2002 SEAL FORUM - Proceedings -





SEAL FORUM 2002

Proceedings

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Table of Contents

<u>1.</u>	Background		1
<u>2.</u>	Opening Remarks		3
<u>3.</u>	Use of Control Rules and Reference Points		5
<u>4.</u>	Harp Seals	10	0
<u>5.</u>	Hooded Seals	1	5
<u>6.</u>	Grey Seals	19	9
<u>7.</u>	Blueback Seals	2	2
<u>8.</u>	Seal Exclusion Zones	2	5
<u>9.</u>	Participants	3	6
<u>10.</u>	Comments received after the Forum	4	3
	 Association des Pêcheurs de la Basse Côte-Nord The Adler Institute The International Fund for Animal Welfare The Canadian Sealers Association Canadian Veterinary Medical Association Comité de défense des intérêts du Québec Fish, Food and Allied Workers Northumberland Fishermen's Association 	44 49 60 70 80 83 91 95	
	Table Filière Loup-marin Inc.	98	

1. Background

The 2002 Seal Forum was held in St. John's, Newfoundland on November 14 and 15, 2002. The purpose of the Forum was to consult with Canadian stakeholders and interest groups on the development of a new multi-year seal management plan for Atlantic Canada and Quebec, based on the report of the Eminent Panel on Seal Management.

Representatives from the following stakeholder groups participated in the Forum:

- The sealing industry in the Atlantic provinces and Quebec;
- The fishing industry in the region and the Fisheries Resource Conservation Council;
- First Nations and Aboriginal groups from the region;
- Provincial governments from the Atlantic Provinces and Quebec;
- Conservation groups and animal welfare groups, regional and national;
- Community associations; and
- Academia.

Nearly 200 Canadian organizations were invited to attend the forum and/or to make written submissions related to the multi-year plan. Each invited organization was entitled to send one delegate and up to two additional observers.

At the Forum, delegates heard presentations from various experts, including Dr. Ian McLaren on the management scenarios, Dr. Mike Hammill on the science behind the precautionary model, Ken Jones on the Blueback issue, and Dr. Dan Lane on Seal Exclusion Zones.

Delegates were assigned to one of four smaller mixed-stakeholder groups for much of the first day. One of these four groups worked in French, the others in English. Facilitators were assigned to each group to encourage full and respectful participation by all stakeholder representatives. The same series of questions related to the following six topics were considered by all groups:

- Control Rules and Reference Points
- Harp Seals
- Hooded Seals
- Grey Seals
- Seal Exclusion Zones
- Blueback Seals

The morning of Day Two, a printed summation of discussions on five of the six topics was distributed to all Forum attendees. As well, preliminary results from the 13 completed surveys related to "seal exclusion zones" were reported on.

After each topic was presented, everyone attending the plenary was allowed a few minutes to write their reactions on a comment card. These were collected and form part of this report as well, under the heading "Comments from the Plenary."

Over the course of the Forum, various viewpoints were offered regarding aspects of the design and planning of the event. These included:

- Interest in having the background documents earlier than they were received;
- Concern about the proposed stakeholder categories, and how they were grouped;
- Structure of the smaller sessions using flipcharts (some approved, some did not);
- Concern about the complexity and number of questions; and
- Recognition that this Forum provided a good opportunity to learn from the scientists.

These comments will serve to improve on the process for the next Forum.

In the remainder of this document, we attempt to summarize the proceedings of the Forum, capturing agreement where it presented itself, as well as the differences that were evident. To the extent possible, stakeholder group preferences related to the proposed "precautionary approach" to managing the seal fishery are indicated. The intention is to offer maximum opportunity for the Minister to understand the various perspectives represented at the Forum.

2. Opening Remarks

David Bevan, Director General, Resource Management, Fisheries and Oceans Canada, Ottawa

David Bevan welcomed participants to St. John's and to the Forum on behalf of DFO. A summary of his remarks follows:

The purpose of the 2002 Seal Forum is to consult with Canadian stakeholders and interest groups on the development of a new multi-year seal management plan for Atlantic Canada and Quebec, based on the report of the Eminent Panel on Seal Management. The Forum will address the three seal species for which there is a commercial harvest on the East Coast of Canada: harp, hooded and grey.

In terms of consultations, I want to stress that the department is not seeking any decision or consensus out of this Forum. Rather, we are collecting the views of a range of Canadian stakeholders and interest groups on possible management strategies. These views will be considered in the development of a new multi-year seal management strategy for 2003 and will be presented to the Minister when he makes his final decision.

We have invited about 200 Canadian organizations to attend the forum or send in written submissions. These include First Nations and Aboriginal groups, sealing and fishing industry representatives, conservation and animal welfare groups, academics, community associations and provincial governments. Seeing the wide range of people here at the Forum, I am sure that you will take full advantage of this opportunity to get to know each other and to exchange ideas.

To assure that all views are presented as fairly as possible, independent facilitators will conduct the forum and produce a final report. The report will set out the views of all attendees, as well as those received in writing.

The Forum is specifically intended to examine the management strategies put forward by the Eminent Panel on Seal Management. I am especially pleased that the Chair of the Panel, Dr. Ian McLaren, is here. Dr. McLaren has graciously agreed to give a presentation on the management strategies.

The Forum will also be looking at control rules and reference points for decisions in any management strategy. The reference points and control rules were developed by a team of DFO scientists and managers and represent a significant first step towards Objective-Based Fisheries Management. These will be explained in a presentation, and DFO scientists and managers are present to clarify them in the workshops.

I would also like to point out that our intention is not to address issues that do not relate to the management of seal populations, such as harvesting practices, allocations to groups or areas, or the different public perceptions of the hunt. There will be an opportunity for an open-mike session at the end of the Forum, at which time Forum participants may choose to voice their views on such other issues.

At this time, I would like to turn things over to the facilitators, Kathleen Howard and Associates, so they can introduce themselves and explain how the Forum will work.

Use of Control Rules and Reference Points

Participants in their small break-out groups were asked to individually indicate the most important "pro" and the most important "con" of the control rules and reference points precautionary model as it was presented to them. The responses have been summarized below.

Pros

- Flexible allows flexibility in management response when herd is above Ncons;
- Responsive identifies several possible actions to achieve results within scenarios; warning time to make decisions before it's too late;
- Permits integrated planning for harvesters and others;
- Decision-making framework for quota-setting;
- Builds confidence in what is happening you can know beforehand what will happen;
- Tangible, transparent targets allows avoidance of arbitrary decisions on TAC;
- Practical management tool, accessible and transparent e.g. links to needed data/research; requires a partnership between scientists and harvesters; allows for consideration of traditional knowledge from fishers;
- More rational approach, removes uncertainty uses population size, health of herd to trigger increase or decrease in exploitation levels and to determine management measures:
- Provides links to possible methods of assessment.

Cons

- Insufficient funding resources;
- Rigid mutually-exclusive categories;
- Requires current data base to prevent arbitrariness, which is costly research programs cannot support framework; this approach requires regular surveys in order to work;
- Does not take into account traditional knowledge or qualitative data;
- Too reactive:
- Deciding how to move from data rich to data poor unknown circumstances make it
 very difficult to choose what scenarios and reference points to use; without a solid
 database on seals and groundfish, going to any reference point is arbitrary;
- Data for uncertainty needs to be incorporated
- Encourages risky behaviour
- Uses a species approach, not ecosystem- this lacks a global perspective of the whole marine resource;
- Programs are too brief and support too erratic;
- There is no optimal target population level identified;
- Difficulty with the language used in the scenarios.

- 1. Linking control rules to reference points seems to make some sense when in a data rich situation. In data poor situations it makes less sense. But data poor does not necessarily mean moving into ultra conservative management (i.e. closing fisheries).
- 2. Although I agree with some of the pros, the whole procedure seems to take a simple understanding of methods of Resource Management and make it a much too complex issue for most people to understand.

