

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

ORGANISATION POUR LA CONSERVATION DU SAUMON DE L'ATLANTIQUE NORD



REPORT OF THE FOURTH ANNUAL MEETING OF THE COUNCIL

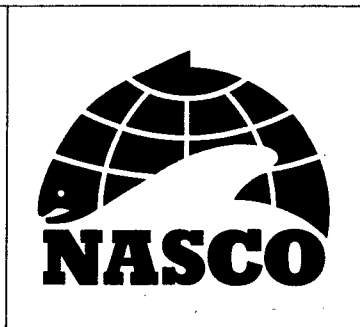
8-12 June 1987
Edinburgh UK

CNL (87) 46

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NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

ORGANISATION POUR LA CONSERVATION DU SAUMON DE L'ATLANTIQUE NORD



COUNCIL

PRESIDENT:	MR GUDMUNDUR EIRIKSSON (ICELAND)
VICE-PRESIDENT:	MR ALLEN PETERSON (USA)
SECRETARY:	DR MALCOLM WINDSOR

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9 JULY 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)46

REPORT OF
THE FOURTH ANNUAL MEETING OF THE COUNCIL OF
THE NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

REPORT OF
THE FOURTH ANNUAL MEETING OF THE COUNCIL OF
THE NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION
8-12 JUNE 1987, DRAGONARA HOTEL, EDINBURGH, UK.

1. OPENING SESSION

- 1.1 The President, Mr G Eiriksson, opened the meeting and welcomed delegates to the Fourth Annual Meeting of the Council, (Annex 1).
- 1.2 A list of participants is given in Annex 2.
- 1.3 The representative for Canada made an opening statement, (Annex 3).
- 1.4 The representative for Denmark (in respect of the Faroe Islands and Greenland) made an opening statement, (Annex 4).
- 1.5 The representative for the European Economic Community made an opening statement, (Annex 5).
- 1.6 The representative for Finland made an opening statement, (Annex 6).
- 1.7 The representative for Iceland made an opening statement, (Annex 7).
- 1.8 The representative for Norway made an opening statement, (Annex 8).
- 1.9 The representative for Sweden made an opening statement, (Annex 9).
- 1.10 The representative for the Union of Soviet Socialist Republics made an opening statement, (Annex 10).
- 1.11 The representative for the United States of America made an opening statement, (Annex 11).
- 1.12 The President expressed appreciation to the members for the statements and closed the opening session.

2. ADOPTION OF THE AGENDA

- 2.1 The Council adopted the agenda without amendment, CNL (87)42, (Annex 12), but agreed to consider the recommendation contained in paper CNL (87)23 under item 19 Other Business.

3. STATUS OF RATIFICATION OF AND ACCESSIONS TO
THE CONVENTION

- 3.1 The Secretary reported on the status of ratifications of and accessions to the Convention, CNL (87)4, (Annex 13). He reported that the USSR had acceded to the Convention on 11 September 1986.

4. APPLICATIONS FOR OBSERVER STATUS AT MEETINGS OF
THE COUNCIL

- 4.1 The Secretary reported, CNL (87)5, (Annex 14) that he had received three new applications for observer status from non-government organizations. In accordance with the conditions laid down by the Council, which applied to such attendance, he had decided in consultation with the President that these three applicants and the three non-government organizations already granted observer status should be invited to the Fourth Annual Meeting of the Council. The organizations invited were:

L'Association Internationale de Defense du Saumon Atlantique

The Association of Scottish District Salmon Fishery Boards

The Atlantic Salmon Trust

The Salmon and Trout Association

The Scottish Anglers National Association

The Water Authorities Association.

- 4.2 The President stated that in his view and that of the Secretary, no change in the arrangement for admission of non-government organizations was called for in the light of experience so far and that the trial period should extend to cover at least the Fifth Annual Meeting.

5. COORDINATION OF THE ACTIVITIES OF THE
REGIONAL COMMISSIONS

- 5.1 The President reported that he had conferred with the Chairmen of the Commissions regarding the co-ordination of their activities.

5.2 REPORTS OF THE REGIONAL COMMISSIONS

The Chairmen of the Commissions reported to the Council on the activities of the three Commissions of the Organization.

6. MEMBERSHIP OF THE REGIONAL COMMISSIONS

6.1 The Secretary presented a document (on the membership of the Commissions, CNL (87)6, (Annex 15)).

6.2 The representative of the USSR made an application to become a member of the North-East Atlantic Commission. The Council unanimously approved this application by the USSR, CNL (87)28.

6.3 The Council referred to the decision to request ICES to study the contribution to the West Greenland fishery of stocks of Icelandic, Norwegian and Swedish origin salmon.

6.4 REVIEW OF MEMBERSHIP OF THE WEST GREENLAND COMMISSION

The Council reviewed the membership of the West Greenland Commission in accordance with decision CNL (86)43 adopted at its Third Annual Meeting. The representatives of Iceland, Norway and Sweden reaffirmed their interest in becoming members of this Commission. The representative of Norway submitted a statement on this question, CNL (87)39, (Annex 16). The Council decided that no change be made in the membership of the West Greenland Commission, having regard to Article 10, paragraph 2, of the Convention.

7. REPORT ON THE HEADQUARTERS PROPERTY

7.1 The Secretary reported on the Headquarters property, CNL (87)7.

8. REPORT OF THE FINANCE AND ADMINISTRATION COMMITTEE

8.1 The Finance and Administration Committee presented a report to the Council, FAC (87)3.

8.2 In addition to decisions taken relating to other agenda items, the Council, upon the recommendation of the Committee, took the following decisions:

(a) to appoint Coopers and Lybrand of Edinburgh as auditors, CNL (87)19.

(b) to adopt a decision relating to the manner by which any contractual instrument shall be executed, CNL (87)43, (Annex 17).

8.3 The Council expressed its thanks to the Committee, for its work during the Annual Meeting, and to the acting chairman, Mr A Isaksson (Iceland).

9. CONSIDERATION OF THE 1986 AUDITED ACCOUNTS,
1988 DRAFT BUDGET AND 1989 FORECAST BUDGET

9.1 Upon the recommendation of the Finance and Administration Committee, the Council:

(a) accepted the audited 1986 annual financial statement, CNL (87)9

(b) adopted a budget for 1988 and took note of a forecast budget for 1989, CNL (87)44, (Annex 18).

9.2 Statements were made on the need to ensure economies in the operation of the Organization.

10. AGREEMENT WITH ICES

10.1 The Secretary referred to the agreement with ICES and indicated that it was working well. The advice from ICES was central to the work of the Organization. The General Secretary of ICES paid tribute to the steps that had been taken by the Organization in establishing the relationship.

11. SCIENTIFIC RESEARCH

11.1 The representative of ICES presented the report of the ICES Advisory Committee on Fisheries Management to the Council, CNL (87)3, (Annex 19).

11.2 The Council discussed the need to rationalise the scientific questions to be posed to ICES.

11.3 The Council adopted a decision to request scientific advice from ICES, CNL (87)45, (Annex 20).

11.4 The Council expressed its appreciation to the representatives of ICES for their contribution to the work of the Organization.

12. SCIENTIFIC AND STATISTICAL INFORMATION

12.1 In accordance with Article 12 of the Convention, the Secretary presented a document, CNL (87)8, containing tabulated catch statistics for salmon in the North Atlantic. The Council decided that in accordance with Article 15, paragraph 1, of the Convention, the Parties should be asked to provide available catch statistics for salmon stocks, subject to the Convention, directly to the Council. The Secretary was asked to take appropriate steps, in consultation with the Parties, to initiate this process.

- 12.2 In accordance with a decision of the Council at its Third Annual Meeting, the Secretary submitted a revised catch statistics questionnaire, CNL (87)11, to the Council. This revised version incorporated the amendments suggested by the Parties and the ICES Working Group on North Atlantic salmon. The Council agreed that the revised questionnaire was appropriate for use in the analysis of catch statistics and would be circulated by the Secretary for completion by the Parties.

13. LAWS, REGULATIONS AND PROGRAMMES

- 13.1 The Secretary reported on steps taken in pursuance of the decision of the Council at its First Annual Meeting that copies of laws, regulations and programmes in force relating to the conservation, restoration, enhancement and rational management of salmon stocks, subject to the Convention, be provided to the Secretary.
- 13.2 The Council noted the desirability of the Secretary completing the analysis of the material submitted and submitting a substantial report at its Fifth Annual Meeting.

14. SALMON TAGGING

- 14.1 The Secretary reported on the review carried out, at the request of the Council, on the status of existing salmon tagging programmes. This review, CNL (87)22, (Annex 21) covered the desirability of establishing a central repository for all tagging information, improved recapture reporting procedures and developing a uniform reward system.
- 14.2 The Council agreed that the Organization should initiate a comprehensive study in consultation with the Secretariat of ICES reviewing the existing arrangements for gathering tagging information, describing the necessary requirements which should be fulfilled by a repository for tagging data and assessing the feasibility of alternative schemes for such a repository, the study to be circulated to the Parties in order to enable a decision to be made by the Council prior to the Fifth Annual Meeting.
- 14.3 The Council considered that the establishment of a uniform reward system might not be feasible in the foreseeable future. The Council agreed, however, to ask the Secretary to produce a study of the mechanics, procedures and method of funding a lottery for presentation to the Parties and, if possible, a decision by the Council prior to the Fifth Annual Meeting.

15. IMPLEMENTATION OF THE CONVENTION

- 15.1 In accordance with the request from the Council at its Third Annual Meeting, the Secretary presented a proposed format, CNL (87)14 Revise 1, (Annex 22), for reporting under Articles 14 and 15 of the Convention. The format was designed to harmonise and simplify the reporting procedure. The Council agreed that the proposed format be used for the annual returns.

16. EXTERNAL RELATIONS OF THE ORGANIZATION

- 16.1 The Council agreed that the report for 1985/86, CNL (87)38, together with a preamble about the Convention and the membership of the Organization be published as part of the public relations work of the Organization. It was further agreed that a pamphlet be produced in consultation with the Parties which described in general terms the aims of the Organization.
- 16.2 The Secretary reported on the operation of the Headquarters Agreement and on other aspects of external relations.

17. CONSIDERATION OF A DRAFT REPORT OF THE ACTIVITIES OF THE ORGANIZATION IN 1986

- 17.1 The Council adopted a report to the Council, CNL (87)13, in accordance with Article 5, paragraph 6, of the Convention.

18. POSSIBLE TOPICS FOR REVIEW BY NASCO

- 18.1 The Council considered a number of possible topics for review, CNL (87)25, (Annex 23). It was agreed that a brief review of the potential threats from salmon aquaculture on wild stocks be undertaken by the Secretary, including information on the activities of other organizations and the role NASCO may have in this matter.

19. OTHER BUSINESS

- 19.1 The Council considered a recommendation to NASCO received from the Atlantic Salmon Trust, CNL (87)23. The Council considered steps taken by the Parties, recognised the need to continue efforts to control illegal fishing and underlined the importance of continuing and strengthening such efforts.

- 19.2 The President referred to his previous proposals that the Council reconsider the level of the post of the Secretary. It was agreed that a proposal to raise the level be voted on, following the Annual Meeting.
- 19.3 The Council agreed that the Secretary report to the Council on official visits undertaken upon invitations of Parties.
- 19.4 Statements were made on the work of the Organization by the representatives of the EEC and Denmark (in respect of the Faroe Islands and Greenland).
20. DATE AND PLACE OF NEXT MEETING
- 20.1 In accordance with the decision of the Council at its Second Annual Meeting, NASCO (85)45, regarding the place of the Annual Meetings in even-numbered years, the Council, following an invitation from the representative of Iceland, agreed that its Fifth Annual Meeting should be held in Reykjavik from 13-17 June 1988. The Council also agreed that its Sixth Annual Meeting should be held in Edinburgh from 12-16 June 1989.
21. CONSIDERATION OF DRAFT REPORT OF THE MEETING
- 21.1 The Council considered a draft report of the meeting, CNL (87)18.
22. CONSIDERATION OF PRESS RELEASE
- 22.1 The Council considered a press release, CNL (87)24, (Annex 24).

8 JUNE 1987
EDINBURGH

ANNEX 1

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

SPEECH MADE BY THE PRESIDENT AT THE OPENING SESSION
OF THE COUNCIL

Distinguished Representatives, Delegates, Observers, Ladies and Gentlemen, it is an honour and a pleasure to welcome you once again to Edinburgh for the Fourth Annual Meeting of the Council and Commissions of the North Atlantic Salmon Conservation Organization. It is a particular pleasure to welcome the Representatives of the Soviet Union who are with us for the first time as full members of the Organization. I would also like to welcome our non-government observers some of whom are here for the first time.

NASCO is now three years old and I would like to suggest to you all that we should take some pride in its development. At the beginning we faced a situation where there were longstanding difficulties and misunderstandings, little cooperation on an Atlantic-wide scale and perhaps little confidence that we would operate successfully.

We can and should take pride in our Organization. We have shown that through this forum we can negotiate, we can cooperate and we can compromise in a good spirit. Let us be clear that no one Party can expect to achieve everything that they seek. NASCO is essentially the forum for a very wide range of views and for the eventual resolution of conflicts.

As we reach our Fourth Annual Meeting, I should like to urge you to consider how the Organization might play a role in salmon conservation wider than just the seeking of annual quotas. Vital though that is, we should now begin to look at other responsibilities that the Convention places upon us and to new areas where wild stocks can be affected.

We have already at previous meetings agreed to an exchange of Laws, Regulations and Programmes. We have agreed to undertake an analysis of catch statistics so that we can better assess the comparability of the basic catch data which we and our advisers in ICES use. We have before us at this meeting a paper which will ask us to review the impacts of aquaculture, this very fast growing industry, on wild stocks. We also have before us the question of whether NASCO should act as a central repository for tagging data. We need to consider the international implications of the reward system for those tags. I would urge you to consider very carefully these important areas that consolidate our task.

In conclusion, I would say that there are no quick and easy solutions to problems that have been with us for very many years. But we can ensure that the risks to this important species are much less than they would otherwise be without the existence of the Organization. We have already shown that cooperation can work. We have taken the first steps and I welcome you all here again to continue that process.

9 JUNE 1987
EDINBURGH

ANNEX 2

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION
FOURTH ANNUAL MEETING OF THE COUNCIL
8-12 JUNE 1987, DRAGONARA HOTEL, EDINBURGH, UK.

