FISHERIES RESOURCE CONSERVATION COUNCIL

GEORGES BANK - 1998

1998 CONSERVATION REQUIREMENTS FOR GEORGES BANK GROUNDFISH STOCKS

REPORT TO THE MINISTER OF FISHERIES AND OCEANS

FRCC.98.R.4
May 1998

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LETTER TO THE MINISTER

May 21, 1998

The Honourable David Anderson, P.C., M. P.
Minister of Fisheries and Oceans
200 Kent St.
Ottawa, Ontario
K1A 0E6

Dear Minister:

The mandate of the Fisheries Resource Conservation Council (FRCC) requires that it advise you on conservation requirements for Atlantic fish stocks. In keeping with this mandate we have conducted consultations with science and industry representatives on the conservation requirements for Georges Bank groundfish stocks.

The FRCC has now concluded consultations for Georges Bank haddock, cod and yellowtail flounder. Our consultations, held in Yarmouth, Nova Scotia on May 13, were characterized by a strong conservation ethic on the part of all stakeholders. Stakeholders were unanimous in asking the FRCC to consider strong conservation measures on all of these stocks. Those who fish on Georges Bank have seen the signs of recovery and they are committed to seeing these stocks rebuild. All who attended our consultations believed that a rebuilding strategy for these stocks should be aggressively pursued and that quotas should continue to be set below the $F_{0.1}$ level to allow rebuilding to occur.

Many in the industry pushed for a June 1 opening date as they believe this will allow for a cleaner fishery. We should also note that they are supportive of the conservation management measures that have been in place over the past three years such as mesh size, observer coverage, and mandatory dockside monitoring, and these should be maintained.

The Council wants to take this opportunity to thank the Department for the fine presentation given by scientists from the St. Andrews Biological Station. The high level of debate and discussion at the Yarmouth consultation indicated how healthy the rapport between science and industry is in this area. We believe this is also indicative of the quality of the advice and the presentation, and ultimately, how far we have all come in working together to achieve our conservation goals.

Since 1996, the FRCC has adopted a rebuilding strategy for these stocks. The criteria which we have used in past years has included:

- setting quotas below $F_{0.1}$,
- target an increase in biomass by 5 percent or more,
- risk of decline in biomass (from the risk analysis) in the order of 20 percent or less; and
- establishing an appropriate ratio of cod to haddock to minimize dumping and discarding.

Please note that for this year the Council maintains these criteria and in many cases goes beyond them to pursue the rebuilding of the stocks more aggressively. When combined with projected catch levels for the USA these quota recommendations are: well below the $F_{0.1}$ levels established in the Stock Status Reports, allow for an 80% certainty (50% in the case of yellowtail flounder) of at least a 20% increase in the size of the biomass, and the risk of exceeding $F_{0.1}$ is reduced to less than 10%.

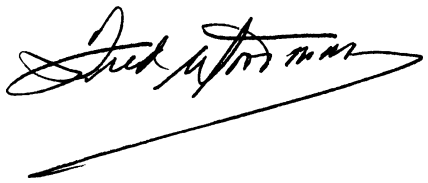
It should be noted that for the Georges Bank cod stock, we are seeing signs of danger including decreasing weights-at-age and a lack of good incoming recruitment. We note that the 1997 year-class is the lowest ever observed. For these reasons, the Council has decided to be even more conservative than it has in previous year's quota recommendations. Given the low quota for cod, the Council is concerned about the potential problems that may arise including the increased potential for dumping and discarding. We have recommended that DFO identify control vessels to compare against landings of vessels without observers as real time mechanisms to control cod

bycatch encountered during the fishery in this area. Observer coverage on these vessels should be sufficient, so when combined with 100% Dockside Monitoring, decisions can be made quickly to close fisheries by area or by fleet as necessary.

The Council has also identified rebuilding targets for these stocks as we believe there is a relationship between the size of the spawning stock biomass and good recruitment. For cod we have set this threshold for the spawning stock biomass at 25,000t and for haddock at 40,000t. While the threshold for yellowtail flounder cannot be as clearly defined, we believe that anything above 30,000t should be the target level. We are optimistic that with an aggressive rebuilding strategy, a strong conservation ethic on the part of the fishing industry in this area, and some help from mother nature, we can achieve these targets in the near future.

Your Council is pleased to have this opportunity to present you with this advice and we trust you will find this helpful in your deliberations.