- 3. Data poor situations should be changed by having more surveys to obtain information that creates a data rich situation. At this time, we can use reference points and control rules. In data poor situations reference points & control rules are very difficult to use.
- 4. Still some confusion in the terms used, some good points taken and accepted (i.e. there must be programs to educate fishers and people on the terms of reference). In other words put it in simpler form, in a way people can understand.
- 5. In an environment where groups are adversarial, one might try in the future not to foster this hostility in small groups, such as using "fisheries" vs. "conservation" approaches to management, labelling stakeholders groups (identifying them in general fostered closed-mindedness among people). As mentioned, this could have been an excellent opportunity for learning, and was in sessions where DFO staff were interactive and acted as moderators (e.g. session with Dr. Becky Sjare).
- 6. The "con" of "insufficient funding resources" (because using these control rules is research intensive) is probably a "pro". Adopting this approach to seal management would necessitate more research funding for studying seal population dynamics more knowledge about these processes is imperative to proper management of the herd. An approach that requires politicians to put money into research is a good thing.
- 7. It was clear in our group that people had a very poor understanding of what the options represented. The responses are, as a consequence, basically meaningless. Much better would have been a session where there was in-depth explanation, questions and answers.
- 8. The Government of Canada should always have a seal fishery to help the cod come back and other species. Our communities in rural Newfoundland are hurting. Young people are leaving with control of our seal herds cut. This can help. I agree with some of the pros. When it comes to people's lives, money should not be an issue.
- 9. Reference points are OK to trigger review and sound alarm for need to take a more conservative approach. However, pre-determining the action to be taken once a reference point is reached is problematic. Up-to-date facts about a situation have to be taken into account, including such things as carrying capacity of environment and predator/prey relationship. Data poor situation calls for caution, but predator/prey issues have to be considered, and decisions taken on the best information available, even if it's less then ideal.
- 10. Multi-species interaction (e.g. seals eat cod, seals eat capelin, cod eat capelin.) The importance of work on diet, fatty acid needs to be expedited.

- 11. Con it should be stated more clearly and explicitly that surveys and data that are kept current over time are critical to utilizing this system. Experience & past history does not indicate that this may happen due to funding and resources at DFO.
- 12. Weight of opinion at this meeting reflective of nothing more than the stacked invite list to this meeting. The fix was in well before this consultation began.
- 13. Generally, the points reflect most of the sentiments I've/we've had or perceived.
- 14. Framework to provide more confidence regarding management of decisions when stock declines.
- 15. "I did see some mother seals killed and the pup fall out on deck still alive...told me to throw it overboard and I did. It crawled up on a pan of ice. The mother was full of milk, the milk ran out on deck when the pup fell out." DFO file, 1998, sealers testimony. END THE HUNT.
- 16. Forum fails to understand that the task is controlling stakeholders, not seals.
- 17. Species-at-risk criteria (i.e. Cosewic criteria) should kick in only after the precautionary approach (PA) has failed. The PA should keep populations within reasonable biological limits.
- 18. Starting point the questions asked should have been less of pitting one group against another. Sometimes the questions asked made one decide against conservation or fisheries but they should not be structured that way.
- 19. The hunt is about politics, not science. We intend to take our message to the people who count in this issue the Minister of DFO and other politicians who end the seal hunt an electoral issue.
- 20. Need much more biological/economic research.
- 21. Group 2 We had difficulty in discussing reference points it maybe would have been better starting with strategies based on the current stock position (which was well-determined) and then ask if reference points were relevant over a planning period (3-5 yrs).
- 22. The Canadian Sealers Association (CSA) will respond to all points and issues, in writing, within the two-week period. This response covers the seven people at our table. I will also respond regarding SIDC.

- 23. If one enforces this system and somehow 10 years passes without a count carried out, that would/may lead to a closure of the harvest even though the stock may be large enough to allow the harvest to carry on.
- 24. Because of limited resources that now exist with the Federal Government and DFO, if seal studies and stock assessments are not carried out on a regular basis, the possibility of moving to a "data poor" situation exists, which would mean that the seal harvest could be cut back or even shut down without further review.

4. Harp Seals

Participants were asked to consider a large number of questions related to the harp seal. Each is considered separately below.

"Do you prefer the <u>Conservation</u> or the <u>Fisheries</u> Reference Points model?

- All groups agreed that labeling the approaches *Fisheries* vs. *Conservation* was problematic. This led many participants to refuse to answer the question as it was put to them.
- Operational differences between fisheries and conservation approaches were difficult to grasp. Many indicated that conservation is the guiding principle for the fisheries model as well. A "healthy balance" is what is being sought.

Do you have any suggestions for other reference points that should be used?

The four discussion groups suggested the following elements be considered in establishing reference points:

- Environmental/ Ecosystem What's going on in other fisheries, for example food availability; carrying capacity of the environment and predator/prey relationship important considerations
- Economic viability of Fishing Industry
- Health of members of herd
- Age-class structure of the herd
- Add reference point "N-target" for seals (between N-conservation & N-max), the target level the seal population ought not to exceed

Are there more specific control rules (management measures) that you would like to see at any reference point level?

• None were proposed, although one group cautioned that "locking in" the control rules too early would constrain management action in future years.

Which Management Scenario for harps seals do you prefer and why?

There was no clear preference across the four groups, one choosing market forces, two others a scenario involving a reduction of the seal population (Scenario #5). A fourth group proposed a sixth "ecosystem" scenario, stabilizing the seal population based on the capacity of the ecosystem to sustain balance. Other individual participants chose a PBR approach, or abstained from choosing at all because of the lack of certainty about the data as we know it today.

While a few individual preferences were expressed, none of the groups chose to consider a "second choice" scenario when asked.

Which scenario(s) do you not like at all and why?

Again, while there was no consensus across the groups, status quo and PBR were referenced often in the discussions.

Are there any other management scenarios that you would like to have considered? Please describe.

- Combination scenarios (e.g. status quo and market forces)
- Create a scenario based on historical information, i.e. catch status and population. How did we get where we are?
- No common operational basis or database to have the discussion about management scenarios
- Allow a fall seal hunt in Labrador
- Sixth scenario: management aimed at attaining better ecosystem equilibrium
- Human/seal relationship approach to management
- Research Quota, Commercial Quota and Traditional Subsistence Quota

- 1. More emphasis on economic viability of the industry. Alternate uses (e.g. tourism).
- 2. We did take seals before they had pups on one occasion. I did see a pup fall out on deck while the female was being pelted. This pup was alive and it was thrown overboard. End the seal hunt now.
- 3. The CSA will, again, respond in writing within the agreed time frame.
- 4. Question 9 Human/Seal relationship. Should be removed. The species must be managed by numbers and health of the species and not by Human/Seal relationships.
- 5. Human/Seal Relationships approach to management vs. exploitation management model is a misrepresentation of the scenario proposed. Currently the emphasis is on managing the seals, not remembering sufficiently that what we can realistically hope to manage is limited to our own exploitation of seals, not the seal population itself. So what was proposed was actually a strategy explicitly focused on managing exploitation in a sustainable way, not vs. exploitation.
- 6. Human/Seal relationship approach to management is obviously a proposal of one of the seal protest groups and should not be considered by this forum. They have no interest in the advancement of the industry.
- 7. In the context of Question 7, it seems clear that there is an unwillingness to compromise, which I can understand. A part of these sessions may have been appropriately used to try and build personal relationships & trust among stakeholders...which would have resulted in more coherent and manageable responses to the questions being asked. Without understanding among stakeholders for each other's situations and passions, everyone will leave here unhappy. In the future, I would like to see more effort expended to foster positive relationships.
- 8. Quota for commerce, quota for research; no quota for traditional subsistence.
- 9. In our group there was a consensus that #4 and #5 were the preference options.
- 10. Cannot emphasize enough the allowance being given for a fall hunt in Labrador, with Ring Seals included in any format.
- 11. Does not reflect the idea that a point of reference should be "the number that the seal population should not exceed."