LIST OF PARTICIPANTS

* Denotes Head of Delegation

CANADA

*MR W A ROWAT	<u>Representative</u> Atlantic Fisheries Service, Ottawa, Ontario
DR G NADEAU	<u>Representative</u> Universite Laval, Quebec
DR W M CARTER	Atlantic Salmon Federation, St Andrews, New Brunswick
DR D MEERBURG	Department of Fisheries and Oceans, Ottawa, Ontario
MS L COTE	Department of Fisheries and Oceans, Ottawa, Ontario
MR B VEZINA	Department of Fisheries and Oceans, Ottawa, Ontario
MR R ANDREWS	Department of Fisheries, St Johns, Newfoundland
DR R PORTER	Department of Fisheries and Oceans, St Johns, Newfoundland
MR B STEINBOCK	Department of External Affairs, Ottawa, Ontario
MR D A MacLEAN	Department of Fisheries, Halifax, Nova Scotia

DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND)

*MR K HOYDAL	<u>Representative</u> Foroya Landsstyri, Torshavn, Faroe Islands
MR E LEMCHE	<u>Representative</u> Greenland Home Rule, Nuuk, Greenland
MR O SAMSING	Ministry of Foreign Affairs, Copenhagen

MR A OLAFSSON	Ministry of Foreign Affairs, Copenhagen
MR J MOELLER-JENSEN	Greenland Fisheries and Environment Research Institute, Copenhagen
MR H JAKUPSSTOVU	Foroya Landsstyri, Torshavn, Faroe Islands
MR A P DAM	Foroya Landsstyri, Torshavn, Faroe Islands
MR J PAULSEN	Greenland Home Rule, Nuuk, Greenland
MR S POULSEN	Faroese Commercial Office, Aberdeen
Ms L RISAGER	Greenland Home Rule, Nuuk, Greenland
 <u>EEC</u>	
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MR J SPENCER	<u>Representative</u> Fisheries Directorate-General, EEC Commission, Brussels
MS E TWOMEY	Department of the Marine, Dublin
DR R G J SHELTON	Department of Agriculture and Fisheries for Scotland, Pitlochry
DR R JOERDENS	Federal Ministry of Food, Agriculture & Forestry, Bonn
MR D PINEY	Secretariat d'Etat de la Mer, Paris
MR G LEFEBVRE	Belgian Ministry of Foreign Affairs, Brussels
MR A BETTE	Council of the European Communities, Brussels
MR S McDONALD	Permanent Representation of Ireland to the EEC, Brussels
MR B PALLISGAARD	Ministry of Fisheries, Copenhagen
MR M POMBO BRAVO	Spanish Consulate, Edinburgh
MR R WILLIAMSON	Department of Agriculture and Fisheries for Scotland, Edinburgh
MR I WHITELAW	Department of Agriculture and Fisheries for Scotland, Edinburgh

MR W MALCOLM

Department of Agriculture and Fisheries
for Scotland, Edinburgh

MR B NAYLOR

Department of Agriculture and Fisheries
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MR T POTTER

Ministry of Agriculture, Fisheries and
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DR C PURDOM

Ministry of Agriculture, Fisheries and
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MR N L D BROWN

Ministry of Agriculture, Fisheries and
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FINLAND

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Representative
Ministry of Agriculture and Forestry,
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Representative
Finnish Game and Fisheries Institute,
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ICELAND

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Representative
Ministry of Foreign Affairs, Reykjavik

MR A ISAKSSON

Representative
Institute of Freshwater Fisheries,
Reykjavik

NORWAY

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Directorate for Nature Management,
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Royal Consulate General of Norway,
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Ministry of Agriculture, Stockholm

MR I OLSSON

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National Board of Fisheries, Goteborg

USA

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Representative
National Marine Fisheries Service, Woods
Hole, Mass

DR F E CARLTON

Representative
National Coalition for Marine
Conservation, Savannah, Georgia

DR V C ANTHONY

National Marine Fisheries Service, Woods
Hole, Mass

MR G RADONSKI

Sports Fishing Institute, Washington, DC

MR A NEILL

National Marine Fisheries Service, Woods
Hole, Mass

MR J K McCALLUM

US House of Representatives, Washington,
DC

MR H S TINKHAM

US Department of State, Washington, DC

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MR V I IKRIANNIKOV	<u>Representative</u> Ministry of Fisheries, Moscow
MR V SOLODOVNIK	Ministry of Fisheries, Moscow
MR V CHEVCHENKO	Ministry of Fisheries, Moscow

ICES

DR B B PARRISH	International Council for the Exploration of the Sea, Copenhagen
PROF O ULLTANG	Institute of Marine Research, Bergen,
DR E ANDERSON	International Council for the Exploration of the Sea, Copenhagen

NON-GOVERNMENT OBSERVERS

L'ASSOCIATION INTERNATIONALE DE DEFENSE DU SAUMON ATLANTIQUE	DR D MILLS
ASSOCIATION OF SCOTTISH DISTRICT SALMON FISHERY BOARDS	GROUP CAPTAIN J R C PROUDLOCK MR J R W STANSFELD
ATLANTIC SALMON TRUST	REAR ADMIRAL D J MACKENZIE THE HON LORD MORAN
SALMON AND TROUT ASSOCIATION	COLONEL J FERGUSON
SCOTTISH ANGLERS NATIONAL ASSOCIATION	MR W R BROWN MR P M SHEPHERD
WATER AUTHORITIES ASSOCIATION	MR A S CHAMPION MR C HARPLEY

SECRETARIAT

SECRETARY	DR M L WINDSOR
ASSISTANT SECRETARY	DR P HUTCHINSON
PA TO SECRETARY	MS Z CLARKE

8 JUNE 1987
EDINBURGH

ANNEX 3

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF CANADA

Mr President, Representatives, Delegates, Observers; it is a pleasure to be in Edinburgh for the Fourth Annual Meeting of the North Atlantic Salmon Conservation Organization. I, too, would like to join in welcoming the Soviet Union to our midst.

The President, in his opening statement, has suggested that we should all take some pride in NASCO and what it has achieved in three short years. I would like to echo his words. Initially there was some doubt whether the Organization could work. Hence, I think that most participants took some satisfaction in what was collectively achieved last year in reaching important agreements. While no country can be completely satisfied with the results of negotiated agreements, it can be satisfied that the mechanism for reaching those negotiated agreements is working. Canadians have made a significant commitment to their salmon resources and it is in our interest to ensure that these international conventions are viable. As you may know, Canada's struggle to restore its domestic Atlantic salmon fishery has a long history with several important land marks. We have had to impose many restrictive and painful measures. These measures have also had a clear effect on reducing Canada's interceptions of other nations fisheries. As well, Canada has undertaken specific initiatives to meet its obligations under the Convention. In 1986, we imposed an October 15 closure date on the commercial fishery in Newfoundland and Labrador. We have reduced Canadian interception of American origin salmon significantly.

Our conservation policy has required considerable domestic sacrifice. We have made large investments during the current five year salmon recovery program. Canadian taxpayers have paid millions for licence buybacks and compensation and other restorative measures. A total of 3,500 fishermen have given up part of their way of life. Anglers and commercial fishermen have been severely limited in their activities.

One should appreciate, however, that today's sacrifices and investments can only be imposed if the future looks bright and that there will be some pay off. In Canada, we are at present in the 4th year of a 5 year recovery program. During the current plan, not only have we attempted to achieve a full recovery of our stocks, we have attempted to create a viable and stable investment environment for the future. We are now planning for the next phase in our salmon fisheries development, which will be

based more on enhancement initiatives rather than the restorative initiatives of the current 5 year plan. But our domestic investments of time, money and sacrifice can only show a return if we are assured that we live within a stable international salmon management regime. This is why Canadians assign such importance to the objectives and the effective operation of NASCO.

Last year, Mr President, there was remarkable progress achieved in establishing NASCO as a viable Organization. As you mentioned in your opening remarks, the risks to this important species are much less than they would otherwise have been without the existence of the Organization.

Mr President, my delegation and I are looking forward to very positive discussions in this year's meetings and hope to see further progress.

8 JUNE 1987
EDINBURGH

ANNEX 4

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF
DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND)

Mr President,

On the occasion of the Fourth Annual Meeting of NASCO it might be appropriate to take a brief look at the achievements of this Organization so far and to express our aspirations for this Annual Meeting in particular and the future of NASCO in general.

Opinions on the achievements of NASCO so far may be divided.

The pessimists will draw our attention to the fact that NASCO has up to now only managed to make a very limited number of regulatory measures. In the majority of cases it has not been possible to reach the necessary consensus required for the adoption of such measures.

This observation is true, but does not force us to take a pessimistic view of the Organization.

NASCO is still a young Organization set up in order to take care of a very difficult task.

The Contracting Parties have needed time in order to accustom themselves to this form of international cooperation on a resource which has both domestic and international characteristics.

In one field we find that NASCO has already achieved considerable results, and that is in providing scientific knowledge on North Atlantic salmon.

Our knowledge about the subject has indeed increased in this four year period thanks to increased cooperation among salmon scientists within ICES in response to questions posed by NASCO.

However, we have to admit, as does ICES in its most recent report, that the questions most crucial to the task of this Organization still remain unanswered. We might ease the task of the scientists by concentrating our questions on the most relevant subjects.

The apparent lack of political results in the form of regulatory measures up to now is partly due to objective differences of interest between different fisheries.

There are a number of different salmon fisheries ranging from angling in the spawning rivers to fixed gear and net fisheries in the same rivers, netting in estuaries, netting or long-lining in coastal waters and in the belt between the base lines and 12 miles right to the high sea fisheries. The people behind all these different fisheries have opposing interests.

In this Organization we see mainly the opposing interests of river state fishermen of all categories on the one hand and host state fishermen on the other hand.

These objective differences must not lead us to forget that we have one interest in common, the wellbeing of the salmon stocks. It must be possible to join efforts to obtain an improvement of the stocks which will leave both sides better off than today.

As mentioned before, another main reason for the apparent absence of tangible results has been the problems of all Parties to accustom themselves to cooperating within the framework of the NASCO Convention and on the basis of the new scientific information being presented to us.

Much time and effort has been spent in previous NASCO meetings on exchange of views on matters of principle, which were already settled when the Convention was negotiated, agreed upon, signed, and ratified several years ago.

It is our hope that all Parties realize that it will be counterproductive to slide back into the use of obsolete concepts such as 'ownership' of the salmon stocks or to nostalgia for the days before fishermen and scientists found the oceanic grazing grounds of salmon.

Scientific and technological progress is irreversible. Host state fishery is an established fact.

The Convention text clearly defines the rights and obligations of both host states and river states and provides guidelines for establishing the correct balance between the interests of the two sides.

ICES scientists have provided us with scientific information enabling us to see the different salmon fisheries in their proper perspective.

If we comply with the principles laid down in the NASCO Convention and heed the advice offered by the scientists, there should be fairly good possibilities in this Annual Meeting to work towards, and even to achieve, durable and mutually beneficial solutions regarding conservation measures.

Our delegation is ready to use these opportunities. We hope that it will be possible to cooperate with other interested Parties in order to find durable and equitable solutions.

8 JUNE 1987
EDINBURGH

ANNEX 5

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE
OF THE EUROPEAN ECONOMIC COMMUNITY

Mr President, Distinguished Representatives, Delegates and Observers.

The Community looks forward to this Fourth Annual Meeting of NASCO in the expectation of a fruitful and constructive meeting.

My delegation very much welcomes that the Soviet Union will be participating as a full member of our Organization in this Annual Meeting. We are convinced that the Soviet Union can make an important contribution to the future work of NASCO and we are looking forward to working together with the Soviet delegation for the conservation of the North Atlantic wild salmon.

Considerable progress has been achieved by NASCO to date. Through the adoption of meaningful regulatory measures and the co-ordinated approach of Contracting Parties within NASCO to increasing the scientific knowledge of the salmon stocks, a spirit of co-operation has been fostered which bodes well for the future of NASCO.

The conservation measures in force in the Member States of the Community bear eloquent testimony to the Community's commitment to the North Atlantic salmon resource; a commitment indeed which can be traced back over centuries. The human and financial resources devoted to the conservation, restoration and rational management of the salmon stocks within the Community continue to expand.

The Community is conscious of its responsibility as a major state of origin for the North Atlantic salmon stocks. It re-affirms its commitment to working with other Parties - notably with those Parties conducting high sea fisheries whose special situation was recognised in the NASCO Convention - in order that agreement may be reached on regulatory measures relating to those fisheries in the common interest of the conservation and rational management of the North Atlantic salmon stocks. As regards the North East Atlantic salmon stocks, this objective has been successfully realised on a bilateral basis in the past and the Community is confident that regulatory measures will now be agreed within the multilateral framework of NASCO at this Annual Meeting.

8 JUNE 1987
EDINBURGH

ANNEX 6

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF FINLAND

Mr President,

As the only member state of this Organization without any jurisdiction or fishing rights in the Convention area, Finland supports and looks forward to such management policy which will ensure and protect strong and diversified salmon stocks. Our opinion is based on two salmon rivers, common with Norway, which produce smolts for the Convention area. In the Tana river, which is the largest salmon river and the biggest producer of smolts in Europe, the salmon stocks seem to be in good condition. In the main water course of this river the density of smolts has been on a satisfactory level in the past years. One important factor for this is the agreement between Finland and Norway regulating the salmon fishery in the two border rivers. The agreement concerning the Tana river is under revision in order to further facilitate the management of salmon stocks. It can be said that during the last few years the local population as well as recreational fishermen have been able to conduct satisfactory salmon fishing in this river.

However, Mr President, the Finnish salmon catches decreased last year, which we consider to be due to a still too heavy interception fishery. In this regard we appreciate the Norwegian prohibition of the salmon drift-net fishery in their home waters as from the end of next year. We also look forward to the management measures to be taken by our Organization in order to regulate interception fisheries in the Convention area. We believe that these measures enable strong and adequate migration to spawning rivers by salmon stocks with a broad genetic base. According to our experiences in the Baltic area we consider the last mentioned factor to be very important. If the genetic base of a certain salmon stock becomes too narrow, the stock may be lost through degeneration.

In this context, Mr President, I would like to draw your attention to the fish farming in net-cages in coastal areas. Last year in our opening statement we were concerned about possible risks of fish diseases to wild salmon stocks from these establishments. Now we are equally concerned about possible risks of genetic disorders caused by escapees from net-cages. Therefore in our opinion salmon farming close to spawning rivers should not take place, because in practice it is impossible to avoid escapees from net-cages.

Mr President, I am convinced that at our Fourth Annual Meeting there will be a thorough and effective discussion regarding management problems and I hope that the regional Commissions can agree on regulatory measures regarding interception fishery in the Convention area.

Thank you Mr President.

8 JUNE 1987
EDINBURGH

ANNEX 7

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF ICELAND

Mr President,

Iceland has a special status among the nations exploiting Atlantic Salmon as there are no sea fisheries for salmon. Most of the catch is in a riverine sports fishery although netting is allowed in a few glacial streams.

Private sea ranching is developing in Iceland and the underlying assumption is that salmon will not be caught in the sea at least within Icelandic fisheries limits.

Sea ranching is also carried out in the salmon streams to enhance the sports fishery. Due to the great value of these sports fisheries this kind of ranching is very profitable.

Since the total salmon stocks in Iceland only amount to 400-600 tonnes they are very vulnerable to overharvest if excessively exploited in a mixed stock sea fishery. It is thus of utmost importance that the existing search programs for salmon tags at Faroes and in West Greenland be continued.

There is considerable qualitative evidence that salmon from Southern and Western Iceland which contribute over 75% of the salmon catch migrate west to East and West Greenland. Iceland will thus continue to seek membership in the West Greenland Commission.

At previous meetings the Icelandic delegation has referred to a resolution of the Althing on sea fisheries for salmon.

In conclusion I would like to emphasize that the Icelandic delegation is willing to cooperate with other nations concerned to resolve conflicting interests.

8 JUNE 1987
EDINBURGH

ANNEX 8

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF NORWAY

Mr President,

The Norwegian delegation looks forward to the Fourth Annual meeting of NASCO with special interest.

Last year, the Norwegian Government announced a set of measures designed to operate extensive regulations in respect of salmon fishing in the Norwegian home waters and in rivers. It is reasonable to say that especially the drift-net fishermen who will be heavily affected as a consequence of the ban of the drift-net fishery, have not fully accepted these measures. They are still working to get a change in the political opinion that eventually could lead to a reopening of the drift-net fishery. In that connection we have to bear in mind that the most important arguments as a base for these measures were over-exploitation of salmon stocks and the interceptory fishery. In this situation it could be very difficult for the continued rational management of the salmon stocks in Norway if we did not reach positive agreements at this NASCO conference.

