In the words of one English official, ocean fishermen are milking a cow they don't feed.

Says one official with the U.S. Bureau of Commercial Fisheries, "If high-seas extraction continues, countries bearing the breeding expenses may abandon the expensive procedures to keep spawning areas in condition to maintain the breeding cycle—and this may indirectly affect future populations."

Two international regulatory bodies, the Northeast Atlantic Fisheries Commission and the International Commission for Northwest Atlantic Fisheries, have recommended a ban on high-seas salmon fishing, but fishermen extracting salmon off the coast of Denmark have been reluctant to accept this action, and the ban has not been carried out.

Prior to 1961, Atlantic salmon were rarely caught in the high seas and extraction was easily regulated near spawning grounds. In 1961, Greenland natives began to catch increasing numbers of salmon; the catches indicated that the species spawned in the estuaries of Europe, Britain, Canada and the United States were concentrating off Greenland, possibly utilizing a fertile feeding ground in that area.

In 1965, two Danish fishing vessels began fishing off the Greenland coast; by 1968, 17 vessels, mostly from Norway, Denmark and Sweden, took out

over 500 tons, with an additional 500 tons extracted by Greenland natives from inshore waters. This total represented about 10 percent of the total 1968 Atlantic salmon catch.

The Greenland inshore salmon catch has developed from a modest 127 metric tons in 1961 to an average 1,200 tons each year since 1964. In the Davis Strait, the catch has risen from 36 tons in 1964 to an estimated 700 tons in 1969. Off Norway, the international high-seas catch last year was approximately 500 tons.

Tagging experiments have shown that salmon spawned in both Western European and North American rivers are being caught off Greenland. And although only about 100 of 100,000 tagged Scottish smolts—salmon that have just descended to the sea—have been returned in the Greenland catches, Danish biologist Sven Aage Horsted of the Greenland Fisheries Investigation based in Copenhagen, conceded this was enough to prove the point.

But Danish fishermen argue that the Greenland takes have not had any effect on the inshore salmon catches in Western Europe or North America. The total inshore catch in Canadian waters, excluding river fishing, was 1,718 tons in 1962 compared with the 2,143 recorded in 1968. But similar comparisons for Scotland and Norway revealed declines, from 1,712 tons to 1,457 for Scotland and 1,935 to 1,618 for Norway.

Although Jens Noergaard, Permanent Under Secretary at the Danish Ministry for Fisheries, says the Danish case rests on the lack of evidence supporting a total high-seas ban, he is not adverse to international regulation. "We have always said we are ready to talk about restrictions on the catch," he says.

The British Government feels there is a case for the ban. British fishermen argue that although there is no immediate threat to the species, a continued escalation of ocean fishing would present a threat of extermination. "We take the line that if something is not done very shortly, a situation will arise from which it will be very difficult to go back," says Lourdon Hamilton, Fisheries Attaché at the British Embassy in Copenhagen.

The betting in Copenhagen now, among Danes and non-Danish observers, is that the next step will be an attempt to agree on restrictive measures designed to stabilize the situation and prevent further high-seas fishing.