- 12. Management aimed at attaining better ecosystem equilibrium. There are more things to consider than just the seals.
- 13. Combination of #2 & #5. Market TAC plus non-commercial removals (subject to actual amount of TAC) to bring about herd reduction over a five-year period.
- 14. I think it's crucial that as an industry we have to find some way to reduce the harp seal population. More emphasis has to be placed on the fact that their numbers are definitely having a very negative effect on the recovery of our cod stocks.
- 15. Keep control of the harp to ensure that groundfish are given a fair chance to expand, still keeping in mind a healthy seal herd. Harp seals must be hunted to help make sure the groundfish fishery returns to a reasonable level.
- 16. If the harp seal is depleting the cod stocks there must be a hunt to help rural Newfoundland survive. It is not only cod but also other species of fish that the seal eat. Level it off.
- 17. Stress once again that the model should be market driven with a ceiling put in place by DFO. I chose fisheries model but we are very concerned about conservation. It was very difficult in the beginning to chose because we thought we were voting against conservation. It puts sealers at odds right from the start.
- 18. We must bring a balance back into our ecosystem. For this to happen we must bring the harp seal population under control in a humane way, with caution and conservation applied first.
- 19. I was present when the female hood was being pelted and the young pup fell out onto the deck. This happened eight or ten times. There were lots of comments made "We should never be allowed out killing them." DFO file, sealers testimony 1998 END THE HUNT.
- 20. Where is the animal welfare perspective? Given that most Canadians oppose the commercial seal hunt and most others oppose the way it's currently operating, no hunt should be a management option.
- 21. Under the current population size (i.e. management regime), there should be adequate flexibility to allow the industry to take advantage of favourable market conditions.
- 22. Should make sure emphasis is not placed on input just because it is all that was received. It appears significant information and input was lost due to problems with process or difficulty in understanding complex concepts. Or attempts by some to deliberately confuse or obstruct a logical discussion of what was on the table.

- 23. We can't manage seals only people. Reference points good idea didn't work for WMP. Reference points are arbitrary. Population model inadequate.
- 24. Even supposedly "well known/data rich" species like harp seals lack sufficiently detailed data for accurate or precise predictions under any scenario. Problem with underlying assumptions for all scenarios as McLaren stated, "no clear management aim" in other words, a head count on population level is a goal but the background question about why remains unstated.
- 25. Considérer l'instauration d'une période d'ouverture de la chasse différente pour la BCN (i.e. retarder l'ouverture de cette chasse de 2 ou 3 semaines) afin de permettre l'arrivée des « brasseurs » avant la prise complète du contingent.
- 26 Évaluer la possibilité suivante (question 4) : à partir d'un Ncible, déterminer les Ncons, Nmin et Ncritique (à discuter avec les scientifiques).

5. Hooded Seals

Participants were asked "Would you agree that hooded seals should be considered as a 'Data Poor' situation?"

• Three of the four small groups agreed that the hooded seals ought to be considered "data poor." The fourth group felt that the current TAC ought to be considered reasonable, but that any future increase should be treated as "data poor." Three of the four groups expressed serious concern about the lack of financial resources made available in order that a population survey is conducted on this species.

Participants were asked: "In a 'Data Poor' situation would you prefer that hooded seals be managed by automatically moving to one or two reference point levels lower or would you suggest that harvest decisions be established using a Potential Biological Removal (PBR) approach?"

- Participants struggled with this question. The lack of recent population data makes it difficult to choose. Clearly, moving to a "data rich" condition is the preference. However, given the current situation, there was some inclination towards the PBR system, with certain reservations and opposing views expressed. A representative opposing view, drawn from the comments below, would argue that classifying hooded seals as data poor, thus reducing or ending the harvest of hooded seals until a new survey is carried out, would be wrong. "The herd of hoods is in good shape and should definitely be harvested...To say simply that it is data poor is wrong. If it was rephrased to say "science-data poor" but rich in fishers' data, that would be more correct."
- There was no clear preferred path on this question. One group agreed that it was not possible to situate hooded seals relative to a reference point, making it impossible to choose between the two options. Another group proposed consideration of a "discounted PBR" option, while a third proposed moving one reference point lower. One group proposed that, if the human and financial resources required to assess this population were not forthcoming from DFO, that responsibility for such an assessment be delegated to the provincial governments.

Participants were asked, "Do you have any suggestions for other reference points that should be used?

 Three groups did not reply to the question. A fourth proposed consideration of age structure. And finally, participants were asked, "Are there more specific control rules (management measures) that you would like to see at any reference point level?"

• None of the groups responded to this question.

- 1. In a data poor situation, it would obviously be difficult to make any management decisions. So, rather than answer questions that were posed, we should somehow request/release federal government funds to learn more about the behaviour and biology (population dynamics) of the Hooded seals. This will allow us to make informed management decisions, otherwise we will be unsure of the impact of harvest scenarios. In addition, it is unbelievable with the ongoing controversy that these animals are still classified as "data poor."
- 2. Harvest hoods when they reach the beater stage. Two weeks after whelping. Apply same management and harvest principle as are used in the harvesting of harp seals.
- 3. Due to the fact Hooded and Harp Seals whelp the same time, we should harvest the (Blue Back) the same dates we harvest the Harps when they become beaters. There should be a blue back hunt for the same reason we have a harp seal hunt.
- 4. No need to have meetings or put out information on the poor data that is put forth. Too many changes can take place in this time period.
- 5. Traditional knowledge has to be considered in a situation where scientific data is not available. It seems to me very unlikely that Hood numbers have diminished in the past 13 years.
- 6. Do the survey, deal with the blueback issue and make it clear to sealers and the public, the implications on the population and on the socio-economic impacts. Welcome the public and NGOs to participate/observe the controlled, humane hunt according to the regulations developed with the help of the industry and other stakeholders.
- 7. Re: Question 12. Don't you mean "other" Reference Points that should be used? If so (P 21 in Info Kit), PBR is not an extra one; it was proposed initially.
- 8. Funding needs to be secured to carry out appropriate population surveys and make "data poor" situations "data rich". This seems obvious certainly it must be to DFO scientists. It seems as if this topic of hooded seals was raised to support Science's

- "application" for funding from their political masters to conduct research that is obviously necessary.
- 9. Cannot understand why DFO would need to ask a lay audience if they are in a data-poor situation with respect to Hooded Seals. It leads one to suspect that to some extent this exercise is designed by micro-managers to obtain evidence to support or not, the funding of basic services at DFO. It seems obvious that the situation for Hoods is data poor so why ask?
- 10. All evidence suggests Hooded Seal population has increased since the last survey. Therefore there is no rationale to reduce quota; however, if any new management measures are to be introduced, a survey should be completed.
- 11. I think that it is dangerous to begin classifying the level of harvesting allowed according to the lack of information. The classifying of hooded seals as data poor would mean that the harvest of hooded seals should stop until a new survey is carried out. The herd of hoods is in good shape and should definitely be harvested.
- 12. Q.10: To say simply that it is data poor is wrong. If it was rephrased to say science data poor but rich in fishers' data, that would be more correct.
- 13. All Reference Points on the Hooded Seal should be held over until an in-depth survey is completed. This survey must occur in short order.
- 14. Shouldn't let "data poor" situation be excuse for allowing herd to go unchecked. Eminent Panel reports recent Northern Cod consumption by Hoods as a staggering 98,000 mt, more than 3 times the total 2J3KL cod index fishery of the past 5 years. While the database is less than ideal, the best available information is consistent with maintaining at least current TAC (10,000). Issue of young hoods (bluebacks) is separate from TAC issue. Scientific info at workshop indicated from biological viewpoint, it's better to harvest young animals than mature adults.
- 15. There is no clear answer as to the size of the Herd, but I feel it has grown much too large, therefore would recommend a legal hunt of the valuable blue back, with conservation being factored in.
- 16. [There should be] a hunt as if there was an increase in population since the last data report, that is with an increase in TAC.
- 17. Once again we need a survey to determine how many hoods we have in the population. Hoods eat 3 times as much cod as harps, therefore we need some form of hunt. It is better to eliminate young hoods (bluebacks) than older hoods. We cannot kill the mature (breeding) population. After the baby is weaned from mother, sealers should have an

- opportunity to harvest some young hoods. In order for us to have a sustainable groundfish fishery, we need to have an expanded hood hunt.
- 18. Accept Control Rules. Make sure a hood hunt is conducted because they are large consumers of any groundfish. There must be a hooded seal hunt. Make info data rich. Government money needed.
- 19. We should have a by-catch of 10% within the present TAC of 10,000 for 2003.
- 20. Not enough emphasis placed on the fact that according to background paper, Hooded seals destroy 3 times more cod than harps. Therefore, we need to start to find a way to control these herds, e.g. blueback hunt within the proper time when young hoods are prime.
- 21. DFO file 1998 Sealer's testimony. STOP THE HUNT! "During the 2nd trip we left 15 or 20 pups alone after taking the family. There were mistakes made by killing pregnant female hoods, this happened approximately 6 times but they never came on deck. I am an experienced sealer and I knew they were pregnant. We were not saving the meat so the pup went overboard with the carcass."
- 22. The fact that you denied the Animal Protection Institute attendance at this conference, indicates your lack of interest in diverse opinions.
- 23. Definition of, and distinction between, data rich and data poor completely arbitrary. PBR, or some similarly precautionary method, should be applied to all species.
- 24. Again CSA will respond in writing in the agreed time frame.
- 25. Do a survey. Cooperation with Greenland. Same goes for harp seals. It didn't even come up in the discussion yesterday!!
- 26. "Data-rich" / "data-poor" is most dangerously applied to this species.
- 27. Political Vulnerability There are a minimum of 24 Liberal seats across Canada that are "vulnerable" where an electoral campaign could defeat the Liberal candidates. Arrogance is not a good political tool.
- 28. We have to find a way to take a quota of these seals.