However, the drift-net prohibition is only one of several measures. In 1987 we have gone further and proposed a licensing scheme for fixed gears in the sea. This case is not fully finalised at this time, but the major intention is to reduce the catch of salmon on fixed gears in Norwegian home waters. Other measures which intend to reduce the catch will also be evaluated.

I will also mention that we already have a 10 year ban for fixed gears in most of the Norwegian rivers. We will also evaluate to include the rest of the salmon rivers in a similar 10 year ban for fixed gears.

A special Law Commission established in 1981 in order to review the Salmon Act from 1964, completed their work in January 1987. This important document updates the Salmon Act and will be a management tool of great importance in future work with Atlantic salmon.

So far NASCO has dealt with annual quotas when reaching agreements in managing the salmon resource. The Norwegian delegation welcomes an extension of the work within the Organization to include also other areas of importance for the salmon resource.

I know we are all conscious of what is involved in these NASCO meetings. I can assure you of my delegation's full co-operation to arrive at successful conclusions.

Thank you Mr. President.

8 JUNE 1987
EDINBURGH

ANNEX 9

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF SWEDEN

Mr President,

In 1986 the Swedish catch of Atlantic salmon continued to increase. Last year the catch amounted to 55 tonnes compared to 42 tonnes in 1985. The spawning migration to the Swedish coast is mainly a migration of one sea-winter salmon, while considerable quantities of multi-sea winter salmon are caught in the interception Faroese fishery. As is evident from the ACFM report recapture rates for salmon tagged in Norway and Sweden are greater than those from smolts released in other countries. The interception fishery thus implies a burden for the Swedish home-water fishery.

In the opening statement last year it was mentioned that in the Kattegatt area fishing for salmon and sea trout with nets is now totally prohibited except for one month during the summer. In addition to this a total ban of the salmon fishery was introduced in one river in February this year. The ban will not ease until 1990.

The salmon producing rivers on the Swedish west coast exhibit improved environmental conditions in several ways. Considerable quantities of acidifying substances mainly released in foreign countries reach the west-coast where the buffering capacity and the pH conditions have been considerably lowered. Due to mitigating liming measures, however, the declining trends of pH and alkalinity have been broken in several river systems. Subsequently special measures have been taken to improve the habitats of the salmon in those rivers. During recent years considerable sums from the national budget have been directly granted as state subsidies for such measures and to regional fishery authorities for fishery conservation measures, mainly with regard to salmon and sea-trout. These national measures are one explanation of the increased catches in Sweden of Atlantic salmon.

Comprehensive measures will also be taken to decrease the contents of nutrients in the rivers emptying into the Skagerrak and Kattegatt area, where severe eutrophication problems have arisen, especially in coastal areas.

On July 1 this year a new law on natural resources will enter into force in Sweden. On the basis of this law areas of national interest shall be distinguished with respect to e.g. commercial fishery and species which need special protection. In 1984 a report was presented concerning the question of how to secure the genetical resources of the Swedish fish species. In this report it was stated that all waters with salmon were of national

interest regardless of special qualities of the species. The Natural Resources Act now constitutes a considerably improved legal basis for the protection of the Swedish salmon. When the waters of national interest have been pointed out there is also an improved basis for guidelines for the establishment of aquaculture activities and the releases of fish in the vicinity of the waters with salmon.

The Swedish Salmon Research Institute has recently presented a national report covering the needs for different kinds of research on the Swedish salmon. It is stated that the research in a long term and socio-economic perspective should be concentrated into the following three areas:

1. Population biology prerequisites
2. Life patterns of the salmon and biological and economic optimization of different production lines
3. Minimizing of risks of genetic erosion and the maintenance of the genetic variations in both wild and cultured populations

It is recommended that the main part of the research should also be geographically concentrated into certain index rivers, e.g. the west coast river Lagan which has a large production of reared fish and is an index river for ICES.

As was stated last year Sweden has clearly indicated its willingness to share the burden of restoring the salmon stocks in the North Atlantic, in which restoration NASCO must play a fundamental role.

NASCO has now finished its economical and administrative building up phase. It is thus up to us to see to it that the Organization with its administrative structure is fully utilised, not only for reaching agreements on regulatory measures in the whole Convention area, but also to let it play a wider role in salmon conservation in general, as mentioned by the President in his opening statement.

8 JUNE 1987
EDINBURGH

ANNEX 10

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF
THE UNION OF SOVIET SOCIALIST REPUBLICS

Mr President, Ladies and Gentlemen

On behalf of the Government of the USSR let me welcome the delegations of NASCO member countries and observers and wish the Organization every success in its work. Since becoming a member of NASCO, the Soviet Union is ready to make a proper contribution to the protection and conservation of the North Atlantic salmon.

North Atlantic salmon is a traditional species of the Soviet fishery which is based on the stocks originating in the rivers of the USSR European North. Such rivers number more than 300, therefore the USSR actively pursues the task of protection and reproduction of salmon stocks including substantial scientific research.

Being a State of origin of North Atlantic salmon, the USSR is impartially interested in international cooperation on the coordination of the efforts of all countries fishing for salmon, in research, conservation, regulation of the fishery and reproduction of salmon stocks.

To ensure the most effective regulations of the fishery and realisation of measures aiming at conservation of fishing stocks, the USSR has always supported prohibition of sea fishing for salmon, and the just solution of the problems arising from its catches, taking into account the special rights of the State of origin.

Such an approach had been upheld by the USSR at the Third United Nations Law of the Sea Conference and this approach is secured in a number of bilateral agreements between the USSR and other countries.

Compulsory requirements for protection and scientifically proved, rational utilisation of natural resources are incorporated into the USSR Constitution and the law of protection and utilisation of the animal world and other legal by-laws, as well as in the 1984 Act of Economic Zone of the USSR of the Supreme Soviet.

The USSR has substantial experience of both natural and artificial reproduction of salmon in Atlantic as well as Pacific regions.

The experience gained in utilization of the living resources of the world oceans supports the evidence that only in the course of international cooperation would it be possible to solve the problems relating to protection and rational management of such resources.

It concerns, in particular, the anadromous species whose migration routes cross the boundaries of sea zones of several countries.

This is why we welcome the aspirations of the representatives of the Governments present here to conserve and reproduce the stocks of this valuable species.

Thank you for your attention.

8 JUNE 1987
EDINBURGH

ANNEX 11

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

OPENING STATEMENT MADE BY THE REPRESENTATIVE OF
THE UNITED STATES OF AMERICA

Mr Chairman, distinguished delegates and observers:

The United States believes that NASCO has made, and will continue to make, significant progress in the restriction of catches of Atlantic salmon in interception fisheries. This is certainly a principal - if not the principal - objective of the North Atlantic Salmon Convention.

During these early treaty years, the achievement of forward movement in this complex area of rational management of stocks has required nearly the full attention of the three Commissions. NASCO's responsibility and competence, however, extend far beyond simply dealing with regulatory management measures, such as, for instance, quotas. The challenge is to have it become what we feel it should be, the leading instrument of the total Atlantic salmon effort.

At this meeting of NASCO, the United States would like to direct the attention of the member States to the full range of responsibilities and functions of the Council of NASCO.

Understandably, it has been necessary, during the infancy of NASCO, for the Council to focus attention primarily on administrative matters, to see to it that the operating mechanism of the treaty functions efficiently and smoothly. Those of us who played a part in the framing and negotiating of the Convention, however, were at all times essentially in agreement that the Council should be the principal forum for the exchange of views and information and the recommendation of scientific undertakings with respect to salmon stocks subject to the Convention. And the treaty as finally ratified does indeed define responsibilities of this type.

We are therefore strongly of the opinion that it is desirable and necessary for the Council now to direct its efforts to the discharge of these important responsibilities. They are described in Article 4 of the Convention, and include, inter alia, the providing of 'a forum for the study, analysis and exchange of information among the Parties' and 'a forum for consultation and cooperation'... 'on matters concerning salmon stocks subject to the Convention'.

It is also our feeling that the Council should be more aggressive in dealing with those other issues of conservation, restoration, enhancement, and rational management that are not the direct responsibility of the Commissions. Here are a few of the areas that should be addressed at this time:-

- a. Pertinent recommendations concerning the undertaking of scientific research can be addressed directly to the Parties to the Convention and to other qualified fisheries and scientific organizations.
- b. The Council should act as a source of information on all key salmon endeavours such as, for instance, the sociological and economic impact of aquaculture on the production, management and harvest of wild Atlantic salmon.
- c. There are a number of common problems affecting all Parties which should be investigated with a view towards solution along equitable lines, such as tagging protocols, the introduction of non-indigenous species, etc.

We realise that matters such as tagging and the introduction of non-indigenous species are among the thorniest of management problems we face, because of the disparities in objectives, approaches and methodologies of the different Parties. Yet isn't this what NASCO is all about? A common meeting ground for sorting out and attempting to solve these types of conflicting views and polarized issues?

The role of the resolution as a useful medium for making the public aware of important salmon issues has yet to be tested under NASCO. The United States believes that this mechanism should be encouraged whenever it gives promise of being effective in realising common objectives of a substantial majority of members in support of a major proposal designed to benefit the North Atlantic Salmon community as a whole. Worthwhile proposals often need a banner under which to march, and resolutions serve this purpose well, bringing the full glare of publicity upon problems requiring universal support.

And the NASCO Council is the logical place to accomplish such things. Resolutions proposed in the Council can also serve to bring attention to issues that might have been bottled up in NASCO at a lower level, as for instance in the Commissions which require a unanimous vote for approval. Again, the framers of the Convention must have had this in mind when they designed the treaty, for a Council vote requires only a three-quarters majority for approval.

In calling for a broadening of the activities of the Council, the United States is motivated by the conviction that NASCO must march with the times, addressing broad issues that are the subject of universal interest, perhaps even of debate. In fact, NASCO should be ahead of the times, whenever we are convinced that some particular area of conservation and restoration requires the special attention of NASCO, the arbiter of progress for the enhancement of the salmon resource.

Finally, breaking new ground through working positively or hitherto undeveloped issues will contribute to a greater understanding of the importance and value of NASCO. The United

States therefore urges the acceptance by NASCO of a commitment to follow new directions and embrace new disciplines which give promise of enabling it to discharge more fully its obligations not only embodied in, but inherent under the Convention.

Thank you Mr Chairman.

8 JUNE 1987
EDINBURGH

ANNEX 12

CNL (87)42

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION
FOURTH ANNUAL MEETING OF COUNCIL
8-12 JUNE 1987, DRAGONARA HOTEL, EDINBURGH, UK.

AGENDA

PAPER NO

- | | | |
|-----|--|---|
| 1. | Opening session | |
| 2. | Adoption of the agenda | CNL (87)2
CNL (87)27 |
| 3. | Status of ratification of and accessions to the Convention | CNL (87)4 |
| 4. | Applications for observer status at meetings of the Council | CNL (87)5 |
| 5. | Coordination of the activities of the regional Commissions
-Reports of the regional Commissions | |
| 6. | Membership of the regional Commissions
-Review of membership of the West Greenland Commission | CNL (87)6
CNL (87)15
CNL (87)28 |
| 7. | Report on the Headquarters property | CNL (87)7 |
| 8. | Report of the Finance and Administration Committee | FAC (87)3
CNL (87)19 |
| 9. | Consideration of the 1986 audited accounts, 1988 draft budget and 1989 forecast budget | CNL (87)9
CNL (87)10
CNL (87)16
CNL (87)20 |
| 10. | Agreement with ICES | |
| 11. | Scientific research | CNL (87)3
CNL (87)21 |
| 12. | Scientific and statistical information | CNL (87)8
CNL (87)11 |
| 13. | Laws, regulations and programmes | CNL (87)12 |

14.	Salmon tagging	CNL (87)22 CNL (87)23
15.	Implementation of the Convention	CNL (87)14 CNL (87)17
16.	External relations of the Organization	CNL (87)38
17.	Consideration of a draft report of the activities of the Organization in 1986	CNL (87)13
18.	Possible topics for review by NASCO	CNL (87)25
19.	Other business	
20.	Date and place of next meeting	CNL (87)26
21.	Consideration of draft report of the meeting	CNL (87)18
22.	Consideration of press release	CNL (87)24

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27 MARCH 1987
EDINBURGH

ANNEX 13

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)4

STATUS OF RATIFICATIONS OF AND
ACCESSIONS TO THE CONVENTION

STATUS OF RATIFICATIONS OF AND
ACCESSIONS TO THE CONVENTION

1. Parties to the Convention as at 27 March 1987 are as follows:

PARTY	DATE OF ACCESSION (A) OR RATIFICATION OR APPROVAL (R)
CANADA	30 September 1983 (R)
DENMARK in respect of the Faroe Islands	31 January 1983 (R)
in respect of Greenland	17 April 1985 (A)
EUROPEAN ECONOMIC COMMUNITY (EEC)	14 December 1982 (R)
FINLAND	18 May 1984 (A)
ICELAND	21 June 1982 (R)
NORWAY	20 May 1983 (R)
SWEDEN	17 May 1984 (R)
UNITED STATES OF AMERICA (USA)	16 November 1982 (R)
UNION OF SOVIET SOCIALIST REPUBLICS (USSR)	11 September 1986 (A)

2. The Convention entered into force on 1 October 1983, following the deposit of instruments of ratification or approval by the Parties satisfying Article 17, paragraph 5 of the Convention.
3. During the period 31 March 1986 to 27 March 1987 the accession to the Convention by the Soviet Union was advised to the Parties and to the Secretary by the depositary.

1 MAY 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)5

APPLICATIONS FOR NON-GOVERNMENT OBSERVER STATUS
AT THE 1987 MEETINGS

APPLICATIONS FOR NON-GOVERNMENT OBSERVER STATUS
AT THE 1987 MEETINGS

1. INTRODUCTION

At its Second Annual Meeting the Council decided, on a trial basis, that observers representing non-government organisations may attend its meetings provided that the organisation has objectives that are compatible with the objectives of NASCO as described in the Convention. The Council decided that the following conditions shall apply to such attendance,

1. that the Secretary, in consultation with the President, shall decide whether the objectives of the organisation applying are compatible with those of NASCO,
2. that the non-government organisation shall apply not less than 15 days before the meeting of the Council,
3. that no more than two representatives of the non-government organisation shall be allowed to attend the meeting,
4. that the representatives of the non-government organisation shall not be permitted to make any statements of any kind at the meetings,
5. that the non-government organisation shall demonstrate to the satisfaction of the Secretary that it has, as an organisation, a legitimate interest in the proceedings,
6. that the non-government organisation shall comply with any other conditions imposed by the Council or by the Secretary.

2. EXISTING APPLICATIONS

Prior to the Third Annual Meeting in June 1986 the Secretary received three applications for observer status from non-government organisations.

The Atlantic Salmon Trust	(based in the UK)
The Salmon and Trout Association	(based in the UK)
Association Internationale de Defense du Saumon Atlantique	(based in France)

The declared aims and objectives of these organisations were summarised in Paper CNL (86)16 and are repeated in Annex 1.

3. NEW APPLICATIONS

As of 1 May 1987 the Secretary had received a further three applications for observer status from non-government organisations.

The Scottish Anglers National Association

Association of Scottish District Salmon Fishery Boards

The Water Authorities Association

The declared aims and objectives of these organisations have been summarised in Annex 2.

4. ACTION TAKEN

In accordance with the conditions laid down by the Council I decided, in consultation with the President, that these non-government organisations have objectives which are compatible with those of NASCO, (condition 1). I concluded that they have a legitimate interest in the proceedings, (condition 5). Accordingly, these three new applicants and the three other non-government organisations already granted observer status have been invited to the Fourth Annual Meeting. They have been advised of and have accepted the conditions as laid down by Council. The attendance of observers is restricted to meetings of the Council.