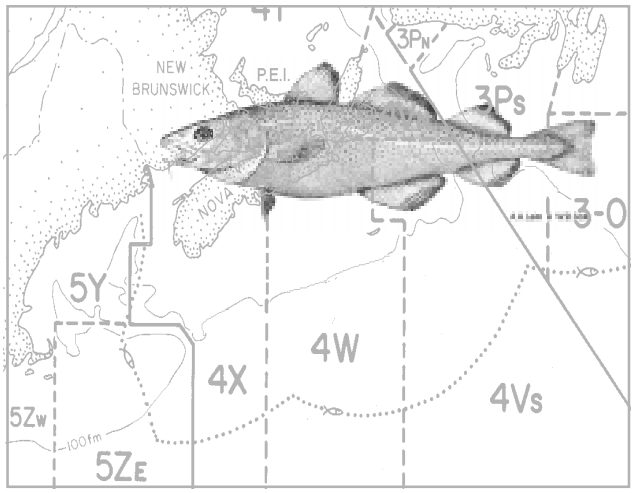
Sincerely,



Fred Woodman
Chairman

STOCK-BY-STOCK RECOMMENDATIONS FOR 1998

1. Cod 5Zj,m



History Of FRCC Recommendations:

In November 1993, the Council concluded that, from a conservation perspective, the fishery for this stock should be closed. The Council noted, however, that a closure by Canada alone would not be sufficient to protect the stock without corresponding action by the United States. The Council urged that consultations continue with the United States with the objective of undertaking urgent and immediate management action to rebuild this stock.

In 1994, the fishery was closed to all sectors from January 1 to May 31 and for an additional month to June 30 for the offshore sector. The U.S. fishery was closed from January 1 to June 30. In November 1994, the Council recommended that bilateral consultations continue with the objective of undertaking management action appropriate to re-build this stock.

In May 1995, the FRCC recommended to the Minister of Fisheries and Oceans that there be no directed fishing for 5Zj,m cod in 1995 and that by-catches be limited to less than 1000t. In November 1995, the Council again recommended that bilateral consultations continue and that the fishery remain closed until June 1996.

In May 1996 and May 1997 the Council adopted a strong rebuilding strategy for these stocks and set the following criteria: setting quotas below $F_{0.1}$, target an increase in biomass by 5 percent or more, risk of decline in biomass (from the risk analysis) in the order of 20 percent or less; and establishing an appropriate ratio of cod to haddock to minimize dumping and discarding. The FRCC recommended Canadian quotas for 5Zjm cod be set at 2,000t in 1996 and at 3,000t in 1997.

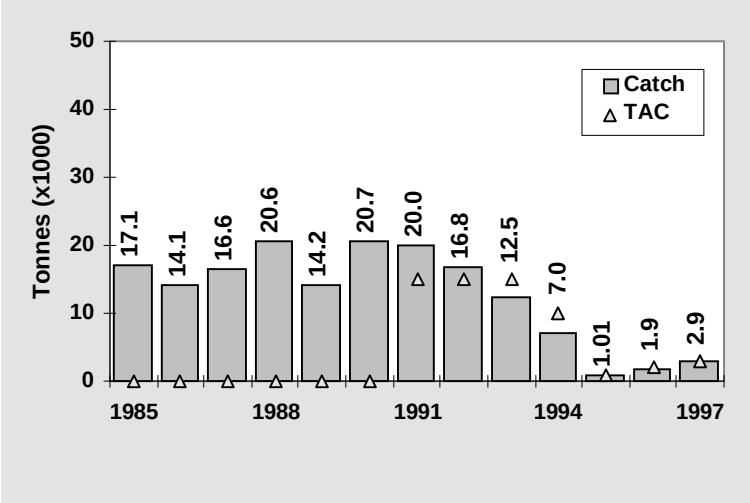
1998 Consultations:

Consultation on 5Z cod were held in Yarmouth on May 13, 1998. Stakeholders from the fixed gear sector expressed satisfaction with the health of the resource and disagreed with some of the negative indicators in the 1998 Stock Status Report. Other stakeholders expressed some caution about the decline in the weight-at-age and the lack of good incoming recruitment. Industry recommendations for TACs were all

Recommendation #1. Cod 5Zjm:

The FRCC recommends that:

1. **the Canadian quota for 1998 be set at 1,900t;**
2. **DFO should identify control vessels to compare against landings from vessels without observers as real time mechanisms to control cod bycatch encountered during the fishery in this area. Observer coverage on these vessels should be sufficient, so when combined with 100% DMP, decisions can be made quickly to close fisheries by area or by fleet as necessary;**
3. **bilateral discussions with the U.S. continue with the objective of undertaking management action appropriate to re-build this stock; and**
4. **the fishery commence June 1, 1998 to allow a better mix of cod and haddock to minimize bycatch problems in the fishery.**



below $F_{0.1}$. There was general agreement that we should continue to pursue a rebuilding strategy for this stock.