6. Grey Seals

Participants were asked "Would you agree with Grey seals being classified as 'Data Poor', but could be readily re-classed as 'Data Rich' with a new survey?"

- One group chose not to respond to the question, as they were not impacted by the Grey seal harvest. The other three groups were all supportive of this population being classified as "data poor." The Francophone group, whose fishers and sealers are more significantly impacted by this species, urged that an assessment of the population be made a priority, given the important interaction between Grey seals and groundfish stocks.
- Participants were further asked, "In a 'Data Poor' situation would you prefer that Grey seals be managed by automatically moving to one or two reference point levels lower than they would have been based on the results of the 1997 surveys, or would you suggest that harvest decisions would be established using a Potential Biological Removal (PBR) approach?"
- Only the Francophone group provided a formal reply, recommending moving one reference point lower, given the uncertainties of the data. However, they stressed the importance of not blocking consideration of pilot projects on utilization of this species if such projects are put forward.

- 1. We should hunt grey seals due to the fact this herd impedes on the rebuilding of the cod stocks in the southern Gulf. We must hunt this herd for this reason if for nothing else.
- 2. Data is not good enough to make data rich kill more grey seals, reduce them in numbers.
- 3. Being from the gulf, we need a survey to determine how many grey seals are in the population. We need a cull (exclusion zone) for grey seals in Bay St. George. Our cod stocks are still in a declining mode and we need to protect these stocks to save our communities in the Gulf.
- 4. The population appears to be on the increase and are also showing up where they were never known. Thus a new predator in town, the population must be lowered.
- 5. They definitely need to be reduced. They are having a major impact on the catches of herring and other species in my area.

- 6. There should be a pilot project. Find a market and hunt the grey seals as they have a great impact on cod stocks.
- 7. Need to conduct a small pilot harvest to test markets for grey seals. Extraordinarily large numbers of grey seals.
- 8. This conversation highlighted some concerns with using TK over science. Observed \uparrow in harps, hoods = population explosion. Observed \downarrow in greys = obviously they are just changing their distribution not really decreasing. Need more science.
- 9. The whole concept of data rich/data poor is poorly defined and understood even by DFO scientists in certain cases. Input on what is felt as data rich/data poor is suspect, i.e. how many are aware of what data exists for grey seals and how it relates to a truly data rich situation i.e. Harp seals?
- 10. As an observer, I travelled between 2 different groups for the "grey seal" question there was some discrepancy in the scientific information that was tossed around in the different rooms. In one group, Dr. McLaren suggested that direct grey seal impact on cod was considered minimal (< 0.4% of their diet). In another room there was an overwhelming feeling among delegates that grey seals were having a large direct impact on the cod. Such discrepancies need to be clarified.
- 11. If so "data poor," how can the estimate of 33% decrease be so exact. I may agree with the 33% if it was in writing as an increase, and this is from personal observation over 37 years of fishing in the Southern Gulf of St. Lawrence.
- 12. Arguably, not data poor given the fact that there has been no exploitation of these stocks in the Gulf and on the Scotia Shelf, then we must be nearing carrying capacity by evidence of any and all observations. Develop a reduction strategy on greys as a first priority examine all market opportunities and encourage work on product development.
- 13. Dear Mr. Minister: Remember a general election is coming & you won by only 703 votes. A decrease from the previous election.
- 14. Remember Mr. Minister: There are three by-elections coming: Moncton Riverview, Ottawa Centre, Perth Middlesex. There is always an opportunity to hold governments accountable for their animal protection and environmental record.
- 15. No comment on Grey Seals, they are not prevalent in my area.
- 16. In areas like the Gulf where grey seals are a problem, perceived or otherwise, scientific work must begin immediately on cod consumption. Urgent.

- 17. Grey seals were essentially extinct in Canada as recently as the late 1940's. When you're recovering from a population of zero, of course the population is growing. The question is, have we learned a damn thing in the last 50 years?
- 18. "After the females were pelted and pups fell out onto the deck the pups were thrown over the side. I did see a couple move around in the water behind the boat. We watched a seal that came out of the old one on deck try to get up on a pan of ice. It did not get up to my knowledge." DFO File, 1998, Sealers testimony. END THE HUNT.
- 19. As stated on other items, the CSA will respond in writing within the time frame.
- 20. L'atelier 4 a tenu d'importantes discussions sur la gestion du phoque gris. Malheureusement, la synthèse des ateliers ne rapporte pas l'essentiel des discussions sur cette espèce. SVP apporter les corrections et ajouts nécessaires.
- 21. Le phoque gris est très problématique pour les pêcheurs de poisson de fond du Québec. Il en a été beaucoup question à l'atelier 4.
- 22. Le phoque est le plus sérieux pour sa prédation sur la morue, il faut faire une étude très élaborée sur ce prédateur. Aussi, nous recommandons un abattage systématique du phoque gris.
- 23. Nous trouvons qu'il manque d'orientation à court terme pour traiter le dossier du phoque gris. Nous avons suggéré lors de notre atelier d'établir un TAC qui se situe entre le scénario 3 et 4 lors d'un régime pauvre en information. Mettre de l'emphase sur la recherche et la mise en place de zones d'exclusion.
- 24. Le phoque gris est une espèce extrêmement importante pour les pêcheurs de poisson de fond. La plupart des discussions de notre atelier ne sont pas rapportées dans le compterendu. Ce n'est pas parce que quelques groupes ne sont pas intéressés aux phoques gris qu'il faut escamoter ce qui a été dit dans l'atelier 4. Vu son importance sur le poisson de fond, il est inconcevable que le ministère ne dispose pas de plus de données.

7. Blueback Seals

A number of questions were put to the four groups about bluebacks. The questions can be summed up as follows: "Do you agree or disagree that a Blueback hunt could be allowed, provided a new population survey was done and shows sustainability?"

The question of opening a hunt was discussed with full recognition that this can be a very emotional, divisive and potentially inflammatory topic. This was raised in all groups, and some discussion of the consequences of any decision to move forward on such a hunt occurred whenever the issue came on the table. It was clear that animal welfare stakeholder groups will not ignore such an activity. They emphatically stated their position that there should not be a hunt and that they would vigorously oppose it.

Most participants agreed that the hooded seal ought to be considered a "data poor" species, and that a population assessment ought to be undertaken without delay. Notwithstanding the considerable emotion stirred by this, most stakeholders agreed that the extended protection for Bluebacks ought to be lifted, provided:

- a population survey confirmed anecdotal evidence of the state of the herd that would sustain such a hunt, and
- the hunt is properly managed through establishment of opening dates that ensure animals are weaned and rules are clear about whelping patch entry.

If an assessment of the hooded seal population is not able to be completed soon, there was some call for consideration of establishing a Blueback TAC within a PBR reference point scheme.

A variety of viewpoints on this position were reflected in the comment card responses below.

- 1. It is quite apparent to me that although we have a diversification of views on agreeing with implementing a precautionary approach management strategy on the various species of seals referred to, we also are debating with some animal rights participants attending (individuals who don't support any hunt whatsoever). I don't consider such a debate appropriate.
- 2. As in all other CSA answers today, we will respond in agreed time frame.