5. OTHER APPLICATIONS

The Secretary also received an application for observer status from Ms Bubier, Staff Attorney at the Marine Law Institute, Portland, USA. The President ruled, under Rule 12(g) of the Rules of Procedure, that Ms Bubier of the Institute could not be considered to be an organisation in the sense that the Council had in mind in agreeing to admit non-government organisations as observers. The Secretary therefore refused this application.

SUMMARIES OF AIMS AND OBJECTIVES OF EXISTING
NON-GOVERNMENT OBSERVERS

ATLANTIC SALMON TRUST (UK)

The Trust has written stating that its main aim is 'to ensure that the Atlantic Salmon is preserved for the benefit of the community, and that the resource is cropped in such a way as to provide the optimum benefits and yet allow it to be sustained and developed'.

THE SALMON AND TROUT ASSOCIATION (UK)

The Association has provided a document concerning its objectives and rules which may be summarised as:

'to safeguard salmon and trout and other salmonid stocks and fisheries of the United Kingdom; to protect and further the interests of all salmon and trout rod-and-line anglers; and to conduct any lawful activities in the furtherance of the first two objectives'.

ASSOCIATION INTERNATIONALE DE DEFENSE DU SAUMON ATLANTIQUE
(FRANCE)

The aims of AIDSA are declared in a recent issue of their journal as follows (our translation)

'To take, maintain and co-ordinate all the correct initiatives to encourage Atlantic salmon to remain and develop in fresh waters.

To monitor, in agreement with interested national and international organisations, the formulation of all regulations with a bearing on the development of the salmon resource both in the seas and in the rivers.

The survival of salmon being strictly dependent on the quality of the habitat, AIDSA is called upon to resist water pollution, obstacles to the free circulation of salmon between the sea and the spawning zones and the extraction of sand and gravel from the river beds. AIDSA takes account of other migratory salmonids, notably where they interact with Atlantic salmon'.

SUMMARIES OF AIMS AND OBJECTIVES OF
NEW APPLICANTS FOR OBSERVER STATUS

SCOTTISH ANGLERS NATIONAL ASSOCIATION

This Association has provided a document in which it states as prime objective:

'measures to promote the conservation and enhancement of Scottish salmon and sea-trout.'

ASSOCIATION OF SCOTTISH DISTRICT SALMON FISHERY BOARDS

The Association is broadly representative of all salmon fishing interests in Scotland and in a document it has provided it briefly summarizes its aims as follows:

'to co-ordinate the work of Boards and Districts; to promote, safeguard and protect the interests of the Salmon Fisheries of Scotland; to take action as may be competent in connection with any legislation or Bill before Parliament affecting Salmon Fisheries; to co-operate with any other Associations or Societies in the furtherance of the objects of this Association and generally to take such steps as may be desirable for the protection, preservation and development of the Salmon Fisheries of Scotland.'

WATER AUTHORITIES ASSOCIATION (UK)

The Association has provided a document in which it says that "The Water Authorities Association is the central coordinating and representative body for the nine Water Authorities in England and the Welsh Water Authority" and it summarizes its interest in NASCO by stating that "Water authorities have a statutory duty under the Salmon and Freshwater Fisheries Act 1975 to maintain, improve and develop salmon and freshwater fisheries, and further duties placed on them by the Salmon Act 1986 regarding the management and conservation of salmon fisheries."

1 MAY 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)6

MEMBERSHIP OF THE COMMISSIONS OF NASCO

MEMBERSHIP OF THE COMMISSIONS OF NASCO

1. NORTH AMERICAN COMMISSION

As of 1 May 1987 the membership of the North American Commission is as follows:

Canada
United States of America

European Economic Community, under Article 11 of the Convention, has the right to submit and vote on proposals for regulatory measures concerning salmon stocks originating in the territories referred to in Article 18.

2. NORTH-EAST ATLANTIC COMMISSION

As of 1 May 1987 the membership of the North-East Atlantic Commission is as follows:

Denmark in respect of the Faroe Islands and Greenland
European Economic Community
Finland
Iceland
Norway
Sweden

Canada and the United States, under Article 11 of the Convention, each have the right to submit and vote on proposals for regulatory measures concerning salmon stocks originating in the rivers of Canada or the United States of America respectively and occurring off East Greenland.

3. WEST GREENLAND COMMISSION

As of 1 May 1987 the membership of the West Greenland Commission is as follows:

Canada
Denmark in respect of the Faroe Islands and Greenland
European Economic Community
United States of America

4. At its Third Annual Meeting in 1986, following further consideration of the presentations previously made by the representatives of Iceland, Norway and Sweden, the Council decided, having regard to Article 10, paragraph 2 of the Convention, that the review of and possibility of

modifying the membership of the West Greenland Commission should be suspended until the next meeting of the Council.

5. It was agreed that there would be no further suspension of the review under Article 10, paragraph 2 of the Convention.

10 JUNE 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)39

NORWEGIAN STATEMENT CONCERNING MEMBERSHIP IN
THE WEST GREENLAND COMMISSION

NORWEGIAN STATEMENT CONCERNING MEMBERSHIP IN
THE WEST GREENLAND COMMISSION

The main reason for Norway to want membership in the West Greenland Commission is because salmon of Norwegian origin is widely spread over the North Atlantic area, including the West Greenland waters. This means that decisions on regulatory measures in these waters are affecting salmon stocks originating in Norwegian rivers. According to basic principles in international cooperation, this fact alone would justify a Norwegian membership in the West Greenland Commission, on the legal basis of Article 10, paragraph 2 of the Convention. In the considerations of the Norwegian membership, considerations, mainly of a political nature, one has to take into account the function of NASCO in the future and the position of NASCO in our native countries. In Norway we continue to regard NASCO as an open Organization, aiming at effective and fruitful international cooperation within salmon conservation work. The effectiveness of NASCO can, of course, not be assessed on the fact that a small Commission with few member States can easily obtain agreements and unanimous decisions, when at the same time the decisions affect salmon stocks from other nations. It would be a parody in international cooperation if this line of approach is applied.

Let us, in addition to these general remarks, give some brief comments on the Convention - article 10 and 11. As mentioned above, the legal basis for a decision on Norwegian membership on this occasion is Article 10, section 2, and it will hardly be understood if one of the most important single-country salmon producers is rejected from the WGC on this political basis. It has to be taken into account what has been clearly underlined by the Swedish delegation, that the Convention - Article 10 and 11 - suffers from a lack of balance in favour of the powerful Parties. At this point it is sufficient to stress the fact that - in accordance with Article 11 - the members of the WGC all have the right not only to attend the meetings of other Commissions, but also to submit and vote on proposals for regulatory measures concerning salmon stocks originating in rivers on their own territories. As far as Norway understands this provision (Article 11), it is no demand that the imposed measures will concern 'significant quantities' of salmon.

This apparent imbalance in the Convention itself could to a certain extent be restored if NASCO will apply the provisions in Article 10, paragraph 2, and perhaps even paragraph 3 - in a just and reasonable way.

At this stage of the negotiations the Norwegian delegation feels that it has reached a crucial point in the international cooperation within the framework of NASCO.

8 JUNE 1987
EDINBURGH

ANNEX 17

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)43

DECISION OF THE COUNCIL
CONFIRMING THE MANNER BY WHICH
ANY CONTRACTUAL INSTRUMENT TO WHICH
NASCO IS A SIGNATORY SHALL BE EXECUTED

Having regard to the requirement that the Organization should have an official signatory to execute Contractual Instruments upon its behalf the Council decides:

that all instruments to which the Organization is a signatory shall be competently executed where the Council has so determined who shall sign such instruments, and that unless otherwise so determined any such instrument shall be signed by the Secretary before two witnesses and sealed with the Official Seal of the Organization.

10 JUNE 1987
EDINBURGH

ANNEX 18

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

FINANCE AND ADMINISTRATION COMMITTEE

CNL (87)44

1988 BUDGET AND 1989 FORECAST BUDGET

SECTION	DESCRIPTION	EXPENDITURE	
		BUDGET 1988	FORECAST 1989
1	STAFF RELATED COSTS	98860	104780
2	TRAVEL AND SUBSISTENCE	16770	12470
3	CONTRIBUTION TO ICES	19040	20180
4	CONTRIBUTION TO WORKING CAPITAL FUND	4070	0
5	MEETINGS	2700	12500
6	OFFICE SUPPLIES, PRINTING AND TRANSLATIONS	25920	27460
7	COMMUNICATIONS	9640	10210
8	HEADQUARTERS PROPERTY	66650	62900
9	OFFICE FURNITURE AND EQUIPMENT	5940	6290
10	AUDIT AND OTHER EXPENSES	5060	5340
TOTAL		254650	262130
		REVENUE	
11	CONTRIBUTIONS-CONTRACTING PARTIES	259515	259480
12	MISCELLANEOUS INCOME - INTEREST	2500	2650
13	SURPLUS OR DEFICIT (-) FROM 1986	-7365	0
TOTAL		254650	262130

JUNE 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)3

SCIENTIFIC ADVICE FROM ICES

THE REPORT OF
THE ADVISORY COMMITTEE ON FISHERIES MANAGEMENT (ACFM)

This paper makes reference to the report of the meeting of the ICES Working Group on North Atlantic Salmon (Copenhagen 9-20 March 1987). That report is not annexed here but is available on request to the Secretariat.

NORTH ATLANTIC SALMON

1. REQUEST FOR SCIENTIFIC ADVICE

The advice below and the appended report of the Working Group on North Atlantic Salmon respond to questions posed by ICES and the Council of the North Atlantic Salmon Conservation Organization (NASCO). ICES requested consideration of how to set catches within safe biological limits. NASCO posed questions with respect to its three Commission areas as presented in items 5-7 in Appendix 1 of the Working Group report. Every question posed is addressed below. Because the same or closely related questions were posed for more than one NASCO Commission area and because reordering the presentation allowed related questions to be answered together without repetition of background material, responses have been ordered by topic and not in the sequence of questions asked. The heading to each section lists the NASCO questions responded to in the section. All tables and numbered figures referred to are found in the Working Group report.

In recent years, demands for advice from ACFM have increased. ACFM has been able to provide advice by drawing on the extensive data bases of participating member countries. Although these data bases continue to expand, it has proved difficult to provide complete answers to increasingly complex questions posed by NASCO and ICES. Although ACFM is able to provide much descriptive information pertaining to the fisheries and salmon harvest, it has not been able to provide accurate estimates of non-reported catches and fishing effort, nor to designate origins beyond continent of origin in the sea fisheries. Advice has been provided in the form of ranges of estimated impacts of the mixed stock fisheries. Narrowing these ranges is dependent on new information regarding natural mortality, non-catch fishing mortality, and tag reporting rate, which seems attainable only through further extensive and costly research efforts.

In general, ACFM is able to answer questions pertaining to catches and the biology of the different stocks and provide general estimates of yield consequences relative to the mixed stock fisheries. It is not able, however, to advise on appropriate catch levels, nor is it likely to be able to do so without new and detailed information on salmon abundance in the fishing areas and major advances in stock forecasting capabilities. Both the development of appropriate methodologies and their required application will be costly.

2. FRAMEWORK FOR SCIENTIFIC ADVICE ON MANAGEMENT OF SALMON

ICES requested consideration of the concept of safe biological limits for the exploitation of Atlantic salmon in the North Atlantic in 1986 and again in 1987. The issue was explored on a preliminary way in ACFM's 1986 advice to NASCO. Further consideration of this issue confirmed that there exist formidable practical obstacles to conserving salmon stocks by controlling exploitation in relevant fisheries so as to achieve an adequate spawning biomass.

Despite the complicating factors of hundreds of stocks, many or most of which are vulnerable to multiple fisheries which exploit many stocks in unknown and varying proportions, the need for a systematic approach to conservation is evident. Given the complex nature of the problem, a special effort is required to address the framework for scientific advice on the management of North Atlantic salmon. Consequently, ACFM recommends that three days to one week be set aside in 1988 for examination of an appropriate framework for such advice, with thoroughly researched background papers and participation of Working Group members together with other experts. This could be carried out as part of the Working Group meeting or as a special meeting sponsored by ICES. The ability of the Working Group to consider this issue would be improved if a Study Group were established to prepare data relevant to the North American Commission of NASCO and if its workload were reduced in 1988.

3. NOMINAL CATCHES OF SALMON IN HOME WATERS

Nominal catches of salmon in home waters (in tonnes round fresh weight) for 1960-1985 are given in Table 1. Figures for 1986 are incomplete. The 1986 catches in home waters, apart from that reported by Finland, are higher than the corresponding 1985 values. ACFM is aware of unreported catches throughout the North Atlantic. Due to the lack of data from some countries, no precise estimates were obtained. However, ACFM considers the unreported catch to be of the order of 3,500 t for all countries.

4. CATCH IN NUMBERS BY SEA AGE FOR RECENT YEARS (NE a)

Reported national salmon catches in numbers and weight for eleven countries are given in Table 2. As in Table 1, catches include both wild and reared salmon.

5. NATURAL MORTALITY IN THE SEA (NR e)

5.1 The Effects of Predation on Natural Mortality (WG, H, NE i)

Predators of salmon from the smolt stage onwards include terrestrial and marine mammals, birds, and fishes. Results of studies presented to the Working Group suggest that birds such as cormorants and fishes such as cod can exert high levels of mortality, particularly during the smolt and post-smolt stages.

5.2 Estimated Natural Mortality Rates (WG k, Ne e)

Published estimates of the marine natural mortality of Atlantic and Pacific salmon were considered, together with some data relevant to the natural mortality of Icelandic ranched salmon. Since the natural mortality in the marine phase has not been precisely estimated, the importance of this factor in assessing the impacts of the West Greenland and Faroese fisheries on home-water stocks was illustrated by using monthly natural mortality rates of 0.01 and 0.02 subsequent to these fisheries.

Assuming a monthly natural mortality rate of 0.01 subsequent to the Faroese fishery, analysis of data for salmon from the Burrishoole River (Ireland) and River Imsa (Norway) gave estimates of 50-80% mortality from leaving fresh water until the mid-point of the Faroese fishery.

6. QUESTIONS OF INTEREST TO THE NORTH AMERICAN COMMISSION OF NASCO

6.1 Acid Rain

6.1.1 Freshwater habitats of Atlantic salmon and their vulnerability to acidification

ACFM adopted the Acid Rain Study Group's estimate that there is approximately 1,000 km² of riverine Atlantic salmon habitat accessible to anadromous Atlantic salmon in North America. A minimum estimate of areas vulnerable to acidification was provided by those areas where mean volume-weighted alkalinity is known to be less than 50 µeq/l. A habitat was determined to be lost to salmon productivity when it had a mean annual volume-weighted pH of less than 5.0 and no longer had juvenile salmon present, as detected by electrofishing. Approximately 50 km² of this habitat is classed as vulnerable, and about 10 km² does not produce wild Atlantic salmon, mainly as a result of acidification. This area is in the Canadian Province of Nova Scotia.

6.1.2 Trends in acidification of freshwater habitat of Atlantic salmon

Very little historical data were available upon which to base estimates of trends in acidification or salmon production. Water chemistry data for two Maine rivers since 1969

showed no apparent change in acidity since that time; no historical data were available for the smaller tributary streams which were classed as vulnerable to acidification. No historical data were available for vulnerable areas in Newfoundland and Quebec. Historical water chemistry data were available for 1953-1955 for five Nova Scotia rivers. Four of these rivers (Roseway, Medway, Mersey, and La Have) show a significant decline in pH over a 26-year period to 1980-1981. For the Medway River, the pH declined linearly from about 5.8 in 1955 to about 5.2 in 1978.