Analysis:

The 1998 DFO Stock Status Report indicates that:

- Exploitation is slightly above $F_{0.1}$
- 1992 and 1995 year classes are moderate; 1997 year class is the lowest observed
- Weights-at-age are variable and some decline has been shown in ages 6+.
- Growth of the 1992 year class and the recruitment of the 1995 year class has sustained the biomass at about 15,000 t since 1996
- Spawning stock biomass improving from low 1994 level, but still below critical level.

This is a transboundary stock. The Council recognizes the improvement made in the recovery of this stock as a result of the conservation measures adopted by industry in recent years and encourages a continuation of these initiatives.

The Council is concerned about some of the danger signs it sees emerging in this fishery. There is a more pessimistic view of the stock for two reasons - the biomass level for 1998 is lower than projected due to declining weight at age and fewer numbers of fish in the research survey. The decline in the size and the weight-at-age is disturbing and needs to be watched closely for further evidence of decline. The exploitation rate in 1997 was slightly above $F_{0.1}$ given the changes in weights-at-age. The 1995 year class appears to be moderate but the 1997 year class is the lowest ever observed.

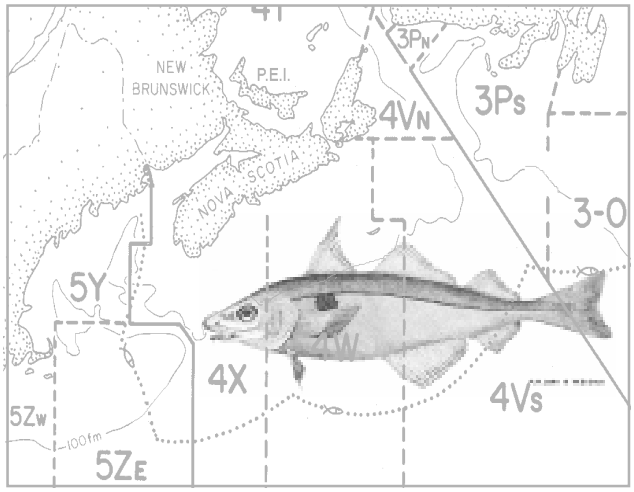
The spawning stock biomass is improving from the low l994 level but is still below the critical level required for more successful recruitment. The Council, and the industry in this area, believe that there is a relationship between the size of the biomass and incoming recruitment. The goal for this fishery is to get the spawning stock biomass (ages 3+) above the 25,000t threshold.

A Canadian quota of 1,900t is a dramatic cut from last year and reflects the Council's concern about this stock. It is a recommendation that provides for a more aggressive rebuilding strategy than we have adopted in the past. Our goal is to meet the 25,000 t level in the spawning stock biomass as soon as possible. Fishing at this low level will permit stock rebuilding, keep exploitation low and will vastly reduce the risk of decreasing the biomass. If this recommendation is followed, there is only a 5% chance of exceeding $F_{0.1}$, and an 80% certainty of getting 20% growth in the stock.

Council's views on Stock Status:

Overall Stock Indicator:	**Some signs of recovery,**
	Compared to average
Spawning Biomass:	**Increasing but less than half long term average**
Total Biomass:	**Below long term average**
Recruitment:	**Recovery due to moderate year classes in 1992 and 1995, 1997 year class lowest observed**
Growth and Condition:	**decline in weight-at-age for age 6+ fish**
Age Structure:	**Expanding**
Distribution:	**Consistent over time**
Recent Exploitation Level:	**slightly above $F_{0.1}$ in 1998, below for previous two years**

2. HADDOCK 5ZJ,M



HISTORY OF FRCC RECOMMENDATIONS:

In August 1993 and in November 1993, the Council recommended that, from a conservation perspective, the haddock fishery on Georges Bank should be closed. The Council urged the continuation of the consultations with the United States with the objective of undertaking urgent and immediate management action to rebuild this stock. The fishery was closed to all sectors from January 1 to May 31 in 1994 and for an additional month, to June 30, for the offshore. The management measures concentrated on avoiding the capture of the 1992 year-class estimated to be 45 cm throughout most of the year.