- 3. Nobody's going to buy the government's Orwellian re-definition of baby hooded seals.
- 4. The respective positions are entrenched. For purposes of self-interest, DFO and the industry should test this one for backlash, nationally and internationally.
- 5. DFO has had a much better record at managing stakeholders then seals.
- 6. Mr. Minister: 3rd Parties with electoral experience can shift 4,000 votes in any given riding considerably more than the 703 victory in West Nova.
- 7. Animal welfare comments should be removed, as "no hunt" is not an issue at this time. At this point in time, we should be managing a healthy stock by having an annual harvest if a responsible size.
- 8. A harvest of bluebacks should definitely be allowed, at least to the level of the current TAC, until a new survey is carried out.
- 9. My perspective was not included, which was support in theory for the proposed hunt, but in practice to hold off until the industry was more responsibly conducted. For example, as long as the industry is party to blaming seals for eating fish and contributing to a climate of intolerance towards seals, they should not be given new and increased opportunities to kill seals as the likelihood of minimizing inappropriate behaviour from a preventive perspective has not been dealt with.
- 10. This is not a scientific (biological) issue. How can you make this decision based on the recommendations of the EPP (which had only science in its talk) and this group (which is industry-dominated)?
- 11. It should be mentioned that a risk benefit analysis regarding organized opposition from animal rights groups should be conducted prior to any decision to reopen a blueback hunt. (Even with the mitigation measures proposed to avoid young pups, PR would be critical.)
- 12. The protection should be lifted and there should be a TAC based on the fact that the herd should have increased since the last survey setting the TAC for a number of years.
- 13. Good comments for the most part. However, because of the agenda of the animal welfare groups, their position has to be completely ignored. If not, we will never be able to develop this industry.
- 14. The agenda of animal welfare is a "no hunt" of all seals, therefore, their input should be ignored. We cannot destroy one species to save another.

- 15. The position of the IFAW should not be considered. No matter what you do they are going to play hardball. Let's look ahead. "Long may your big jib draw."
- 16. We should definitely have a blue back hunt provided there is a new survey completed. Blue backs or young hoods consume an extreme amount of cod. Once they are weaned from the mother, there should be a hunt for blue backs.
- 17. Don't wait for new survey change rule now. Better to harvest young then mature adults. Information we have: 1. Latest Arial survey (dated), 2. Catch has been well below TAC every year since. 3. Anecdotal evidence of abundance. 4. Impact of hoods on Northern cod as per Eminent Panel.
- 18. Ignore the animal rights groups; continue with hunt at present TAC 10,000; make data rich.
- 19. By all means, we should have hunt in 2003. With the present TAC of 10,000.
- 20. Relevant to Northern Labrador, a blueback hunt is most favourable. Bluebacks in this region are generally one year old. An exception to the current protection should be administered.
- 21. I do not have a problem with reducing the age of harvest. But I think we need to understand the relationship (behaviour) between the mother & pup because we don't want to disrupt this interaction in a negative way, possibly resulting in an alteration in population dynamics. Therefore, I would recommend a bit more behavioural research into this interaction, prior to making this decision.
- 22. The concerns raised in one group that there must be more consideration of the logistics of performing a blueback hunt i.e., what are rules around whelping patch entry, etc. did not make the PowerPoint summary. Also, there was no mention of the comment made by several delegates in one room that they are concerned about the possible political/public "backlash" that could occur if the blueback hunt restriction was lifted.
- 23. END THE HUNT! "Almost all these seals especially after March 8, 1998 had the pups with them on the ice. The trend was that if there was no pup, these animals took to water. Prior to March 8, 1998 most females were killed with the pup inside them. I seen seven pups thrown over the side after the female was pelted. I took two out myself. There was once I can remember the young seal watching his parents being hoisted aboard. He watched the boat as we steamed away." DFO file, 1998, sealers testimony.



8. Seal Exclusion Zones

Ten questions were asked in pencil-and- paper survey format. From the small number (13) of surveys completed in time for consideration at the forum, a summary of responses follows. One of the survey respondents indicated strong disagreement on the proposal for such zones to be established.

Question 1: How do we decide if seal exclusion zones are needed?

With two exceptions, respondents called for there to be a basis of evidence from which such a decision would be taken, demonstrating the need for such an action. Such evidence would be both anecdotal and scientific. One respondent made the point that this should happen, "only if it can be established that statistically significant benefits can be obtained. One respondent was against the concept.

- Prove that seal herds are interfering with those stocks
- Yes. So would concerned people around the world if you ever tried to sell this unsaleable concept.
- This requires scientific evidence and industry observation and confirmation of seals inflicting high mortality on specific aggregations of fish at key periods of fish life cycles (e.g. spawning, juvenile rearing)
- By study to determine if there would be efficiency related to any activities within such a zone.
- Through information gathered directly from fishers and sealers. Also from organizations directly involved from the hunt.
- Good scientific evidence of a threatened cod stock in a specific area.
- In certain, very limited contexts (e.g. Smith Sound), a highly regulated hunt might be
 justified but ongoing observation and adherence to whatever regs are established must be
 part of it. For example, if seals are killed only to be repeatedly replaced by others. The
 herd could be decimated.
- If there is evidence of vulnerable species particularly in key spawning and nursery areas.



- Evidence of local impacts by seals over short and long-time sealers, habitual or repeated use by individual seals, important local impacts (e.g. Large fish concentrations), measurability of exclusion actions.
- Seal exclusion zones are definitely needed. But because of the detrimental effects seals are
 having on all cod stocks province wide it may be more beneficial to have an immediate
 reduction in all seal herds.
- Only if it can be established that statistically significant benefits can be obtained.
- Through science information on the different groundfish species.

Question 2: Do you have concerns about the benefits and costs of seal exclusion zones?

All but one expressed concerns in this regard. The exception simply stated, "government should pay." Concerns ranged from who should pay, to safety, ensuring a humane approach, ensuring something meaningful comes from it, proper selection of sites, etc.

- Yes, I do. Also, how the kill or hunt will take place.
- Yes. So would concerned people around the world if you ever tried to sell this unsaleable concept.
- Concerns the overall impact of benefits may be difficult to measure, but will require scientific study.
- Benefits immediate protection of well-defined local areas where cod are known to suffer high predation by seals.
- Yes. Will there be benefits and at what cost. Dependent on specific location.
- No. Government should pay.
- Yes. Full utilization of the animals. Utilize most effective and humane methods of harvest.
- Outside of Smith Sound, few locations are practicable. Also, nets are and should be illegal.
 Guns are out in some cases.
- I have great concern about the cost of not doing it.



- Yes. Scientific rigor / measurement of effectiveness, practicability, cruelty (Nets, wounding of animals shot in water.)
- Yes
- The benefits will out weigh the costs. What will the costs be if our groundfish stocks are depleted completely.

Question 3: If seal exclusion zones are established, how should decisions be made on the establishment and continuation of any zone?

Most respondents suggested such decisions be made on the basis of consultations (fishers, sealers, scientists, provincial governments and industry), on historical data, and/or scientific data on effectiveness.

- Made in consultations and meetings with sealers.
- They should not be established. The backlash would be huge if they are.
- Industry observation and scientific confirmation of same.
- Through consultation with local fishers and appropriate scientists. Control, monitoring and review would be critical throughout any pilot project.
- With use of historical data gathered over the times/years the zone is in
- Scientific data
- There is a concern that the zones will be used to destroy the seal population, on the futile hope that this measure will restore a viable cod stock.
- Consultation between DFO, Industry, Province, Public, etc. Committees could be set up on this purpose on a regional basis.
- Measured effectiveness based on a prior criteria established (e.g. mitigation of predation impact).
- On the basis of experimental results. Experiments should be conducted to determine if predicted results could be obtained.



• By science doing surveys on the health of groundfish stocks.

Question 4: If anywhere, where would you favour the establishment of seal exclusion zones, i.e. fiord-like areas, inshore, offshore, or specific areas where cod over-winter or spawn? Please specify any area where you believe there should be such a zone. Please also indicate if you are concerned about the creation of any zone in areas near communities, etc.

Most respondents (8 of 12) proposed fjord-like areas where such an effort was operationally most feasible. Smith Sound was most often mentioned as a candidate area for consideration.

- Smith Sound and Pinsents Arm near Williams Harbour in Labrador.
- Species cleansing zones should not be established.
- Smith Sound Fjord during spawning aggregations for cod
- Placentia Bay
- Bird Island, Sydney Bight, Cape Breton, juvenile area
- Bonavista and Trinity Bays
- Areas to be identified in 4TVn (e.g. Miscou), 3Pn4RS
- St. Georges Bay
- Would have to be specific situation with some control over parameters, i.e. fjord-like, enclosed. Significant biomass of fish, probability of success, etc.
- In any place where there is a cod spawn/winter area or a known concentration of cod.
- Wherever it is most feasible, practical and effective. Public perception is a concern. Easy access by residents also a concern.
- Smith Sound, only as a pilot project/test case.
- Fjord-like areas, inshore areas, areas where cod overwinter or spawn all warrant designation for seal exclusion zone.