Angling catch records for ten Nova Scotia rivers where the current mean annual pH is less than 5.1 were used as an index of Atlantic salmon production since 1936. Atlantic salmon harvests declined in those rivers that have been acidified and, in several rivers, have disappeared. The decline seems to have begun about 1955, but earlier declines are possible.

Watt (1987) estimated that Atlantic salmon production loss attributable to the acidification of Nova Scotian rivers is in the vicinity of 23,000 adult fish per year. ACFM noted that this estimate involved two main assumptions: that all habitat in the Southern Upland Zone of Nova Scotia was equally productive per unit rearing area prior to acidification, and that the rearing area in rivers below pH 4.7 had been underestimated. ACFM recommended examination of an alternative method of calculation involving comparison of the historical catch rates of angling harvest per unit area of the rivers classed as "vulnerable" to those not considered vulnerable. This comparison would address the question of equivalence of rearing habitat. It would be necessary to assume that anglers harvested the same proportion of the total stock from each river in the years of earliest catch record. Data were not available to ACFM to complete this calculation.

ACFM noted that, while information was presented on trends in acidification over years between rivers, no information was available in the Study Group report on trends in pH within a year for any river.

6.1.4 Influence of acidification of freshwater habitat on growth and survival of Atlantic salmon

ACFM concluded that low pH can lead to mortality in several stages of the salmon life cycle; particularly vulnerable are hatching and transition to first feeding in alevins, while the water-hardened egg is relatively resistant to low pH. Mortality can also occur in parr and smolt, particularly if the pH is rapidly reduced as occurs during snow-melt in some areas.

In assessing the effect on smolt production, ACFM noted that low pH seems not to adversely affect growth rates of surviving fish, however, due to mortalities from pH stress, parr densities, parr production, and smolt densities have all been shown to be significantly depressed.

6.1.5 Effectiveness of mitigation measures

Liming is in the experimental stage in North America (Nova Scotia) but is in large scale current practice in Scandinavia where it has been shown to be cost effective in terms of the added value of salmon landed. Experimental-scale liming in Nova Scotia is used to create de-acidified refuges in small tributary streams which currently have remnant salmon populations.

The main mitigative measure related to acidification used in North America is stocking of hatchery-reared salmon smolts and parr which is currently taking place only in Nova Scotia. ACFM noted that both liming and stocking are palliative measures and agreed with the Study Group's conclusion that a definitive solution to the problem of acidification of Atlantic salmon rivers can be achieved only by reduction of acid-precursor emissions at their sources.

The Working Group was not able to complete its work on the estimate of loss of Atlantic salmon due to acid rain. If the Study Group does not reconvene, the Working Group should be prepared to consider this question at its next meeting.

6.2 Description of Fisheries

6.2.1 Fisheries catching salmon originating in another country (NA b)

Canadian fisheries harvesting USA-origin salmon have been described in ACFM advice in 1984 and 1985. In 1986, the commercial salmon fishing season was 5 June to 15 October for Statistical Areas A to I and M to O; 5 June to 10 July for Statistical Areas J1, K, and L; and there was no open season in Statistical Area J2. The commercial salmon fishery was closed in Nova Scotia, New Brunswick, Gaspé, and parts of the north shore of the Gulf of St. Lawrence. In Newfoundland and Labrador, there were about 3,400 fishermen licensed to fish 13,000 50-fathom gear units. Canadian commercial catches for 1985 and 1986 are given in Table 3 and Newfoundland and Labrador catches and fishing effort for 1971-1986 are given in Table 4. Catches increased by 36% from 1985 to 1986 and licensed effort declined by 6%. The higher catches were at least partly due to increased abundance of Canadian salmon stocks.

6.2.2 Sport fisheries for Atlantic salmon in Maine (NA h)

Maine rivers with sport salmon fisheries are shown in Figure 1. Seven small rivers have self-sustaining salmon populations and sport fisheries based primarily on wild salmon. The Penobscot and St. Croix Rivers have restoration programmes underway and have sport fisheries based on stocked salmon. Remaining rivers shown have minimal sport fisheries and are scheduled for restoration.

Peak angling effort occurs in May and June although the angling season extends from May to 15 September (15 October for the lower reaches of some rivers). The total Maine catch of salmon varied from 350 to 1,350 (1.3-6.4 t) annually in recent years. The Penobscot River frequently contributes more than half of the total catch.

Catch reporting is voluntary and is considered 80% complete. About 2,500 to 3,000 anglers fish for salmon in Maine and 80% of these are Maine residents. Estimated exploitation rates for the Machias River varied from 14% to 25% from 1960-1972 and for the Narraguagus, from 10% to 37% from 1962-1974. The average exploitation rate for these rivers was about 20%. From 1977-1984 the exploitation rate for the Penobscot varied from 15% to 29%. In 1985, new regulations reduced the latter rate to 10%.

More than 95% of the catch consists of maiden, 2SW salmon.

6.3 Historical Catches of Salmon Originating in Rivers or Artificial Production facilities of Another Country (NA a)

ACFM considered that revised estimates of returns to home waters and of model parameters, together with the availability of a computerized tag data base for the first time, justified a complete re-analysis of data presented last year. The basis for calculation is explained in the Working Group report.

Tag recoveries and harvest estimates for Newfoundland and Labrador fisheries are summarized by standard week in Tables 7 and 8 and harvest estimates by standard month are given in Table 9 and by year in Table 10. The revised analysis led to a 6% overall increase in estimated catches. Previous and revised estimated annual catches are compared in Table 11.

Estimated Newfoundland-Labrador catches of Maine-origin salmon varied from 117 in 1972 to 4,956 in 1980 and were less than 1,000 before 1974. From 1981 to 1985, harvest estimates averaged about 1,700 fish and corresponding run sizes averaged about 3,800 fish.

Using a similar calculation, an estimate of 649 Connecticut River origin salmon harvested in Newfoundland-Labrador in 1985 was obtained.

6.4 Impact of Management Measures Taken by Canada in 1984 and 1985 and Expected Impact for 1986 in Reducing the Harvest of USA-Origin Salmon (NA e)

Further restrictive management measures were enacted in the Canadian salmon fishery in 1986. Measures which could reduce the harvest of USA-origin salmon included closure of the commercial salmon fishery in Newfoundland on 15 October, mandatory tagging of legally commercially caught salmon, and a further reduction in licensed fishing effort.

As no new analysis was presented relating licensed fishing effort to fishing mortality, ACFM reiterated its previous advice that the reduction in total catch and in the harvest of USA-origin salmon attributed to reduced licensed effort (1984 and 1985 reductions) was expected to be less than 31% and could not be quantified. It was also not possible to quantify the impact of mandatory tagging of legally harvested salmon in the commercial fishery.

To assess the combined effect of all measures taken by Canada for 1984 and 1985, the estimated harvest of 1SW Maine-origin salmon in Newfoundland-Labrador was compared to the Maine run size of 2SW salmon the following year. For the years 1967-1983, the ratio of estimated Newfoundland-Labrador harvest to home-water returns averaged 0.53 and the values for 1984 and 1985 were 0.32 and 0.48, respectively. Both harvest levels in 1985 and corresponding run size increased from 1984. The increase in the harvest between 1984 and 1985 (923 fish) was associated with an increased harvest of 1,113 fish after 15 October. The Newfoundland autumn fishery took 16 t in 1985 compared to a long-term average of about 4 t.

The declines in proportions from 1983 to 1984 and 1985 were consistent with management measures adopted by Canada. ACFM, however, could not confirm that the changes observed were caused by these management measures as there have been wide fluctuations in the proportions in previous years.

ACFM noted last year that area closures and season reductions for 1984 and 1985 should have resulted in an 11% reduction in harvest of Maine-origin salmon. The closure of the autumn fishery on 15 October would account for a further 29% of 1SW Maine-origin salmon caught in Newfoundland-Labrador fisheries. The rates are not additive, however.

6.5 Tagging of Salmon

6.5.1 Salmon tags captured but not reported (NA c)

ACFM suggested three experimental methods to assess the proportion of external salmon tags captured but not reported:

- comparison of recapture rates from two methods of tagging;
- comparison of recapture rates for vessels with and without observers;
- community surveys.

6.5.2 Tag recovery reward system

Tag rewards varied by a factor of 5 between countries. ACFM considered that uniformity of tag rewards within a country and between adjacent countries was more important than uniformity across the entire NASCO area. There was scepticism about the validity of assuming that there would be substantial increases in return rates from modest increases in rewards. Substantial increases in rewards, however, carry the danger that spurious returns could result. Tags taken from smolts or from bird colonies, for example, could be

held over and returned later to obtain rewards. ACFM considered that one of the most important factors in setting reward payments was the attitude of the local fishermen with respect to tag returns in general.

National clearing houses were working well and tag returns by countries where they were recovered were satisfactory. Programmes involving more than one country in detection of microtags were all operating and reporting satisfactorily.

6.6 Stock Identification Methods (NA g)

ACFM considered stock discrimination methods based on image analysis of salmon scales and otoliths. Scale shape, texture, and circuli spacing were considered to have potential as high resolution discriminators for separation of salmon stocks to continent, country, and possibly fish farm or hatchery of origin. Shape analysis of salmon otoliths was also considered as a possible inter-annual calibration technique for scale-based stock discrimination in the West Greenland fishery. ACFM was optimistic about the practical potential of these techniques, since needed material can be routinely collected in sampling catches. The methods require additional study, however.

6.7 Non-Catch Fishing Mortalities (NA i)

Non-catch fishing mortality is mortality generated directly or indirectly by fishing but which is not included in the reported catch. Six types were identified: predation mortality, drop-out mortality, haul-back mortality, escapement mortality, discard mortality, and other mortality such as direct consumption by fishermen or unreported local sales. These terms are explained in the Working Group report.

ACFM noted that it is usually not possible to make separate estimates of predation, drop-out, and haul-back mortalities, but their sum can be estimated by direct observation. Nets can be patrolled and the locations of observed fish can be marked. This has been done in the United Kingdom and Norway. Frequent boat patrols along salmon nets might bias the observations by causing salmon to mesh more firmly.

Escapement mortality is difficult to estimate accurately. Gillnet selectivity curves can be used to determine the proportion of salmon encountering the gear but escaping. The mortality rate of escapees is difficult to determine. Estimates have been obtained in Norway by experimentation in controlled enclosures and fish with net marks have been held in water of differing salinity to determine mortality rates. ACFM concluded that, although precise estimates were difficult to obtain, some of the available methods can provide rough estimates.

Numbers of fish dead when discarded can be estimated by direct observation. Salmon may also be released alive and die subsequently. This portion of discard mortality must be inferred by methods similar to estimation of escapement mortality.

7. QUESTIONS OF INTEREST TO THE WEST GREENLAND COMMISSION OF NASCO

7.1 The West Greenland Fishery, 1986 (WG a)

Nominal catches for the West Greenland salmon fishery from 1960 to 1986 are given in Table 14. In 1986, the fishery opened on 15 August and ended on 1 December. The total catch was 960 t, 51 t more than the TAC of 909 t. The 909 t TAC and 15 August opening date corresponded to the agreed TAC of 850 t for an opening date of 1 August. There was a "free quota" of 649 t available to all licensed fishermen and a "small boat quota" of 260 t which was allocated to districts and restricted to boats less than 30 feet. In total, 670 t were taken by small boats and 290 t by boats over 30 feet. The free quota was taken in 10 days and was exceeded by 51 t when it was closed.

The 1986 geographical distribution differed from previous years (Table 15). The biggest divisional catch was from Division 1F in 1986, while it had been from Divisions 1B to 1E in the past. Catches decreased from south to north.

Catch rate data were available from 17 vessels. Catch rates in Divisions 1D and 1E were higher than in 1C and 1F. Catch rates in 1986 were higher than those observed in 1970-1975 (Table 16). Larger, non-Greenlandic vessels had lower catch rates in 1970-1975 than did smaller, Greenlandic vessels in 1975 and 1986, due to different fishing patterns and locations and ways of operating the fishing gear.

The very high catch rates in 1986 and the highest observed catch taken in the first two weeks in 1986 could indicate a higher abundance or availability of salmon to the gear than in previous years.

7.1.1 Origin of salmon at West Greenland

A discriminant analysis of scale characters from salmon sampled in the West Greenland fishery in 1986 was developed and tested using 319 fish caught at West Greenland whose origin was known from tags or protein electrophoresis. The discriminant function had a mis-classification rate of 19.5% and an error rate of $\pm 2.5\%$. Applying this function to catch samples gave an estimated proportion of North American salmon of 54% in 1986 (Table 18). The estimated proportion varied from 63% in Division 1E to 44% in Division 1F.

Using Carlin tag recoveries and a model similar to that of Section 6.3, ACFM estimated the number of Maine-origin salmon caught at West Greenland from 1967 to 1985 (Table 20). The estimated total catch ranged from 230 in 1967 to 2,875 fish in 1974. From 1970 to 1975, catches averaged about 1,600 fish. Since 1976, it has averaged about 1,300 fish. During this period, there was an increasing number of MSW salmon returning to Maine rivers, partly due to increased stocking of smolts.

An independent estimate of numbers of Maine-origin salmon caught at West Greenland for 1976 to 1985 was obtained using the estimated proportion of North American hatchery-origin fish in the catch from scale analysis. Estimates were about four times higher than those obtained by the Carlin tag method and the correlation between the two series was 0.84. ACFM concluded that possible mis-classification of river age and possible biases in sub-sampling of catches should be investigated further.

7.1.2 Biological characteristics

Alternative estimates of the proportionate composition of the catch by continent of origin for 1982 to 1986, obtained by weighting samples from a division by the catch in that division, are presented in the Working Group report. These differ by up to 5% from those shown in Table 18. The weighted 1986 proportion of 56% North American origin corresponds to a catch of 513 t or 179,800 salmon from North America and 447 t or 140,300 salmon from Europe.

Fish length, weight, and age data were compared for the two continents of origin in Table 21. As previously, North American origin salmon were shorter and lighter than those from Europe. Sea and smolt age compositions are presented in Tables 22 and 23. The mean smolt age of North American origin salmon increased from that observed in the previous three years but remained below the 1968-1981 average. There were no corresponding changes in smolt age in European-origin salmon.

The estimated sea age composition for 1986 of 96.2% 1SW, 3.0% 2SW, and 0.8% previous spawners showed a lower proportion of 2SW fish and previous spawners than in the previous three years.

7.2 Salmon Stock Abundance in the West Greenland Fishery (WG b)

ACFM provided rough estimates of salmon stock abundance in the West Greenland fishery using tag recoveries of Maine-origin salmon and assuming that all Maine-origin 1SW salmon extant at the time of the West Greenland fishery were present in the fishery and that all salmon present at West Greenland were subject to the same exploitation rate.

The analysis provided estimates of salmon abundance between 1969 and 1985 ranging from 1 to 2 million fish of all sea ages (Table 25). The lowest estimates of abundance occurred in 1978, 1983, and 1984 when the quota was not taken. Estimated abundance was also low in 1976 and 1982.

A comparison of abundance estimates and catches suggested that the exploitation rate at West Greenland ranged from 33% to 54% during the pre-quota years (1969-1975) and from 11% to 37% since then (Table 25). The rates declined considerably in 1983-1985 to an average of 14%. ACFM noted that these estimates are very sensitive to the tag reporting rate. Although they appear reasonable, they should be viewed as preliminary.

