



Council

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***Atlantic Salmon in the Sea - Draft Proposal to Establish an
International Co-operative Research Programme***

(Tabled by Norway)

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International Co-operative Research Programme*

The general decline in the abundance of wild Atlantic salmon in the North Atlantic during the last 20 years is a matter of great concern to all NASCO Parties. According to ICES the decline has occurred over large areas of the salmon's distribution range, and is most severe in north America and southern Europe. During the same period there have been significant changes in the sea age composition of salmon, i.e. the abundance of MSW salmon has decreased at a higher rate than that of 1SW salmon. There could be many reasons for this decline, natural as well as man-made. The problems can be located to single rivers as well as in the sea (fjords, coast, ocean). It should also be noted that changes in the freshwater environment may affect performance of salmon in the sea.

Although there has been some studies of salmon in the marine phase in recent years the marine life history of this species is yet very little understood. It is well documented that the marine mortality of Atlantic salmon has increased considerably in many areas, and analysis of some time series has suggested that mortality is linked to reduced surface temperatures in the post-smolt habitat. It is, however, unlikely that temperature as a single factor is responsible for the increased mortality. Atlantic salmon are one of the many components of the marine ecosystem and will respond to changes (biotic as well as abiotic) in this. The crucial question is, therefore, to improve the understanding of the response of the salmon to changes in the marine ecosystem.

It is our impression that all NASCO Parties are concerned about what is happening to salmon at sea. There is some ongoing research on salmon in the marine phase in different countries, but because marine research is very expensive it is difficult to expect any major breakthroughs that may help us to identify the problems salmon have to face in the marine environment. On the other hand, if research resources were spent on international co-operative research, more resources would be available, and the different problems could be directed to areas where the opportunities and facilities were most favourable. This would also give better value for the resources spent.

Norway would, therefore, propose that an international co-operative research programme is carried out. The main aims should be:

1. To identify and explain the causes for the increased marine mortality of Atlantic salmon
2. To examine the possibilities to counteract the increased mortality

The research program should continue for 5 years and be funded by the Parties, and the results of the final report should then give guidelines for future management of salmon.

Norway proposes that a small group of scientists and managers is appointed. The task will be to outline a detailed research program addressing the main aims stated above, and report back to NASCO prior to next year's Council meeting. Norway is willing to help organise this work.