- It is absolutely critical that Smith Sound be designated.
- Care should be taken, regarding use of firearms near communities. Other options (e.g. nets) should be considered.
- As panel report stated, only fjord-like areas seem practical.
- Small, restricted areas where the zone can be closely monitored and the results unequivocal.
- Offshore St. Pierre Bank 3Ps (over winter)
- Inshore Bay St. George 4RS3Pn
- Fjord-like Smith Sound 2J3KL

Question 5: If established, during what period or season should a seal exclusion zone be in effect?

Not surprising, the responses were very location-specific, and thus wide-ranging.

- Early and late fall.
- Species cleansing zones should not be established.
- During spawning aggregations and peak spawning periods.
- When the most damage and monitoring is being inflicted on the fish, and seals are most abundant.
- All year.
- Whenever the cod is in the area.
- When predation occurs.
- Not when females are in late pregnancy.
- Should be in effect anytime it is felt by industry that the presence of seals are having an effect on the presence of cod in that area.



Winter season where cod over-winter; spring season in 4R3PN.

Question 6: If established, who should be allowed to hunt seals within a seal exclusion zone – a specially trained team or licensed professional seal hunters?

Once again, no consensus emerged on which of these two groups ought to hunt within the zone. One voice said that the idea "was not practical to implement."

Question 7: Given that DFO has no current funding for any seal exclusion zone program, do you have any ideas on how any new seal exclusion program could be financed?

Many had no response on this question. Four indicated government ought to pay. One person proposed self-financing.

Responses:

- Species cleansing zones should not be established.
- Funding is required instead of funding through marine mammal envelopes, then try fisheries envelopes and oceans management funding.
- IFAW contribution or DFO should fund or subsidize. Any monies from seals could be contributed to project.
- Gov't should pay.
- No idea other than lobby for increase in science budget.
- Self-financing by marketing products. Make it part of the TAC (shared revenue)
- Spend some of our surplus, the federal government proposes to have.

Question 8: Should there be a limit or quota on the number of seals hunted within a seal exclusion area and should those seals be sold to processors or just collected for diet research?

There was no suggestion of a limit in these zones, with the exception of the respondent who disagreed with the zones completely.



Responses:

- Yes, sold to processors.
- Both as per market opportunities, no limit on seals "hunted" or otherwise excluded (e.g. acoustics)
- Used to fund project by selling. Limits or quota should be high enough to be effective
 or to measure any possible effects of exclusion.
- Should not reduce TAC. There should be no limit or quota in an effort to maintain an exclusion zone. Seals should be utilized by both the industry and research.
- Full utilization of the animals. How would the zone be considered exclusive if there were a quota/limit on harvest?
- The situation must be monitored to prevent undesirable results (pilot project)
- No limit as long as threat to fish stocks exists. Seals could be sold to processors if shortfall exists in market requirements otherwise, collected for research
- For ethical and scientific reasons, the carcasses should be fully used.
- Collected for diet research

Question 9: The Marine Mammal Regulations limit hunting methods to the use of clubs, hakapiks and firearms with minimum requirements as prescribed in those regulations. Do you believe that any other humane-harvesting method should be looked at for use in any seal exclusion zone? If so, which method?

There was general agreement that, whatever the method, it must be humane. One respondent felt there was no humane method. Nets and acoustic devices were also identified for consideration.

- May be driven from area
- There is no humane method
- All humane harvesting methods should be explored whenever harvesting is carried out.



- Yes and possibly not be limited to lethal methods. Perhaps acoustics or barrier.
- · Remain as is
- Yes has to be humane. Depending on proximity to communities; methods of other firearms. Nets?
- No
- Nets, in areas close to communities.
- Only firearms seem practicable??? And humane enough

Question 10: How should DFO assess the effectiveness and impacts of any seal exclusion zone?

Most respondents suggested monitoring a well-designed experiment. Several felt that there was no practical way of assessing effectiveness of such an effort.

- Information from the hunters
- There is no practical way
- Through scientific monitoring, control and performance evaluation and additional information from seal research.
- Based on the design and implementation of the experiment
- Constant Monitoring / Research programs
- Long term planning, monitoring implementation. Perhaps approach as pilot project for one specific area; Smith Sound?
- Without a longitudinal analysis and much better seal and groundfish data than currently available, it is hard to imagine how results (other than seals killed) can be measured.
- Observations of Fisheries Officers and scientists consultations with industry and interested groups



- As in Q1,2, the purpose would have to be stated in terms of biological consequences for the groundfish being depredated. This establishes scientific hypotheses and would lead to operational criteria to be assessed for testing those hypotheses.
- Continue to give the Science Branch more funding to carry out further study on the recovery, if any, of cod stocks, i.e. tagging programs, etc.
- Through science surveys telling us the groundfish stocks are improving.

- 1. While this may sound like a good idea to many, the administration and practicality is a difficult process. However, I feel this is worth doing through government funding but it must be maintained for a lengthy period in order to be able to provide sufficient data to further this process, maybe as long as 8 to 10 years.
- 2. It would be interesting to do a test case, but finding a control and an experimental situation. Based on ecosystem based on diet models, other predators take out much more cod (e.g. adult cod) than seals. How do we deal with this? It appears that we are targeting an obvious visible predator. Saying this, it would be an interesting attempt. Not limiting the numbers killed, however, is scary because with the level of negative emotions directed at seals we could end up in a very serious "cull" situation, and ultimately in the eradication of seals.
- 3. This is a very contentious, emotionally and politically charged issue. It is my impression that there is no overwhelming data to support the creation of such seal exclusion zones. The FRCC seems to have charged ahead with this idea in the face of lack of data or scientific support. Much more consideration of these seal exclusion zones needs to be given. If they are to be implemented probably largely for political and <u>not</u> scientific reasons there should be consideration given to using <u>only</u> non-lethal exclusion methods.
- 4. Species-cleansing zones: Unnecessary, not operationally feasible, totally contrary to the Canadian public's expectations.
- 5. CSA will complete <u>one</u> as an organization and forward it to Grace Mellano.
- 6. Products from seals removed from exclusion zones should not be allowed to enter the marketplace. This could have a very adverse affect on the market for seal products.
- 7. We're recommending that the Liberal TAC be increased.



- 8. Seal exclusion zones are, in fact, fishermen anger management programs perhaps some truthfulness in this process would be useful
- 9. Let's have a sealer exclusion zone. "I seen a female pelted and the pup came out of her when they cut her open. The pup was dead. This seal was killed for a while. This was on the day we got one hundred and seventy. Someone passed the comment 'if only Greenpeace were here to see this'." DFO file, 1998, Sealer's testimony. END THE BLOODY HUNT!
- 10. We're going to establish Liberal exclusion zones.
- 11. Need research on means of driving seals away, which could be more practical than killing the seals.
- 12. General Comment: I agree with seal exclusion zones. Especially at a time when the survival of key commercial species such as cod are at risk. (However subject to appropriate responsible criteria).
- 13. Areas such as Smith Sound, concentrations of cod must be protected. As an experiment it should be tried for its effectiveness.
- 14. Should be done right away.
- 15. Zones are one of a series of management alternatives that should be used.
- 16. Need to proceed. Develop a pilot project in consultation with scientists, fish managers, sealing industry, and communities close to proposed zones.
- 17. Seal exclusion zones should be looked at as a means to protect vulnerable fish aggregations, not as a means to reduce seal herds.
- 18. "He had to know that the 22-calibre guns were being used.... I don't think that the 22-calibre rifle is powerful enough to kill even a beater seal. I often seen seals alive after we hoist the seals out of the speed boats." DFO file, 1998, Sealer's testimony. END THE HUNT!
- 19. I strongly support a seal exclusion zone. It has been greatly debated that seals destroy cod in and around Smith Sound. Therefore, to protect our groundfish resource we need exclusion zones for seals.
- 20. Make sure the proposed action and suggestions are carried out to its fullest. Do it in the right manner.