7.3 Effects of Varying Levels of Harvest at Greenland on Subsequent Returns of Large Salmon to Home Waters (WG c)

ACFM reviewed the 1980 assessment of the effects of the West Greenland salmon fishery on subsequent stocks and yields in home waters. Subsequent assessments examined equivalent TACs for differing opening dates. Although parameter values used in the calculations are known to vary from year to year and some parameters are not precisely estimated, there were not sufficient changes or trends to warrant a new assessment. For reasons discussed in Section 5.2, calculations were carried out using monthly natural mortality rates of 0.01 and 0.02 for the period following the Greenland fishery.

ACFM estimated that, on the average, for each tonne of European-origin salmon in the reported catch at West Greenland, 1.22 to 1.69 t would be lost to home-water returns in Europe, and for each tonne of North American origin salmon, 1.45 to 2.02 t would be lost to home-water returns in North America. These ranges reflect the range of parameter values used in the calculations and should not be interpreted as confidence limits.

Applying these figures to the 1986 West Greenland catch of about 447 t of European-origin salmon and 513 t of North American origin salmon, total losses to home waters were estimated to be 545-755 t for European stocks and 744-1,036 t for North American stocks. The combined total losses are estimated to be from 1,287 to 1,791 t.

7.4 Effects of Opening Date and Quota on Number of Salmon Caught at West Greenland (WG m)

ACFM reviewed the analysis on which it had based its advice on this question in 1982 and considered a new analysis using relative frequencies of weight classes by month in West Greenland salmon catches.

ACFM concluded that the new analysis generally confirmed its earlier conclusion, which was based on a more detailed model, that the catch level corresponding to various opening dates giving the same impact on stocks is:

$$\hat{Y} = 1183.79 + 5.4398x - 0.0710x^2$$

where x is the opening date with 9 August = 0 and 1184 is the catch for that opening date.

7.5 Historical Catches and Sustainable Yield (WG 1)

ACFM reviewed historical catches of North American origin salmon and considered catch levels corresponding to sustainable yields. Table 27 shows catches in North America from

1910 to 1985 and estimated catches of North American origin salmon at West Greenland from 1960 to 1985. ACFM expressed concern regarding the reliability of all catch figures prior to 1970.

Sustainable yield was defined as any level of harvest that could be maintained on a continuing basis. In the context of historical catches and also considering the complexity of the fisheries involved, ACFM noted several concerns with the application of this concept to manage the North American Atlantic salmon resource. Large variation in annual productivity is evident in the historical catch statistics. The sea fisheries harvest a mixture of stocks of considerably varying productivity. Catches of salmon at differing sea ages are not equivalent in their impact on home-water returns and spawning escapements. Setting a single catch level for all North American origin salmon would include assigning a level of catch to the Greenland fishery, thereby affecting European stocks also caught there. Finally, it was noted that application of a management system based on maintaining a sustainable yield constitutes a major change in the present system whereby stocks are managed on the basis of satisfying stock conservation requirements.

ACFM considered a proposal to set a TAC of 2,650 t for North American-origin salmon, equal to the mean of historical catches from 1948 to 1985. This level was not proposed as a sustainable yield but as a ceiling subject to downward adjustments. The TAC at West Greenland under such a procedure would depend on the division of this catch between Canada and West Greenland as agreed by NASCO. The 1986 catch at West Greenland and in Canada relates to a North American catch of 2,346 t (840 + 1,506). This is based on the 960 t catch at West Greenland assuming half is of North American origin which, if taken in North American home waters, would equal 840 t. ACFM noted that the concerns expressed in the previous paragraph applied in varying degrees to all levels of TAC.

7.6 Home-Water Fisheries and Stocks

7.6.1 Impact of management measures taken and proposed by states of origin on home-water catches and spawning escapements of salmon (WG d)

Management measures of European states of origin are discussed in Section 8. Existing management measures in North America, as described in last year's report, remain in effect.

New conservation measures for 1986 in the Newfoundland-Labrador fishery are:

- closure of the commercial salmon fishery on 15 October;
- a limit of 15 fish per season for recreational fishermen;
- a requirement that all commercially caught salmon be tagged with market tags;

A mandatory registration system to monitor catches for all MSW salmon taken by angling in Maine will take effect in 1987.

Based on average historical catches, the reduction in landings associated with area closures of Canadian salmon fisheries in some areas was 22% for MSW (212 t) and 3% for 1SW (16 t) salmon in 1986. Similarly, delayed seasons were expected to give a reduced catch of 74 t of MSW salmon and 6 t of 1SW salmon, some of which might be subject to mortality in later fisheries. Closure of the Newfoundland-Labrador salmon fishery on 15 October would reduce the catch by an average of 7 t of MSW and immature 1SW salmon.

Returns to Canadian rivers in 1984 to 1986 were higher than predicted, with the exception of the Saint John River. ACFM confirmed that the increased returns to rivers were consistent with management measures adopted in 1984 to 1986 and that these measures had reduced the harvest of salmon in other Canadian fisheries, particularly of MSW salmon.

Additional regulations placed on recreational fishermen in the Penobscot River of Maine beginning in 1985 reduced the exploitation rate to 10% as compared with previous estimates of 22-27%.

7.6.2 Spawning escapements and target spawning biomass for salmon stocks occurring in the West Greenland Commission area (WG f)

Target spawning escapements and 1986 spawning escapements were provided for six Canadian rivers and three USA rivers. Targets were exceeded in four Canadian rivers; in the remainder, they were not met. Spawning escapements were presented for four European rivers.

7.6.3 Exploitation rates in home waters for salmon stocks occurring in the West Greenland Commission area (WG j)

Exploitation rates for European rivers are discussed in Section 8. Within Canada, the Conne River salmon fishery in Newfoundland had an exploitation rate of 28% in 1986 and the Saint John River had exploitation rates from 25% to 40% for 1SW and 29% to 62% for MSW salmon during 1983-1986.

Estimated exploitation rates for the Penobscot River, Maine varied from 5% to 15% for 1SW and 12% to 35% for MSW salmon from 1982 to 1986.

7.7 Tagging of Salmon (WG i)

In 1985, 5% of the West Greenland catch was screened for microtags and 34 microtags were recovered from the 14,319 fish examined (tags were detected but not recovered in two fish). In 1986, 10% of the catch was examined and microtags were recovered from 70 of 30,360 fish examined. In 1985, 90% of the 34 tags read were from Ireland. In 1986, 31% were from England and Wales, 27% from Canada, 26% from Ireland, 10% from the USA, and 3% each from Iceland and Scotland.

ACFM noted that analysis of external tag recoveries from Greenland was proceeding and discrepancies in numbers of tags sent and received had been resolved. Additional written feedback to laboratories forwarding tags was recommended. Completeness of data accompanying tag returns has varied. Trends in completeness, however, of reported data paralleled estimated trends in tag reporting rates.

Tag rewards in Greenland increased to 100 D.Kr. in 1986. This increase in reward and improved publication of the programme led to increased recovery of tags, some of which had been held by fishermen for several years.

External tags from Canada (54), the USA (58), Scotland, Norway, and Sweden were recovered in 1986.

Tag reporting rates for external tags recovered at West Greenland were estimated using variations in the proportion of tags recovered from two North American rivers. Relative rates were calibrated against the value of 0.8 calculated from a 1972 experiment. The results are presented in Table 36. There is a decline in the estimates from about 80% in the early 1970s to 40% at the end of the decade, followed by an increase to about 80% in the mid 1980s.

Microtagging programs were discussed. Many purposes exist for such programs. The ANACAT Committee of ICES compiles an annual listing of tags and finclips applied. ACFM noted that some countries were not reporting and the delay of a year or more in publishing the list posed problems in the case of Atlantic salmon. The Working Group provided an updated table of 1985 releases and a preliminary draft of a 1986 table (Table 33). More than 600,000 microtags were applied in 1985 and preliminary listings for 1986 exceed 875,000. In all known 1986 microtag applications, the adipose fin was clipped.

7.8 Accuracy of Classification by Continent of Origin and Accuracy of Age Composition Estimates (WG g)

The accuracy of classification by continent of origin was discussed in Section 7.1. The accuracy of river age composition by continent of origin is also important. It was cal-

culated that the random sample size taken in 1986 would allow estimation of the proportion of river age 1 salmon from North America to about $\pm 20\%$ of its value. However, other sources of error of comparable magnitude may exist, such as biases due to the way the catch was sub-sampled and biased determination of river age. ACFM recommended that these possibilities be examined further.

8. QUESTIONS OF INTEREST TO THE NORTH-EAST ATLANTIC COMMISSION OF NASCO

8.1 Faroese Salmon Fishery

8.1.1 Composition of catches in the Faroese salmon fishery (NE b,c)

Table 37 gives the catch by calendar year and by fishing season for the Faroese salmon fishery. The 1986 catch was 628 t and the 1985/1986 catch was 625 t.

The catch in number by age group and month in the 1985/1986 Faroese salmon fishery is given in Table 38. Discards were estimated to be 1.9% of the catch in numbers.

8.1.2 Distribution of catches by season and area in the Faroese salmon fishery in relation to country of origin (NE f)

No new data on recoveries of external tags from the Faroese fishery were available since 1985. Previous information on external tag recoveries was presented by ACFM in 1986. It was previously observed that there was no significant difference between centres of distribution of recoveries of tags originating in Norway, Sweden, and the United Kingdom. However, recapture rates for salmon tagged in Norway and Sweden were greater than those from smolts released in the United Kingdom and Ireland which, in turn, were greater than those from smolts released in Iceland.

8.1.3 Contribution of hatchery-reared salmon and fish farm escapees to the Faroese salmon fishery (NE d)

ACFM considered four general approaches to distinguishing reared salmon and fish farm escapees in salmon catches: direct observation, morphometric methods, scale analyses, and biochemical methods. Problems previously identified with the first three approaches were considered not to have been solved. To be effective, a method must distinguish fish which have escaped from fish farms after the smolt stage from reared fish released at or before the smolt stage for river enhancement purposes. This criterion is presently met only by the biochemical approach, and only in a preliminary way. It is known, for example, that eroded or deformed fins occur in salmon released at the smolt stage for stock enhancement purposes. Biochemical analysis of a sample of 219 fish in the Faroese fishery found that at least 3% were of farmed origin. Direct observation suggested that 13% were reared and scale reading suggested 7%.

8.1.4 Minimum size regulations and discards (NE g,k)

Estimated discard rates in the Faroese fishery were 13.5% in 1984/1985 and 1.9% in 1985/1986. The former value is considered to be near the top of the probable range while the latter shows that discards can fall to insignificant levels in some years. It is estimated that 15-20% of discarded fish survive. Consequently, of about 25,000 discarded salmon in 1984/1985, 3,750 - 5,000 would survive, and of about 3,500 discarded in 1985/1986, 525 - 700 would survive.

The effect of total compliance with a minimum landing size (MLS) of 63 cm or 68 cm total length rather than the present 60 cm was estimated using the length frequency distributions of landings for the two seasons. The results are shown below:

Estimated discard rates (%) by numbers			
Season	MLS 60 cm	MLS 63 cm	MLS 68 cm
1984/1985	13.5	19	36
1985/1986	1.9	6	22

If the MLS were abolished, discarding would probably continue. However, the implication of retaining the fish discarded in 1984/1985 was calculated to be:

Age class	No. of fish killed in fishery	No. of fish returning to home waters
1 SW	increased by 3,013	decreased by 2,280
2 SW	decreased by 7,684	increased by 5,235
3 SW	decreased by 739	increased by 2,170

The total weight of salmon returning to home waters would increase by 38 t. If the 1984/1985 discard rate is considered maximal, then the effect of retaining all fish caught would vary from a small amount to the calculated value.

Beginning in 1987, the Faroese Fisheries Laboratory has been empowered to close areas to salmon fishing if large numbers of small fish are present in the catch. ACFM noted that this approach may be more effective than a MLS in reducing discard rates. Increasing survival rates of discarded fish is considered impractical.

8.2 Home-Water Fisheries

8.2.1 Catches of salmon in the North-East Atlantic Commission area (NE a)

Catches from home-water fisheries are presented in Table 1. As in 1986, ACFM was unable to report catches in the categories requested. However, catches in home-water fisheries are divided into sea fisheries, estuarine fisheries, and river fisheries in Table 39. Only in the Faroese salmon fishery does the fishing season overlap the end of the year (see Section 8.1).

8.2.2 Description of salmon fisheries in the North-East Atlantic Commission area (NE a,h)

ACFM was asked to describe home-water fisheries and to consider the effects of regulation on the exploitation of home-water stocks. ACFM considered that home-water stocks were conserved by management measures laid down by various regulations and that these same regulations were largely responsible for the present form of the salmon fisheries. Consequently, it was not possible to estimate the incremental impact of the various regulations in force. The evolution of home-water fisheries and regulations is described for Norway, England and Wales, France, Finland, Northern Ireland, Scotland, Iceland, and Ireland in Section 4.2 of the Working Group report.

8.2.3 Effects of conservation measures on exploitation of home-water stocks (Ne j)

A wide range of exploitation rates occurs in home-water fisheries in the North-East Atlantic, ranging from a few percent to over 90%. There is a large body of conservation measures in place including closed seasons, weekly closed times and closed areas, prohibition and definition of gears, and materials and methods of fishing. Size of boats, numbers of licences, and sale of fish caught are also regulated. Evaluation of the effects of present and future conservation measures is subject to several difficulties. Catches do not

necessarily reflect changes in stock abundance which is assessed for few rivers. Marine survival is variable, confounding the effects of changes in management measures. There is also evidence of significant illegal catches in some countries. For these reasons, ACFM was not able to assess the effects of specific measures.

8.2.4 Evolution of the fishing gear (NE h)

Most home-water fisheries have been controlled for at least 100 years. There has been little change in the gear used except that certain methods have been banned. The introduction of synthetic netting twines in the 1960s and especially monofilament and monopy twine, however, affected the operation of many netting methods. Gillnets became much more effective and could be operated effectively in daylight and away from shore. This led to increased marine drift netting until it was restricted or banned.

8.3 Exploitation Rates (NE a)

Exploitation rates in various fisheries for some stocks in Norway, Scotland, Ireland, and Northern Ireland are presented in Tables 40 to 44. These rates were estimated from tag recovery data.

9. ACOUSTIC SURVEYS IN THE FAROESE SALMON FISHERY

The Study Group on the Norwegian Sea and Faroese Salmon Fishery recommended that acoustic methods should be used to assess numbers and biomass of salmon in the Faroese area. The ICES Working Group expressed some doubts about the technique, especially concerning accuracy of the estimates, but recommended that a feasibility study be carried out to determine if these acoustic methods can work in high seas Atlantic salmon fisheries. ACFM endorses this recommendation.

10. SPECIAL STUDY GROUPS IN 1987

The results of two Study Groups are included in this report and should be referred to if further clarification is needed. These are the Report on the Study Group on the Norwegian Sea and Faroese Salmon Fishery (ICES Doc. C.M.1987/M:2) and the Report of the Acid Rain Study Group (ICES Doc. C.M.1987/M:3). The Working Group and ACFM endorsed the research initiatives recommended by the Study Group on the Norwegian Sea and Faroese Salmon Fishery and generally endorsed those of the Acid Rain Study Group. These are presented below:

The Study Group on the Norwegian Sea and Faroese Salmon Fishery made the following recommendations:

1. Sampling and screening the catches at Faroes

The Study Group considered the current effort put into sampling and screening catches adequate and recommends it be continued at a similar level.

2. Analysis of tag returns

The analysis of tag returns should include total returns to the home-water fisheries divided according to river origin and specifying whether fish are reared or wild.