In 1994, the Council recommended that bilateral consultations continue with the objective of undertaking management action appropriate to rebuild this stock. In the meantime, the Council recommended that the fishery be closed until June 1995, prior to which time the Council would provide a definite recommendation with respect to the 1995 TAC. In May 1995, the Council recommended that the 1995 TAC for 5Zjm haddock be set at 2,500t.

In May 1996, the Council adopted a rebuilding strategy for this stock based on the following criteria: setting quotas below $F_{0.1}$, target an increase in biomass by 5 percent or more, risk of decline in biomass (from the risk analysis) in the order of 20 percent or less; and establishing an appropriate ratio of cod to haddock to minimize dumping and discarding. In 1996 the FRCC recommended that the Canadian quota for 5Zjm haddock be set at 4,500t and in 1997 the FRCC recommended the Canadian quota be reduced to 3,200t.

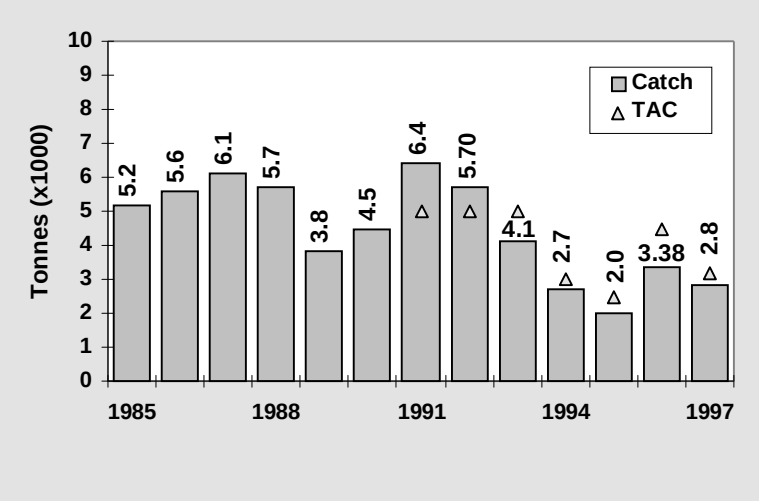
1998 CONSULTATIONS:

Consultations on 5Z haddock were held in Yarmouth on May 13, 1998. Stakeholders expressed satisfaction with the initial rebuilding that took place over the past year but were unanimous in recommending that caution still prevail. Industry recommendations for TACs were all below $F_{0.1}$. There was also general agreement that we should aim for a 40,000t target in the spawning stock biomass (ages 3+) to improve the chances of good recruitment. Industry participants were all of the opinion that this fishery should open on June 1 as this was a time when haddock could be fished without a lot of mixing with cod.

RECOMMENDATION #2. HADDOCK 5ZJ,M:

The FRCC recommends that:

1. **the Canadian quota for 1998 be set at 3,900t;**
2. **the fishery commence June 1, 1998 to allow a better mix of cod and haddock to minimize bycatch problems in the fishery; and**
3. **bilateral discussions with the U.S. continue with the objective of undertaking management action appropriate to re-build this stock.**



ANALYSIS:

The 1998 DFO Stock Status Report indicates that:

- Exploitation below $F_{0.1}$
- Moderate year classes in 1992, 1993 and 1996 but recruitment from 1995 and 1997 year classes appear to be weak
- Biomass close to recent average, but less than 1/3 of long term average
- Spawning biomass still below critical level of 40,000 t

This is a transboundary stock, the majority of which appears to be in Canadian waters.

The Council recognizes the improvements made in this stock as a result of the conservation measures adopted by industry in recent years and encourages a continuation of these initiatives. The Council is optimistic that with the improved status of the 1996 year class achieving the 40,000t spawning stock biomass target is achievable in the very near future. Above this level, the FRCC and the industry in this area believes that there is an improved chance of good recruitment to the fishery. The FRCC cautions however, that given the weak year classes in 1994 and 1995, recruitment will not be as strong in the next year or two for this stock and this may effect future fishing levels.