- 21. There should be an exclusion zone as an experiment and paid for by government.
- 22. Anywhere that numbers of seals are found to be feeding on concentrations of cod or herring in the small bays and inlets in Nfld., these seals should be hunted at the time regardless of the time of year. Sometimes these seals may be driven from an area by just firing shots in the area.
- 23. Smith Sound according to SSR, most of remaining 2J3KL cod overwinter in Smith Sound. Absolutely must be protected. At most, a tiny, tiny % of seal herd would be harvested to protect this vital area. Other areas should be considered as well, as required.
- 24. Something has to be done to reduce the number of seals. This is one idea of many. I like it.
- 25. This is very important to the cod stocks in our area with no question this should happen and the fishers in the area should be the hunters to take the seals with the help of government people, etc. and to monitor the area is important as well. Good idea.
- 26. Yes, we need exclusion zones, but how do we keep the seals out. Being a professional sealer for many years, I fail to see the suggested methods working. However there may be ways, we must try.
- 27. D'accord avec le principe des zones d'exclusion des phoques. De plus amples commentaires suivront dans les prochains jours.
- 28. Oui aux zones d'exclusion dans le contexte actuel (poisson de fond) à bas niveau. Ferons suivre le reste de nos commentaires d'ici le 29 novembre.



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Comments received after the Forum

This section contains comments received by mail after the Forum.

The following organizations provided additional comments:

- Association des Pêcheurs de la Basse Côte-Nord
- The Adler Institute
- The International Fund for Animal Welfare
- The Canadian Sealers Association
- Canadian Veterinary Medical Association
- Comité de défense des intérêts du Québec :
 - Alliance des pêcheurs professionnels du Québec (APPQ) et les organisations affiliées
 - Association québécoise de l'industrie de la pêche du Québec (AQIP)
 - Fédération des pêcheurs semi-hauturiers du Québec (FPSHQ)et les organisations affiliées
 - Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec (MAPAQ)
- Fish, Food and Allied Workers
- Northumberland Fishermen's Association
- Table Filière Loup-marin Inc.

Translated from French

Association des Pêcheurs de la Basse Côte-Nord

[Lower North Shore fishers' association]

Preliminary Proposal for An Improved Management Plan for the Seal Hunt 2002-03

> Brief Submitted to DFO Management DFO Quebec and DFO Ottawa December 2002

> > La Tabatière December 5, 2002

Preliminary Proposal for the Seal Hunt in 2002-03

Introduction on seal landings on the Lower North Shore and ice coverage

The Lower North Shore is a maritime region of Quebec that borders on Labrador. It is an isolated region and depends mainly on the inshore fishery and on marine resources for its economic survival. For several centuries up until the 1980s, the seal hunt was an important part of our economy. Our traditional method was to hunt adult harp seal with nets and, when it was prohibited, the sealing industry collapsed.

Please refer to the table on page 29 of the report entitled *Atlantic Seal Hunt* – 2002 *Management Plan*, which shows landings from 1992 to 2001. A copy is also appended. Not surprisingly, our region now shows very low landings over this period, because our traditional nets were taken away from us in the early 1980s. Since then, we have been forced to hunt as best we could on a competitive basis with the other areas of the southern Gulf, which have earlier access in the spring because of their sparsely ice-covered and ice-free harbours.

Access is also earlier on the Labrador coast and northeastern Newfoundland because they are in the Atlantic. Our region is the northernmost part of the Gulf of St. Lawrence and our shores have the most ice in the Gulf. Our harbours are blocked by ice early in the season and this makes the conditions for an early spring hunt difficult. We therefore asking the Department to develop an appropriate action plan with a separate quota for the seal hunt in our region.

Relations among species and resource management

The relations among species are much better understood today than they have been previously. There is an obvious link between groundfish (in this case, cod) and seals. You are certainly aware that our region has lost over 50% of its fishers since the early 1980s. Ironically, this coincides with the period when the nets which were our traditional harvesting gear were taken away from us.

This certainly did not help the status of the cod stocks. There is considerable evidence for a direct, predator-prey relationship between seals and cod, which has in the past, and continues to do so today, played a significant role in the sudden decline of groundfish stocks on the Lower North Shore. It would be instructive to measure the impact of this decline on our fishing fleet since the early 1980s in relation to the absence of the seal hunt. We believe that our region has been completely forgotten and even neglected. We have repeatedly asked for a regional quota based on our previous access to the seal resource, and so far have not received any significant support.

Impact on crab with less access to the other resources (groundfish and seal)

At present, our region is increasingly dependent on snow crab for its income. Along with turbot, it is just about the only resource for which our region has separate sub-quotas within the fleet without having to compete with the larger fleets.

However, we are seeing alarming signs of snow crab decline in crab area 13. The moratorium on groundfish and on our traditional seal hunting gear has had a devastating effect on our region and communities. Now the shortage of seal and groundfish is having a negative effect on crab, because our fishers are turning to it as the main short-term solution.

Recommendation for a special committee to manage the seal file

We recommend that the seal file be entrusted to a committee like the one that handles the issues in dispute between the Lower North Shore of Quebec and Newfoundland. This could be a good way of letting the principal players in the file express themselves, and of enabling Ottawa to finally resolve this important matter.

Until now, the committee that handles issues in dispute between the Lower North Shore and the west coast of Newfoundland has been relatively inactive. In our opinion, this is mainly because we have little resource to work

with to resolve resource sharing issues. With seal, it is different: the resource is abundant, and the quota could be raised as the ultimate short-term solution to problematic issues in the longer term, such as the sharing of groundfish.

Parameters for setting regional allocations

We definitely do not agree with the reference period used in the document entitled *Atlantic Seal Hunt* – 2002 *Management Plan*, and we stress again the relationship between seals and groundfish. Additional pressure has been placed on the crab resource to make up for the lack of groundfish and appropriate access to seals, i.e., the lack of any regional quota.

Many people have said that these issues (groundfish, shellfish, pelagics and seals) should be dealt with separately. But the scientific evidence and the close links between seals and cod make this unrealistic. We firmly believe that the seal file is closely related to the groundfish file and that special attention should be paid to the regions that were the most affected by the groundfish decline.

With respect to the arguments presented in the this brief summary, we wish to stress the need to establish a regional quota on the Lower North Shore. The parameters used to determine the quota level should be based on the impact of the groundfish moratorium and also on the history of our seal fishery. As well, statistics should be updated to adjust for the shortfall in our region and the destruction of a way of life in the Lower North Shore, which was the seal fishery.

We wish to stress again the devastating impact of the moratorium and of the existing management measures, which fail to provide our region with equitable access to seals. We have received no compensation or separate quota that takes into account the difficult ice conditions in our area. The existing statistics will have to be adjusted to cover an appropriate reference period that reflects the development of our fishery at a time when it was permitted under the regulations. Such an approach will also reveal our region's true attachment to the resource. Combining these various parameters could result in an equitable quota for our region.

Our region still has about 200 commercial sealing licences and about the same number of licences for the subsistence hunt. With this number of participants, we believe there is a real potential to develop the sealing industry. At the same time, a number of problems could be solved within the fishing industry, not just for the Lower North Shore, but for the fishers on the west coast of Newfoundland who share virtually the same fishing area.

Recommendations

- 1. Emphasize research at the Department of Fisheries and Oceans to develop a better understanding of the relationships between predatory and prey species (e.g., seal-cod-capelin). Establish a multi-species scientific team to help us improve ecosystem management, i.e., a management model aimed at achieving a better balance among commercial species.
- 2. With the existing figures on seal populations, increase the annual quota to at least 375,000 animals in the harp seal fishery and create an exploratory grey seal quota within a multiyear harvesting plan. Also, transfer the unused portion from the preceding year to the following year.
- 3. Given the differences among the fleets and the favourable periods for hunting or for other authorized harvesting methods, implement a regional quota for the Lower North Shore to resolve the current imbroglio in crab area 13 and in the groundfish fishery in our region.
- 4. Allocate a special budget for experimentation with hunting gear to allow for testing of a trap, or corral, system, to replace our traditional hunting method with nets. This is a crucial project for our region that may make our hunting operations more effective, given the difficult ice conditions in our region in early spring.
- 5. Promote the establishment of seal exclusion zones to protect inshore zones and vulnerable species. Identify the sensitive zones in each area and evaluate the scenarios under which hunting could take place on a regular basis. These activities could be funded through, for example, sentinel fishery projects, to ensure that

public opinion is assuaged through scientific monitoring and a professionally conducted hunt. With exclusion zones, another harvesting method based on an adapted net system could be used.

