

Council

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Unreported catches – Tabled by Iceland

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Introduction

Unreported catches from legal salmon fisheries have so far not been considered a major issue in Iceland. It has been mandatory for over 50 years to provide salmon statistics both from angling and net fisheries. The Icelandic statistics from salmon angling are some of the best in the world, which is the main basis for the high value of salmon angling in Iceland along with a restricted number of rods. The number of riverine salmon nets was kept constant after 1952 and statistics were willingly provided by the proprietors as they realized that some day their fishing rights might be a valuable commodity, which would increase the value of their land. These expectations have more or less been realized. The statistics from freshwater trout angling are somewhat more inaccurate but improving.

Coastal net fisheries for salmon have been banned by law since 1932. Only a few farms holding hereditary rights were allowed to fish during the early periods but these have now all been eliminated either through allocation of dividends from the local river association or through a total buy-out. There are thus currently no legal coastal fisheries for salmon.

Illegal fisheries targeting salmon were not uncommon in the 1960 and 70s, when salmon were sold at a premium price matching those of lamb and beef. After the huge development of salmon aquaculture in the 1980s the price of salmon dropped sharply and poaching of salmon was no longer profitable. During the peak of the ranching period in the 1990s, however, when approximately 100 thousand salmon of ranch origin were migrating inshore in western Iceland, there was an increase in poaching, especially around rural towns where salmon entering harbours were being snagged on illegal hooks and in nets, which led to increased enforcement in those areas. This fishing frenzy, however, came to an end after the closure of the ranching stations in the mid 1990s.

When coastal salmon fishing was banned in the 1930s it remained lawful to catch sea-char and sea-trout in coastal nets. Although the mesh size used for char fishing is by law much smaller than the mesh used for salmon netting there have been incidences of by-catches of salmon in char nets, especially in areas bordering the riverine habitat of salmon and char. Some of these fisheries have been banned by the management authorities through annual closures during the peak of salmon migration but some areas especially around northwestern Iceland are still open. Such fisheries,

however, must by law be closed during half the week, i.e. from Friday night through Thursday morning, which gives the salmon great protection and is being strictly enforced.

From the above it can be concluded that the greater source of unreported catches in Iceland would be by-catches in various fisheries, which will be discussed in the following section.

Unreported by-catch

As has been reported in the annual returns to NASCO , there might be incidental catches of salmon in a number of fisheries for other species. There has already been a reference to legal char fisheries but fisheries for a number of marine species may also be a source of salmon mortality. Lump fish are being caught around the Icelandic coast during the early part of the salmon's migration and although the mesh sizes are large and the nets deep in the water they have been known to catch large salmon. Net fishing for haddock or even cod in inshore water may also be a source of a salmon by-catch. As reported in CNL(07)10 on unreported catches it has been estimated that these types of inshore fisheries in Iceland may be responsible for over 75 % of the unreported catch, which has been estimated as 2 % of the annual salmon catch. This is a relatively small figure amounting to 2 - 4 tonnes annually with a large error margin.

In addition to these inshore catches, which would primarily be affecting Icelandic salmon stocks, there have been confirmed reports of adult salmon being caught in bottom trawls as well as pelagic ones. In a NASCO paper (CNL(03)27) Iceland reported incidences where up to 200 salmon were caught in a short period as a by-catch in herring fisheries using expandable pelagic trawl in the Svalbard area. One of these salmon was confirmed as a tagged fish from Norway. In the 1960s the Icelandic Institute of Freshwater reported that up to 30 salmon were caught per purse seine haul in Atlanto-Scandian herring fisheries east of Iceland (CNL(00)20). According to scientific estimates the Atlanto-Scandian herring populations have now had a phenomenal recovery and millions of tonnes are now migrating far into international waters. With heavy fisheries developing on those herring, probably with pelagic trawls, there might be a great increase in the by-catch of salmon east of Iceland and possibly in other areas.

The Institute of Freshwater Fisheries in cooperation with the Association of Icelandic River Associations did a survey among Icelandic trawler fishermen to estimate the number of salmon being caught in pelagic trawls. From this survey it was estimated that about 5000 salmon were caught in 2005 with an upper and lower 95 % confidence limit of 3100 to

7000 salmon. Most of these were caught in the summer on distant fishing grounds, making the origin of these fish uncertain. It is quite clear that there would be a great increase in the Icelandic unreported catches if these figures were to be included, but one must assume that similar figures should emerge from the scrutiny of pelagic fisheries by other NASCO as well as non-NASCO Parties and they should thus be treated separately.

Although there may be a general feeling among salmon scientist that by-catches of salmon in trawl fisheries are not a major cause of marine mortality, one must bear in mind the relatively small numbers of migrating salmon amongst the millions of pelagic species such as capelin and herring. One can thus certainly theorize that by-catches of salmon in many unrelated fisheries for marine species may a considerable source of mortality for adult salmon as well as the smaller post-smolts which would quickly disappear in the thousands of tonnes of herring, mackerel or capelin scooped up in a single haul.

We see the numbers of salmon dwindling in spite of a major conservation efforts and cut-backs in all targeted salmon fisheries. The 2SW component is doing worst and those fish spend the longest time in the marine environment and are thus exposed to “hazards” for a longer period. They are also more likely to be preying upon relative large fish such as herring and would be found in the vicinity of such schools as demonstrated by the Icelandic herring seine catches in the 1960s. Greater surveillance and documentation of these by-catches must thus be of high priority in any research program dealing with marine survival. In the light of the “Precautionary Approach” we must indeed stay vigilant and explore all possible sources of marine mortality of salmon. Man is after all the most efficient predator as proven by his track record in a number of fisheries.