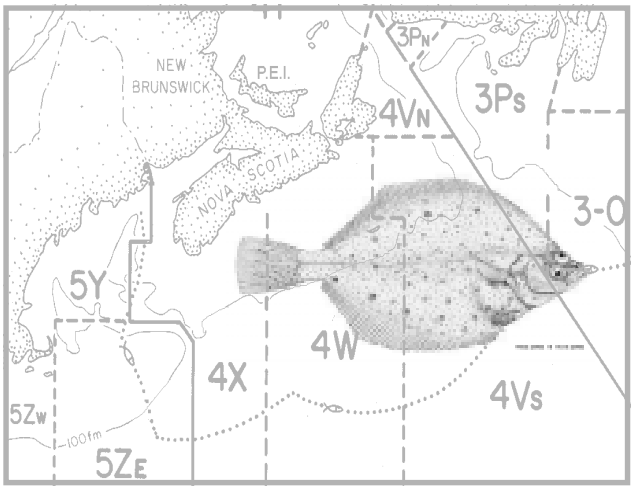
A Canadian quota of 3,900t is recommended because it will permit stock rebuilding, will keep exploitation low and will dramatically reduce the risk of decreasing the biomass. If this recommendation is followed, there is a negligible chance of exceeding $F_{0.1}$, and an 80% certainty of getting 20% growth in the stock.

COUNCIL'S VIEWS ON STOCK STATUS:

Overall Stock Indicator	**Some signs of recovery**
	Compared to average
Spawning Biomass:	**increasing but below 40,000t threshold**
Total Biomass:	**doubled since 1993 but 1/3 of levels of 1930's to 1950's**
Recruitment:	**Sporadic; 1992, 1993 and 1996 year classes moderate**
Growth and Condition:	**Average**
Age Structure:	**expanding**
Distribution:	**more than 90% of biomass on Canadian side, limited on US side**

Recent Exploitation Level: Below $F_{0.1}$

3. Yellowtail Flounder 5Zjmhn



History Of FRCC Recommendations:

The directed fishery for yellowtail flounder began only recently, with 8 to 10 boats participating in a fishery. It expanded rapidly in 1994, with about 40 vessels pursuing the fishery. In November 1995, the Council recommended that bilateral consultations continue with the U.S. with the objective of undertaking management action appropriate to rebuild this stock. In the meantime, it was recommended that the fishery remain closed until June 1996, prior to which time the Council would provide a definitive recommendation with respect to the 1996 TAC.

In May 1996, the Council adopted a rebuilding strategy for this stock which was based on the following: setting quotas below $F_{0.1}$, target an increase in biomass by 5 percent or more, and risk of decline in biomass (from the risk analysis) in the order of 20 percent or less. In 1996 the FRCC recommended that the Canadian quota for 5Zjmhn yellowtail flounder be set at 415t and in 1997 the FRCC recommended that the Canadian quota be increased to 800 t.

1998 Consultations:

Consultations on 5Zjmhn yellowtail flounder were held in Yarmouth on May 13, 1998. Stakeholders expressed satisfaction at the moderate rebuilding which has taken place, but asked the FRCC to remain cautious in its recommendations. Many participants noted that the research vessel survey did not survey the yellowtail hole in the 1998 season where there are known high concentrations of yellowtail flounder.

Analysis:

The 1998 DFO Stock Status Report for this species indicates that:

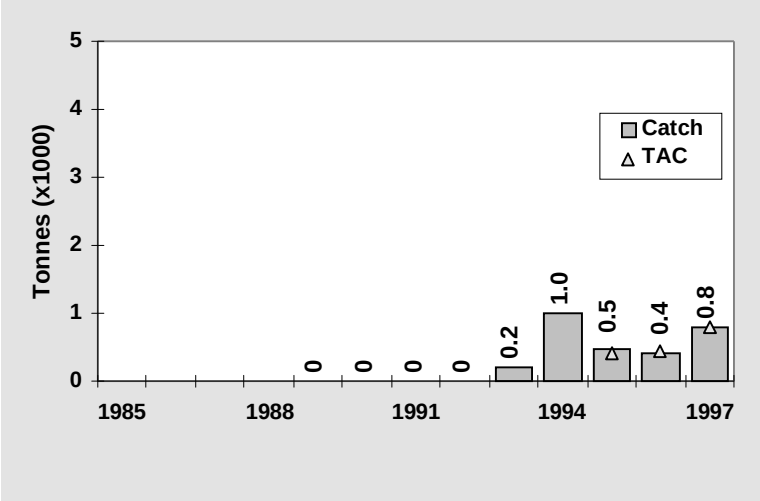
- Population biomass has been increasing since 1995
- Exploitation below $F_{0.1}$
- Biomass recovering but still at low level
- Recruitment is improving, with moderate recruitment in the 1990's

This is a transboundary stock, which is very close to the international boundary. This is a relatively new fishery for the Canadian industry, which started in 1993.