3. Tagging in the high seas

Tagging using breakable hooks was discussed and the Study Group recommended that this method should be reviewed before the next meeting. In addition, an effort should be made to estimate the hook loss in the Faroese fishery, and the number of fish caught in the home-water fisheries with hooks in their mouth or alimentary canal.

4. Acoustic surveys

Work done on Pacific salmon stocks indicates that it is possible to assess numbers and biomass of salmon using acoustic methods. The Study Group considered that, although these results were obtained in restricted areas, they were so encouraging that similar work in the North-East Atlantic was recommended.

5. Separating salmon of wild and reared-origin

The Study Group discussed various methods for separating wild and reared salmon in the Faroese fishery and made a number of recommendations for future work.

The Acid Rain Study Group, as a result of its work, made the following recommendations:

1. The major effort in North America should be devoted to the prevention of additional damage to existing Atlantic salmon stocks from acidification of habitat rather than mitigating damage after it occurs. The extensive damage to Atlantic salmon stocks in Scandinavia that has already resulted from acidification necessitates local mitigation measures to preserve and enhance existing stocks. Such damage is presently minimal in North America, but efforts undertaken to prevent such damage should include reduction in emissions of acid-precursors at their sources, if necessary.
2. Chemical and biological surveys should be conducted in Atlantic salmon rivers in order to better quantify the extent and degree of risk to the habitat, and long-term monitoring programs should be established on selected index rivers to obtain time-series data from which trends in acidity can be determined. The Study Group found that an estimation of the extent of North American Atlantic salmon habitat that is vulnerable to acidification, and of trends in the acidification of this habitat, was hampered by a lack of data on which to base these estimates.
3. Because of the importance of aluminum as a toxic substance to salmonids in acidified Scandinavian streams, further research should be conducted to resolve its importance (or lack thereof) in eastern North American salmon streams.
4. Consideration should be given to the advisability of developing programs to protect the genomes of Atlantic salmon stocks at risk from acidification. Protection techniques may include creation of refuges or preservation of male and female gonadal products and other genetic material.
5. A study plan should be prepared to determine the feasibility of transferring the existing European river liming technology to North American acidic Atlantic salmon waters. Although such liming practices are technologically and economically feasible in Scandinavia, North American rivers differ with respect to hydrological, chemical, and biological characteristics, and as a result, the technology may not be directly transferable.
6. Since it was not possible in the time available to provide complete and definitive answers on Atlantic salmon in relation to acid rain, consideration should be given to reconvening the Study Group in one year's time to complete its assigned tasks. Since the problem of acid rain concerns other anadromous and catadromous species and has an impact on marine biology, consideration should be given to broadening the terms of reference of the Study Group to include the direct and indirect effects of acid rain on the production of diadromous and marine species in the estuarine and coastal environments and to report its findings to both the ANACAT and Marine Environment Quality Committees.
7. The North Atlantic Salmon Working Group should undertake the assessment of the loss of production in acid-affected habitat using the two methods proposed in this report, or such other methods as it deems appropriate, because the Study Group judged itself as not having the competence to conduct an assessment with sufficient rigor.

12 JUNE 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)45

DECISION OF COUNCIL TO REQUEST SCIENTIFIC ADVICE FROM ICES

CNL (87)45

DECISION OF THE COUNCIL TO
REQUEST SCIENTIFIC ADVICE FROM ICES

The Council decides to request the following scientific advice from ICES:

(I) With respect to Atlantic salmon in the West Greenland Commission area:

1. Describe events of the 1987 fisheries with respect to gear, effort, exploitation rate, composition and origin of the catch and assess the status of the stocks.
2. Evaluate the effectiveness of new, existing or proposed management measures for home waters and interception fisheries on stocks occurring in the Commission areas.
3. Discuss scientifically based approaches for managing salmon in the context of existing fisheries.
4. Specify data deficiencies and research needs.

(II) With respect to Atlantic Salmon in the North-East Atlantic Commission Area:

1. Describe events of the 1987 fisheries with respect to gear, effort, exploitation rate, composition and origin of the catch and assess the status of the stocks.
2. Evaluate the effectiveness of new, existing or proposed management measures for home waters and interception fisheries on stocks occurring in the Commission area, in particular the effect in the Faroese fishery zone of effort control compared to the control of catches on the level of exploitation.
3. Discuss scientifically based approaches for managing salmon in the context of existing fisheries.
4. Specify data deficiencies and research needs.

(III) With respect to Atlantic Salmon in the North American Commission area:

1. Describe events of the 1987 fisheries with respect to gear, effort, exploitation rate, composition and origin of the catch and assess the status of the stocks.
2. Evaluate the effectiveness of new, existing or proposed management measures for home waters and interception fisheries on stocks occurring in the Commission areas.
3. Discuss scientifically based approaches for managing salmon in the context of existing fisheries.
4. Specify data deficiencies and research needs.

In addition in the North American Commission, the following advice is requested:

1. Provide a table indicating the average percentage by number (and its variability) of US fish in the total harvest of the Newfoundland-Labrador commercial fishery. Estimates should be broken down by standardized week and fishing area and include only standardized weeks from week 23 to week 41 inclusive.
2. With respect to the issue of acidification:
 - a) if new information is available, provide estimates of amount of salmon habitat available, areas vulnerable to acidification and areas lost to production.
 - b) provide estimates of the number of salmon lost due to acidification.

1 MAY 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)22

ATLANTIC SALMON TAGGING REVIEW

ATLANTIC SALMON TAGGING REVIEW

INTRODUCTION

- 1.1 At its Third Annual Meeting the Council requested that the Secretary, working in consultation with the ICES Secretariat, review the status of the existing Atlantic salmon tagging programmes and investigate the desirability of establishing a central repository for all tagging information, improved recapture reporting procedures and developing a uniform incentive reward system.
- 1.2 The Convention states in Article 15, paragraph 2 that 'each Party shall compile and provide statistics, other than catch statistics, as required by the Council'. It is also stated in Article 12 (b) that 'the Secretary shall compile and disseminate statistics and reports concerning the salmon stocks subject to the Convention'.
- 1.3 This review is based on discussions within the ANACAT Committee, October 1986 and on the reports of the ICES Working Group. It has been submitted to the ICES General Secretary.

2. EXISTING REPOSITORY ARRANGEMENTS

- 2.1 National repositories for tagging information have been established by most NASCO members. In addition, clearing houses for microtags recovered from the Greenland and Faroes fisheries have been established. These clearing houses were considered to be working well except that they have experienced problems with the supply of release data, (ICES CM:1987/Assess 12).
- 2.2 Information on fin-clipping and coded wire tagging is collected and published annually in the form of data sheets by the ANACAT Committee of ICES. However, discussions within this Committee questioned the completeness of this data:
 - 2.2.1 Some countries were not reporting, (ICES CM:1987/Assess 12).
 - 2.2.2 The data sheets are only a record of fin clips and microtags, although some countries submit data regarding Carlin tags.
 - 2.2.3 Tagging by organisations other than government agencies is unlikely to be included.

2.2.4 The Working Group on North Atlantic Salmon considered that the ANACAT fin clipping/coded wire tagging data are published too late, (1985 tagging was not reported until late 1986) for the identification of current tags, (ICES CM:1987/Assess 12).

2.3 At its 1987 meeting the Working Group on North Atlantic Salmon attempted to update the 1985 tagging list produced by the ANACAT Committee to include internal and external tags and to compile a 1986 list. Many members did not have ready access to tagging data and it was noted that some microtags are applied by the aquaculture industry and might not be known or reported to the Working Group, (ICES CM:1987/Assess 12). However, this list is the most complete indicator of the status of salmon tagging programmes in the North Atlantic and is attached as Annex 1. These data indicate that tagging is principally of hatchery origin fish and the Working Group had previously drawn attention to the fact that existing tagging programmes may provide an incomplete picture of the pattern of migration and exploitation of all wild salmon stocks, (ICES CM:1985/Assess:11).

2.4 Problems of collating release data in the Pacific have also occurred and have been resolved by establishing a managed central repository for coded wire tag release data at the Pacific Marine Fisheries Commission. This database involves coded wire tag data for all species of Pacific salmon in Canada and the United States and involves collecting from 35 agencies, (State, Federal and private). On an annual basis a cumulative report including the previous years operations is prepared within 2-3 months of the end of the year.

3. EXISTING TAG REWARD SYSTEMS

3.1 Tag rewards show considerable variation between member countries. A summary of present rewards is given in Annex 2. Moreover, there are variations within countries associated with different types of tag recovery procedures and in some cases geographical location. It has been reported that in some instances fish are transported to areas offering the best reward.

3.2 Tag rewards in distant water fisheries are paid, in the main, by the authorities in those countries.

3.3 Discussions within the ANACAT Committee indicated that:

3.3.1 Increased tag rewards may result in increased reporting rates.

3.3.2 The cost of tagging experiments is such that increased rewards could be highly cost-effective.

3.3.3 Increased rewards could only be payable at the cost of reduced tagging programmes because in some countries the rewards are paid from the scientific research budget.

3.4 The increase in the tag reward to DKr 100 in the West Greenland fishery in 1986 resulted in the recovery of tags that had been in the possession of fishermen for several years, (ICES CM:1987/Assess 12). However, the Working Group were sceptical about assuming that there would be substantial increases in return rates from modest increases in rewards and substantial increases were considered to carry the danger of spurious returns, eg. tags from smolts or bird colonies held over and returned at an appropriate date to obtain rewards.

4. RECAPTURE REPORTING PROCEDURES

4.1 The assumed tag reporting rate is important to some of the ICES Working Group's assessments, (CM 1986/Assess:8) and the range of reporting efficiencies assumed is listed in Annex 3. In areas where contact between fisheries agency representatives and fishermen is high, reporting rates may approach 1.0 (100%), but in other areas may be much less. It is possible that reporting rates will decrease in areas where new restrictive regulations have been imposed or where these are threatened. (ICES, CM: 1986/Assess 8).

4.2 Discussions within the ANACAT Committee recommended that more attention should be paid to non-reporting of tags and the Working Group on North Atlantic Salmon has subsequently suggested procedures for assessing the proportion of external tags captured but not reported.

4.3 The Working Group on North Atlantic Salmon pointed out the value of a tag recovery even if there was no information supplied but was unable to recommend means of improving the information provided with the tag. The Working Group considered that the current reporting of receipt of tags between agencies and clearing houses was adequate. (ICES CM:1987/Assess 12).

DISCUSSION

5. THE REPOSITORY

5.1 It would appear that there is a case for a comprehensive, managed database for all salmon tag release information in the North Atlantic as currently exists for Pacific salmon. An ANACAT compilation covering coded wire tags and fin clips exists, though it does not cover all tag types or all agencies.

5.2 The advent of the NASCO Convention opens new possibilities for cooperation between NASCO and ICES.

Under a joint ICES/NASCO approach, it would be possible for NASCO to make an annual request for tagging data to the national clearing houses and to any other agencies outside the clearing system. The data could then be computerised in IBM compatible form using established database software currently used in NASCO for other salmon information. The data would be immediately transmitted to ICES. The database would have the following features:

- 5.2.1 The database would contain tag release information for all tagging methods, by all agencies in all member countries, requested according to a standard format, (Annex 4).
- 5.2.2 The database would be managed so that information could be summarised by country, region, age and life stage of fish, type of tag or any other indicator.
- 5.2.3 An annual cumulative report would be produced immediately following receipt of the data. Confirmation of the origin of any tag could be provided immediately via telephone, telex or facsimile links.

TAG REWARD SYSTEMS

- 5.3 Considerable variation exists in tag rewards within the North Atlantic. Whether this is a cause for concern to homewater authorities is not discussed here. However, there may be a case for uniformity in rewards for international returns, ie. those tags presented for payment in countries other than their country of origin. It is these returns which are of considerable interest to NASCO members and one solution might be to set up a small NASCO fund, apportioned according to the origins of returned tags, to pay international rewards. The level of the reward could then be reviewed annually so as to improve the return rate if necessary. To further improve returns, a publicised lottery of these returned tags might be cost effective and might result in an improvement in information accompanying the return.

6. SUMMARY

- 6.1 There is no managed, comprehensive repository for tagging information covering the North Atlantic. Under the Convention, NASCO could undertake this task. As with the Pacific Salmon Commission, this would be a central database for tags applied. The current arrangement for analysing tag returns would not be affected.
- 6.2 The basic information could be requested annually by the NASCO Secretariat from the national clearing houses and from other tagging agencies.
- 6.3 This repository should be a cooperative project with ICES in that the data would be made available in any form requested by the Working Group on Atlantic salmon, ANACAT, or the ICES Secretariat. The material should not be available outside NASCO or ICES without agreement between the two organisations.
- 6.4 Council might consider the need for greater uniformity in rewards, at least for international returns. One effective way to achieve this would be to set up a small NASCO fund from which all international rewards would be made. Alternatively, or additionally, a lottery would offer improved publicity.

ANNEX 1
TO CNL (87)22

Table 33 Number of micro- and Carlin tags applied to ATLANTIC SALMON by country for the years 1985-1986.

Country	Stock	1985		1986	
		Microtags	Carlin	Microtags	Carlin
N. Ireland	Hatchery	17,966	-	25,159	-
	Wild	-	-	1,166	-
Ireland	Hatchery	198,333	-	134,123	-
	Wild	3,572	-	-	-
England & Wales	Hatchery	64,698	-	120,049	-
	Wild	6,700	-	9,418	-
Scotland	Hatchery	13,145	-	13,350	2,485
	Wild	352	10,594	2,875	16,225
Norway	Hatchery	3,206	35,650	-	94,036
	Wild	-	1,780	-	1,890
Iceland	Hatchery	74,400	-	55,000	-
	Wild	2,600	-	200	-
Faroes	Hatchery	30,000	-	NA	NA
France	Hatchery	15,084	4,849	NA	NA
	Wild	-	-	NA	NA
Canada	Hatchery	29,640	75,000	70,148	92,040
	Wild	-	-	-	-
USA	Hatchery	149,248	149,898	447,287	146,873
	Wild	-	-	-	-
Others ¹	Hatchery	?	Yes	?	Yes
	Wild	?	?	?	?
Total	Hatchery	595,720	265,397	865,116	335,434
	Wild	13,224	12,374	13,659	18,115
Grand Total		608,944+	277,771	878,775+	353,549+

¹Includes unknown number of tagged hatchery and wild salmon released in Spain, the west coast of Sweden, and USSR.

Note: All tagged fish with possible exception of "others" were marked by excision of the adipose fin.

FROM: REPORT OF THE WORKING GROUP ON NORTH ATLANTIC SALMON (ICES CM 1987/ASSESS:12)

ANNEX 2
TO CNL (87)22

SUMMARY OF TAG REWARDS CONVERTED TO
APPROXIMATE US DOLLAR EQUIVALENTS

MEMBER	REWARD LOCAL CURRENCY	US \$
CANADA	\$8	\$6
DENMARK		
FAROE ISLANDS	30 DKr	\$4.4
GREENLAND	100 DKr	\$14.6
EEC		
ENGLAND	£3	\$4.8
FRANCE		
IRELAND	I £2	\$3.4
SCOTLAND	£3	\$3.2
WALES	£5	\$7.9
N. IRELAND	£2	\$3.2
FINLAND	19 FMK	\$4.1
ICELAND	200 IKr	\$5.6
NORWAY	20 NKr	\$2.9
SWEDEN	20 SWKr	\$3.2
USA	\$8	\$8
USSR	N/A	

NOTE: In some cases rewards vary if the fish is damaged in recovering microtags. In some countries rewards are payable for adipose fin clipped fish irrespective of whether a tag is subsequently recovered. Rewards for microtags and external tags may differ. The information in this table was obtained during the 1986 ANACAT meeting.