Recommendation #3. Yellowtail Flounder 5Zjmhn:

The FRCC recommends that:

1. **the Canadian quota for 1998 be set at 1,200t; and**
2. **the Department of Fisheries and Oceans (DFO) should implement an age reading capability for yellowtail flounder on Georges Bank; and**
3. **bilateral discussions with the U.S. continue with the objective of undertaking management action appropriate to re-build this stock.**



The Council recognizes the improvement made in this stock as a result of a cautious approach taken by industry in this fishery in recent years and encourages a continuation of these initiatives. Industry also raised the issue of proper aging of this stock and noted that it would reduce the uncertainties in the calculations of the size of the population. Action should be taken to address this uncertainty in the Canadian fishery so that more precise population estimates can be made.

The biomass of yellowtail flounder is below the long term average but has steadily shown signs of improvement. Moderate-to-strong year classes in the 1990's, but less than what appeared in the 1960's. The age structure of the population is expanding, as evidenced by the size composition in the landings over the past 3 years. Exploitation levels were well below $F_{0.1}$ in 1995, 1996 and 1997.

A Canadian quota of 1,200t is recommended for l998 because it will permit stock rebuilding, will keep exploitation low and will reduce the risk of decreasing the biomass. There is less than a 10% probability of exceeding $F_{0.1}$ and a 50% chance of 20% growth in the biomass.

The Council notes that the above figures are calculated based on the method which provides the most conservative levels for $F_{0.1}$. The scientists applied another method in the DFO SSR that provided for a higher estimate of $F_{0.1}$ (or its equivalent). The Council is cautious, and believes that the alternate method may be overly optimistic. For detailed discussion of the two approaches used, please see DFO SSR A3-15 (1998), Yellowtail Flounder on Georges Bank.

COUNCIL'S VIEWS ON STOCK STATUS:

Overall Stock Indicator:	**Rebuilding**
	Compared to average
Spawning Biomass:	**Below long term average but improving**
Total Biomass:	**Low**
Recruitment:	**Moderate/strong year classes in 1990's;**
Growth and Condition:	**Slight increase in weights-at-age over past 4 years**
Age Structure:	**Expanding**
Distribution:	**Consistent over time**

Recent Exploitation Level: Below $F_{0.1}$

APPENDIX 1:

Letter To Stakeholders And Questions For Discussion At Consultation

APPENDIX 1: LETTER TO STAKEHOLDERS AND QUESTIONS FOR DISCUSSION

April 15, 1998

Dear Stakeholder:

On May 13, 1998, the Fisheries Conservation Council (FRCC) will hold a public consultation at 9:00 A.M. in the Yarmouth Room of the RODD GRAND HOTEL in Yarmouth, Nova Scotia to gather information on Georges Bank groundfish stocks.

Stakeholders' views will assist the FRCC in providing advice to the Minister of Fisheries and Oceans regarding conservation requirements for Georges Bank haddock, cod and yellowtail flounder, subarea 5Zjm. The FRCC is committed to the continued rebuilding of Georges Bank groundfish stocks in order to attain a sustainable yield, closer to the long term average.

To help focus the discussion at the Yarmouth consultation, the FRCC has produced the following questions:

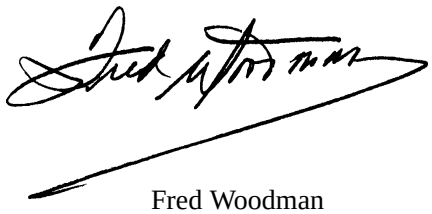
1. Based on your knowledge of Georges Bank, are we at a comfortable level of biomass? What rebuilding threshold should we be seeking to reach?
2. How can we best enhance rebuilding of the stocks, e.g., fish at $F_{0.1}$ or less, ensuring more spawners and larger fish are left to produce adequate recruitment?
3. Were last year's FRCC recommendations appropriate to allow a clean fishery without dumping and discards? What should this year's recommendation be with respect to the proper mix between cod and haddock?
4. Is June 1 still an appropriate opening date for this fishery?
5. Should there be additional conservation measures in this fishery and what should they be?
6. Do you feel the later-than-usual appearance of haddock in the 1997 fishery was a warning sign or cause for concern?

Stakeholders are invited to make public presentations by way of oral presentation or by providing us with a written brief. The Council has also asked the Department of Fisheries and Oceans (DFO) to present new data from its 1998 Stock Status Reports at the meeting. For further information, or if you are unable to attend and wish to submit a brief, please contact the FRCC:

Fisheries Resource Conservation Council
P.O. Box 2001, Station D
Ottawa, ON K1P 5W3
(613) 998-0433 voice (613) 998-1146 fax

Your views are important to the Council and we hope you will participate.

Sincerely,



Fred Woodman
Chairman

APPENDIX 2:

Briefs Received at the Georges Bank Consultation

APPENDIX 2: BRIEFS RECEIVED AT THE GEORGES BANK CONSULTATION

A. Briefs Received by Mail

FRCC. 98.5Z.-1	Groundfish Enterprise Allocation Council, Gloucester, Ont.
FRCC. 98.5Z.-5	Mr. Gary Dedrick, <45' Shelburne County Gear Quota Group, Shelburne, N.S.

B. May 13, 1998 - Yarmouth, N. S

FRCC. 98.5Z.-2	Scotia Fundy Mobile Gear Fishermen's Assoc., Yarmouth, N.S.
FRCC. 98.5Z.-3	Inshore Fisheries Ltd., Yarmouth, N.S.
FRCC. 98.5Z.-4	Mr. George Renneham, Shelburne County Groundfish Management Board, Gunning Cove, N.S.
FRCC. 98.5Z.-6	Mr. W. Murphy, Mr. Neil A. Bellefontaine, The Gulf of Maine Advisory Committee

APPENDIX 3:
FRCC MANDATE AND MEMBERSHIP

APPENDIX 3: FRCC MANDATE AND MEMBERSHIP

1. INTRODUCTION

The Government of Canada is committed to a more comprehensive approach to the conservation and management of our fisheries resource. This approach demands a better understanding of complex fisheries ecosystems - the interaction of fish with other species, predator-prey relationships, and also changes in the marine environment like ocean currents, water temperatures and salinity.

The Government of Canada is also committed to a more effective role in decision-making for those with practical experience and knowledge in the fishery.

The Minister of Fisheries and Oceans has established the Fisheries Resource Conservation Council (FRCC) as a partnership between government, the scientific community and the direct stakeholders in the fishery. Its mission is to contribute to the management of the Atlantic fisheries on a 'sustainable' basis by ensuring that stock assessments are conducted in a multi-disciplined and integrated fashion and that appropriate methodologies and approaches are employed; by reviewing these assessments together with other relevant information and recommending to the Minister total allowable catches (TACs) and other conservation measures, including some idea of the level of risk and uncertainty associated with these recommendations; and by advising on the appropriate priorities for science.

2. DEFINITION OF CONSERVATION

Fisheries conservation is that aspect of the management of the fisheries resource which ensures that its use is sustainable and which safeguards its ecological processes and genetic diversity for the maintenance of the resource. Fisheries conservation ensures that the fullest sustainable advantage is derived from the resource and that the resource base is maintained.

3. COUNCIL OBJECTIVES

3.1 To help the government achieve its conservation, economic and social objectives for the fishery.The conservation objectives include, but are not restricted to:

3.1.1 rebuilding stocks to their 'optimum' levels and thereafter maintaining them at or near these levels, subject to natural fluctuations, and with 'sufficient' spawning biomass to allow a continuing strong production of young fish; and,

3.1.2 managing the pattern of fishing over the sizes and ages present in fish stocks and catching fish of optimal size.

3.2 To develop a more profound understanding of fish-producing ecosystems including the inter-relationships between species and the effects of changes in the marine environment on stocks.

3.3 To review scientific research, resource assessments and conservation proposals, including, where appropriate, through a process of public hearings.

3.4 To ensure that the operational and economic realities of the fishery, in addition to scientific stock assessments, are taken into account in recommending measures to achieve the conservation objectives.