A. ASSUMED TAG REPORTING EFFICIENCIES

CANADA

LABRADOR	0.9
INSULAR NEWFOUNDLAND	0.7

NORWAY

NORWEGIAN HOMEWATERS	0.5 - 0.7
NORWEGIAN SEA	0.75

SCOTLAND

NORTH ESK/MONTROSE BAY	1.0
SCOTTISH HOMEWATERS	0.75
FAROE ISLANDS	0.75
OTHER FISHERIES	0.50

USA

MAINE	0.9
-------	-----

B. INFORMATION ACCOMPANYING TAG RETURNS

RETURNS FROM GREENLAND TO CANADA

1974-78	50% tags accompanied by complete information
1982-83	7% tags accompanied by complete information
1984-85	30% tags accompanied by complete information

RETURNS FROM NEWFOUNDLAND TO MAINE

1974-78	88% of returns noted date of capture
1982-83	49% of returns noted length information
1984-85	80% of returns noted weight information

FROM: REPORTS OF THE WORKING GROUP ON NORTH ATLANTIC
SALMON, (ICES CM:1986/ASSESS: 8 AND 17).

PROPOSED ICES/NASCO ATLANTIC SALMON TAGGING DATABASE

COUNTRY:

TAGGING CONDUCTED DURING CALENDAR YEAR:-----

TAGGING AGENCY	
AGE OF FISH AT TAGGING	
LIFE STAGE AT TAGGING	
HATCHERY OR WILD	
STOCK ORIGIN	
TYPE OF TAG, MARK OR FIN, CLIP ETC.	
NUMBER	
TAG CODES OR SERIAL NUMBERS USED	
TYPE OF AUXILIARY TAG, MARK OR FIN, CLIP ETC.	
NUMBER	
DATE OF RELEASE	
PLACE OF RELEASE	
COMMENTS	

ANNEX 4

TO CNL(87)22

MODIFIED FROM THE ANACAT FIN CLIP/MICROTAG DATA SHEETS

10 JUNE 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)14 REVISE 1

PROPOSED FORMAT FOR REPORTING UNDER
ARTICLES 14 AND 15 OF THE CONVENTION

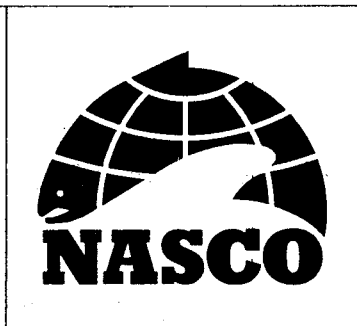
PROPOSED FORMAT FOR REPORTING UNDER
ARTICLES 14 AND 15 OF THE CONVENTION

INTRODUCTION

1. At the Third Annual Meeting the Council agreed that the Secretary should develop a format for the annual request under Articles 14 and 15 of the Convention so as to simplify the reporting procedure.
2. The requirement under these Articles is wide ranging and the following draft formats are submitted to the Council for their comment. The aim would be to simplify and harmonise the reporting procedures.
3. The agreed request form would then be submitted to the Parties annually at least 90 days before the meeting. Statements are required to be sent to the Secretary not later than 60 days before the Annual Meeting.

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

ORGANISATION POUR LA CONSERVATION DU SAUMON DE L'ATLANTIQUE NORD



ANNUAL REQUEST TO THE PARTIES
UNDER ARTICLES 14 AND 15 OF THE CONVENTION

1988 ANNUAL RETURN

Please complete the relevant sections and return to the Secretary by April 1988. This request refers to the calendar year ending 31st December 1987. A nil response is necessary even if there have been no changes.

DRAFT FORMAT FOR COMMENT
DO NOT COMPLETE

1988 ANNUAL RETURN - ARTICLES 14 AND 15

1. Under Article 14 of the Convention for the Conservation of Salmon in the North Atlantic Ocean, each Party shall ensure that such action is taken, including the imposition of adequate penalties for violations, as may be necessary to make effective the provisions of the Convention and to implement regulatory measures which become binding on it under Article 13.
2. Under Article 15 of the Convention for the Conservation of Salmon in the North Atlantic Ocean, each Party shall notify the Council of:
 - (a) the adoption or repeal since its last notification of laws, regulations and programmes relating to the conservation, restoration, enhancement and rational management of salmon stocks subject to the Convention in its rivers and area of fisheries jurisdiction;
 - (b) any commitments by the responsible authorities concerning the adoption or maintenance in force for specified periods of time within its territory or area of fisheries jurisdiction of measures relating to the conservation, restoration, enhancement and rational management of salmon stocks subject to the Convention; and
 - (c) factors within its territory and area of fisheries jurisdiction which may significantly affect the abundance of salmon stocks subject to the Convention.
3. The Council have agreed that responses should be sent to the Secretary under the following format. It is requested that responses are made under one or more of the headings which follow.

ARTICLE 14

1. HAVE ANY NEW ACTIONS BEEN TAKEN TO MAKE EFFECTIVE THE PROVISIONS OF THE CONVENTION, INCLUDING IMPOSITION OF ADEQUATE PENALTIES FOR VIOLATIONS UNDER THE FOLLOWING HEADINGS? (Article 14, paragraph 1)
(If 'yes' please give details)

- 1.1 The prohibition of fishing for salmon beyond 12* nautical miles from the baselines from which the breadth of the territorial sea is measured, (Article 2, paragraph 2).

* 40 nautical miles at West Greenland.

* Area of fisheries jurisdiction of the Faroe Islands.

YES		NO	

- 1.2 Inviting the attention of States not party to the Convention to any matter relating to the activities of the vessels of that State which appears to affect adversely the salmon stocks subject to the Convention, (Article 2, paragraph 3).

YES		NO	

- 1.3 (Members of North American Commission only)
Measures to minimise by-catches of salmon originating in the rivers of the other member, (Article 7, paragraph 2).

YES		NO	

1.4

(Members of North American Commission only)
Alteration in fishing patterns in a manner which results in the initiation of fishing or increase in catches of salmon originating in the rivers of another Party, except with the consent of the latter, (Article 7, paragraph 3).

YES		NO	

2.

HAVE ANY NEW ACTIONS BEEN TAKEN TO IMPLEMENT REGULATORY MEASURES UNDER ARTICLE 13, INCLUDING IMPOSITION OF ADEQUATE PENALTIES FOR VIOLATIONS? (Article 14, paragraph 1).
(If 'yes' please give details)

YES		NO	

ARTICLE 15

3. HAVE ANY LAWS, REGULATIONS AND PROGRAMMES BEEN ADOPTED OR REPEALED SINCE THE LAST NOTIFICATION? (Article 15, paragraph 5 (a))
(If 'yes' please give details and attach copies of the relevant documents)

YES		NO		

4. HAVE THERE BEEN ANY OTHER NEW COMMITMENTS CONCERNING THE ADOPTION, OR MAINTENANCE IN FORCE FOR SPECIFIED PERIODS OF TIME OF MEASURES RELATING TO THE CONSERVATION, RESTORATION, ENHANCEMENT AND RATIONAL MANAGEMENT OF SALMON STOCKS SUBJECT TO THE CONVENTION? (Article 15, paragraph 5 (b))
(If 'yes' please give details)

YES		NO		

5. HAVE THERE BEEN ANY OTHER NEW FACTORS WHICH MAY SIGNIFICANTLY AFFECT THE ABUNDANCE OF SALMON STOCKS SUBJECT TO THE CONVENTION? (Article 15, paragraph 5 (c))
(If 'yes' please give details)

YES		NO		

23 MARCH 1987
EDINBURGH

ANNEX 23

NORTH ATLANTIC SALMON CONSERVATION ORGANIZAION

COUNCIL

CNL (87)25

POSSIBLE TOPICS FOR REVIEW BY NASCO

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1. Under Article 4 (a) of the Convention, one of the functions of the Council is to provide a forum for the study, analysis and exchange of information on salmon stocks subject to the Convention. Under Article 12, Paragraph 2 (b) of the Convention, one of the functions of the Secretary is to compile and disseminate statistics and reports concerning the salmon stocks subject to this Convention.
2. To date the following ongoing work has been authorised by the Council and the relevant Council papers are as indicated:
 - A. LAWS, REGULATIONS AND PROGRAMMES (CNL(87) 12)
 - B. ANALYSIS OF CATCH STATISTICS (CNL(87) 11)
 - C. SALMON TAGGING REVIEW (CNL (87) 22)
3. Now that NASCO has reached its Fourth Annual Meeting it would seem timely to consider which directions might be considered by the Council in its future work. The search for mutually agreed regulatory measures is a major task, but the Organization might now wish to consider a broader assessment of its responsibilities.
4. There are a number of possible topics that might be considered in consultation with the Parties:
 - A. THE POSSIBLE IMPACT OF SALMON AQUACULTURE ON WILD STOCKS

Salmon farming has developed rapidly since the 1970s. Production now greatly exceeds the wild catch and could reach 150,000 tonnes in 1990. A review paper by NASCO Secretariat could, in consultation with the Parties, deal with potential economic, genetic, disease, parasite and other impacts. It could be submitted to Council at its 1988 meeting. The ANACAT Committee of ICES is considering some of these interactions at its 1987 meeting and their conclusions can be incorporated.

- B. THE POSSIBLE IMPACT OF INTRODUCTIONS AND TRANSFERS ON WILD SALMON STOCKS

The Council may wish to review the impacts of salmonid introductions and transfers on wild stocks. The principal concerns are those listed in A above, but in addition, there may be risks of other interactions between introduced species and the native wild stocks. In its progress report (NAC (87)4) to the North American Commission, the Bilateral Scientific Working Group on Salmonid Introductions and Transfers considered that bans

against all salmonid transfers and introductions to the eastern seaboard may not be warranted, but that action is required to reduce the potential risks until appropriate protocols can be developed.

C. THE ECONOMIC VALUE OF WILD STOCKS IN THE NORTH ATLANTIC

Wild stocks of salmon have many aspects of economic value, eg. food, employment, recreation, dependent communities, tourism, hotel and catering, vessels, processing, gear and tackle etc. There is, however, no consensus as to how the economic value of the actual or potential resource might be assessed. A review of the available information could be prepared in consultation with the Parties and submitted to Council.

5. The aim of this paper is to seek the guidance and advice of the Council on priorities for any future work.

12 JUNE 1987
EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

COUNCIL

CNL (87)24

PRESS RELEASE

Conservation of Atlantic salmon was the central issue during inter-governmental negotiations at the Dragonara Hotel, Edinburgh this week, 8-12 June 1987.

The Fourth Annual Meeting of the North Atlantic Salmon Conservation Organization (NASCO) was opened by its President, Mr Gudmundur Eiriksson of Iceland. Representatives of Canada, Denmark (in respect of the Faroe Islands and Greenland), EEC, Finland, Iceland, Norway, Sweden, Union of Soviet Socialist Republics and the United States of America attended the meeting. The USSR acceded to the Convention in September 1986, thereby completing the membership by every North Atlantic nation with salmon interests.

The Organization, which is the only inter-government organisation in Scotland, was established by a Convention in 1984 with the objective of contributing to the conservation, restoration, enhancement and rational management of salmon stocks.

Detailed negotiations on the salmon fisheries were held in the three regional Commissions of NASCO - the North American Commission, the West Greenland Commission and the North-East Atlantic Commission. The North American Commission accepted recommendations pertaining to salmonid introductions and transfers. As in 1986, the Newfoundland/Labrador fishery will be closed on 15 October 1987. In 1986 the West Greenland Commission had agreed a two year regulatory measure for the West Greenland fishery and this measure will continue to apply in 1987. The North-East Atlantic Commission agreed measures controlling the Faroese fishery for a trial period of three years in accordance with an effort limitation programme, to be monitored by the Commission. The total catch during the trial period shall not exceed 1790 tonnes, but in any one year the annual catch shall not exceed 5% more than the annual average.

The Council of the Organization agreed to review the interactions between wild and farmed fish and to undertake an analysis of the comparability of catch statistics throughout the North Atlantic. In order to assist international scientific tagging programmes the Council agreed that NASCO initiate a study to assess the feasibility of a central repository for tag release data. The possibility of setting up a lottery to improve incentives to return tags is also to be explored.

The Fifth Annual Meeting of the Organization will be held in Reykjavik from 13-17 June 1988.

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

FOURTH ANNUAL MEETING OF COUNCIL
8-12 JUNE 1987, DRAGONARA HOTEL, EDINBURGH, UK.

LIST OF COUNCIL PAPERS

<u>PAPER NO</u>	<u>TITLE</u>
CNL (87)1	Provisional agenda
CNL (87)2	Draft agenda
CNL (87)3	Scientific advice from ICES - Report of the Advisory Committee on Fisheries Management (ACFM)
CNL (87)4	Status of ratifications of and accessions to the Convention
CNL (87)5	Applications for observer status to NASCO
CNL (87)6	Membership of regional Commissions
CNL (87)7	Report on the Headquarters property
CNL (87)8	Catch statistics
CNL (87)9	1986 audited accounts
CNL (87)10	Outline of the draft budget for 1988 and forecast budget for 1989
CNL (87)11	Analysis of catch statistics
CNL (87)12	Laws, regulations & programmes
CNL (87)13	Draft report of the activities of the Organization in 1986
CNL (87)14	Proposed format for meeting of requirements of Articles 14 and 15 of the Convention
CNL (87)14R1	Proposed format for reporting under Articles 14 & 15 of the Convention
CNL (87)15	Application by the USSR for membership in the NEAC
CNL (87)16	Contributions for 1987
CNL (87)17	Articles 14 & 15 of the Convention - statements received
CNL (87)18	Draft report of Council

CNL (87)19	Draft decision of Council on appointment of auditors
CNL (87)20	Draft 1988 budget and 1989 forecast budget
CNL (87)21	Not issued
CNL (87)22	Atlantic Salmon tagging review
CNL (87)23	Recommendation received from the Atlantic Salmon Trust
CNL (87)24	Press release
CNL (87)25	Possible topics for review by NASCO
CNL (87)26	Place of Fifth Annual Meeting
CNL (87)27	Proposed schedule of meetings
CNL (87)28	Draft decision of the Council on membership of the USSR in the NEAC
CNL (87)29	List of Council papers
CNL (87)30	Draft decision of the Council confirming the manner by which any contractual instrument to which NASCO is a signatory shall be executed.
CNL (87)31	Additional statement received on Article 14 & 15 of the Convention
CNL (87)32	Statement from USSR on regulatory and conservation measures
CNL (87)33	Statement of EC to Council and regional Commissions
CNL (87)34	Statement by EC pursuant to Article 15
CNL (87)35	Draft Decision of Council to request scientific advice from ICES
CNL (87)36	Not issued
CNL (87)37	Not issued
CNL (87)38	Draft Report in 1985/86 (for publication)
CNL (87)39	Norwegian Statement concerning membership in the WGC
CNL (87)40	Not issued
CNL (87)41	Not issued
CNL (87)42	Agenda

CNL (87)43	Decision of Council confirming the manner by which any contractual instrument to which NASCO is a signatory shall be executed
CNL (87)44	1988 budget and 1989 forecast budget
CNL (87)45	Decision of Council to request scientific advice from ICES
CNL (87)46	Report of the Fourth Annual Meeting of the Council of NASCO
FAC (87)3	Report of the Finance and Administration Committee

NOTE:

This list contains all papers submitted to the Council prior to and at the meeting. Some but not all of these papers are included in this Report as annexes.