3.5 To better integrate scientific expertise with the knowledge and experience of all sectors of the industry and thus develop a strong working partnership.

3.6 To provide a mechanism for public and industry advice and review of stock assessment information.

3.7 To make public recommendations to the Minister.

4. Mandate and Scope

4.1 The Fisheries Resource Conservation Council will address these objectives by bringing together industry, DFO science and fisheries management, and external scientific and economic expertise in one body.

4.2 The Council will:

4.2.1 advise the Minister on research and assessment priorities;

4.2.2 review DFO data and advise on methodologies;

4.2.3 consider conservation measures that may be required to protect fish stocks;

4.2.4 review stock assessment information and conservation proposals, including through public hearings, where appropriate; and,

4.2.5 make written public recommendations to the Minister on TACs and other conservation measures.

4.3 The Council may recommend any measures considered necessary and appropriate for conservation purposes such as TACs, closure of areas to fishing during specific periods, approaches to avoid catching sub-optimal sized fish or unwanted species, and restrictions on the characteristics or use of fishing gears.

4.4 The Council's scope includes Canadian fish stocks of the Atlantic and Eastern Arctic Oceans. In the first instance, the Council will address groundfish, and then subsequently take on responsibility for pelagic and shellfish species.

4.5 The Council is also responsible for advising the Minister on Canada's position with respect to straddling and transboundary stocks under the jurisdiction of international bodies such as the Northwest Atlantic Fisheries Organization (NAFO).

5. Size, Structure and Make-Up

5.1 The Council will consist of not more than 14 members with an appropriate balance between 'science' and 'industry'.

5.2 Members are chosen on merit and standing in the community, and not as representatives of organizations, areas or interests.

5.3 'Science' members, are drawn from government departments, universities or international posts, and are of an appropriate mix of disciplines, including fisheries management and economics.

5.4 'Industry' members are knowledgeable of fishing and the fishing industry and understand the operational and economic impacts of conservation decisions.

5.5 All members of the Council are appointed by the Minister.

5.6 All members, including the Chairperson, are appointed for a three year term; terms can be renewed.

5.7 Members appointed from DFO serve 'ex officio'.

5.8 Members have to disclose any interest in the Atlantic or Eastern Arctic fishery and take appropriate measures so as to avoid potential or real conflict of interest situations during the term of appointment.

5.9 The four Atlantic Provinces, Quebec and the Northwest Territories may each nominate one delegate to the Council. These delegates have access to the Council's information, and may participate fully in meetings, but will not be asked to officially endorse the formal recommendations to the Minister.

5.10 The Council is supported by a small Secretariat, to be located in Ottawa. The Secretariat will:

5.10.1 provide administrative support for the functioning of the Council;

5.10.2 provide a technical science and fisheries management support;

5.10.3 organize Council meetings;

5.10.4 record decisions of the Council;

5.10.5 undertake a professional communications function for the Council, providing a central point for communications to and from the Council; and

5.10.6 undertake such other matters as from time to time might be appropriate.

5.11 The Chairman may appoint an Executive Committee, consisting of the Chairman, Vice-Chairman, and three other Members.

5.12 In addition, the Chairman may, from time to time, strike an 'ad hoc' committee to deal with a specific issue.

6. ACTIVITIES:

6.1 Reviews appropriate DFO science research programs and recommends priorities, objectives and resource requirements.

6.2 Considers scientific information - including biology, and physical and chemical oceanography, taking into account fisheries management, fishing practices, economics and enforcement information.

6.3 Conducts public hearings wherein scientific information is presented and/or proposed conservation measures/options are reviewed and discussed.

6.4 Recommends TACs and other conservation measures.

6.5 Prepares a comprehensive, long-term plan and a work plan for the Council which are reviewed annually at a workshop with international scientists and appropriate industry representatives.

6.6 Ensures an open and effective exchange of information with the fishing industry and contributes to a better public understanding of the conservation and management of Canada's fisheries resource.

FRCC MEMBERSHIP:

Members:

Fred Woodman, Chairman
Jean-Claude Brêthes, Vice-Chair
Bruce Chapman
Jean-Guy d'Entremont
Sally Goddard
Tom Hallett
Frank Hennessey
Daniel Lane
Paul LeBlond
Trevor Taylor
Maureen Yeadon

Provincial Delegates:

Stephen Atkinson, Northwest Territories
Rob Coombs, Newfoundland and Labrador
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