6. In future, the seal file should be included with the other commercial species (for example, groundfish) with which they have a direct, predator-prey relationship. When treated in isolation, the seal file draws more negative attention from the media, which are unaware of the complexity of the ecosystem and the impact of the harvest by fishers and/or hunters.

Contact: Paul Nadeau, Executive Director

Atlantic Seal Hunt – 2002 Management Plan

12. SEAL LANDINGS BY AREA AND SPECIES - 1992 TO 2001

[Translator's note: For figures, see French original, or page 29 of Atlantic Seal Hunt – 2002 Management Plan]

Species	Yea r	Nfld. Front/ Labrador	Newfound -land Gulf	Cape Breton, N.S., P.E.I.	Magdale n Islands	Quebec North Shore	Persona I Use	Yearly Total
Hooded								
Seals								
Harp								
Seals								
Harbour,								
Bearded								
, Ringed								
Harbour								
Seals								
Ringed								
Seals								
Bearded								
Seals								
Grey								
Seals								
Total All								
Species								

A Response to Department of Fisheries and Oceans (DFO) 2002 Seal Forum

THE ADLER INSTITUTE Janet Russell, Carolyn Walsh and Gail Davoren December 3, 2002

Introduction

On November 14 and 15, 2002 DFO hosted the 2002 Seal Forum at the Fairmont Newfoundland Hotel in St. John's, Newfoundland. The stated objective of the Forum follows:

OBJECTIVE – The purpose of the Seal Forum is to consult with stakeholders and interest groups on the development of a new multi-year seal management plan, based on the report of the Eminent Panel on Seal Management.

Attendance was by invitation only with each invited group permitted to send one participant and a maximum of two observors. The Forum was not open to the public or to the press. Therefore, in our response we aim to do more than simply respond to questions posed at the above Forum. We wish to share the process and our response to it with others and so we will summarize and quote from the Forum materials at greater length than would be required were this only a correspondence between ourselves and DFO.

Invitations to the Forum were sent out a few weeks before the event. An information package was offered to those planning to attend, with the package to be mailed out to registrants in advance of the Forum. The Alder Institute received the above invitation and provided the names and mailing addresses of three people (the authors) who would be attending and wished to receive information packages in advance of the Forum. The information package consisted of one copy of the Report of the Eminent Panel on Seal Management (2001) and one copy of 2002 Seal Forum Info Kit. Only one of the three requested information packages was received. It arrived one week before the Seal Forum itself. The recipient being out of province until just before the Forum, none of the registrants were able to benefit from the package in advance of the Forum. There were numerous complaints voiced by others at the Forum about the lack of time between receiving the background materials and the Forum itself. There were also complaints about the limited distribution among attendees of the materials. Many of those attending found themselves unprepared for full participation and therefore declined to answer many of the questions posed to attendees by the Forum. As a consequence we were given until November 29th to provide written responses to DFO on the Forum. We then requested and received an extension on the deadline to December 3, 2000. Apparently the process is very time constrained with advisors to the Minister required to submit the results of this consultation in early December. While the authors attended the Seal Forum courtesy of the Alder Institute the views expressed here are the authors, and are not necessarily shared by other members or affiliates of the Alder Institute.

Report of the Eminent Panel on Seal Management

The Eminent Panel on Seal Management (Dr. Ian McLaren, Chair, Dr. Solange Brault, Professor John Harwood and Mr. David Vardy) were appointed by the Minister of Fisheries and Oceans and given a Terms of Reference stating the following:

Objectives

To evaluate the current state of scientific knowledge and to provide advice on long-term strategies for management of seal populations in Atlantic Canada;

To develop a strategic harvesting plan for seal populations over a 5-year period.

The Panel was asked to provide the following (which to facilitate discussion we will refer to as "Panel Deliverables" and have attached numbers to):

- -1. An assessment of the available scientific information on dynamics of seal populations and the ecosystems of which they are part;
- -2. If an optimum size of the seal population can be identified, advice on management strategies to attain such an optimum population size;
- -3. Advice on directions for improving scientific knowledge of dynamics of seal populations and the ecosystems of which they are part, to ensure that the scientific basis for seal management is sound;
- -4. Advice on whether and to what extent seal exclusion zones or experimental culls would provide protection to vulnerable local populations of commercial fishes;
- -5. An assessment of all sources of harvest mortality on Atlantic seal stocks including but not restricted to harvests inside and outside Canada and mortality of animals struck and lost;
- -6. Advice on the most appropriate strategic directions for management of seal populations in the context of the above considerations and analyses and in particular for the next five years.

The Panel, in its report (2001) provided the following recommendations for research and management. To aid in discussion we will refer to these as "Panel Recommendations" and have attached numbers to them:

Research

- 1. Funding for seal science in general should be increased and made less dependent on short-term, application-driven sources
- 2. All hooded seal breeding aggregations in the northwest Atlantic should be surveyed from the air as soon as possible. All available information on age structure and reproductive status should be analysed to provide improved estimates of survival and pregnancy rates. These data should then be used to recalculate the TAC for this stock.
- 3. Existing estimates of grey seal pup production and population size should be published as soon as possible.
- 4. DFO should accelerate research on all aspects of high mortalitites of groundfish stocks. Funds for groundfish research could be used to improve estimates of seal consumption, because this is probably a fundamental component of these mortalities. Stock assessment programs for capelin off Newfoundland and in the Gulf should be reinstated, because the abundance and availability of this species is central to an understanding of recent and future changes in the abundance of groundfish and seals.
- 5. Existing information on the movements of satellite-tagged harp, hooded and grey seals should be published as soon as possible. More satellite-tracking of harp and hooded seals is needed to determine if their distribution has changed since the mid-1990s, and to improve the design of seal diet studies.
- 6. Work commissioned by the panel suggests that hooded seals may be consuming large quantities of northern cod in Divisions 2J3KL. However, these results are based on very small sample sizes, particularly in offshore areas, and more samples are urgently required.
- 7. The results of existing work on the use of fatty acid profiles to determine the diet of grey seals should be published as soon as possible.
- 8. Existing data on seal diet should be reanalyzed to determine the most cost-effective way of reducing the large uncertainties associated with current estimates of fish consumption.

 Management
- 9. National and provincial governments should provide consistent and accurate data on their direct and indirect financial support to the sealing industry.
- 10. Management of seals in Atlantic Canada should have explicit objectives. DFO should commission a study to develop a generic set of control rules and Reference Points that could be applied to any of the management scenarios described above.
- 11. Canada and Greenland should cooperate in the conduct of scientific research and in the management of seal species that are common to both jurisdictions.
- 12. The potential benefits of seal exclusion zones should be investigated in a trial involving experienced seal collectors, with appropriate levels of replication. Stomach and blubber samples should be collected from all seals that are shot, and the abundance and distribution of cod should be monitored in experimentally and control areas.

The 2002 Seal Forum Kit provided the following summary 'Issues" each accompanied by one or more questions which those attending the Forum were asked to comment on. We reproduce them verbatim here with numbers to facilitate discussion, followed by our comments.

Control Rules and Reference Points

General Questions on Reference Points

Issue

The Department of Fisheries and Oceans is proposing a new approach to the management of seals in Atlantic Canada (described in Hammill and Stenson 2002 – See document titled: Control Rules and Reference Points). Under this approach, seal management would be based on the concept of identifying Reference Points, which will trigger specific management actions, when these points are reached. Three reference points have been identified ($N_{conservation}$, N_{min} and $N_{critical}$).

Question (#1): Do you agree with the concept of using reference points to manage seals in Atlantic Canada? Why? Why not?

Response: We believe Reference points may have some utility and insurance value if used in a conservative way. However, reference points are proposed to be used with and even to contribute to changes in management objectives (p. 4. Seal Forum Kit "For example, if harp seals were considered to be substantially above $N_{conservation}$ then one management consideration might be to reduce the population to bring it closer to $N_{conservation}$ to favour the recovery of commercially valued fish stocks."). This shifts the practical implications of the reference points from simply points of reference to targets. It also indicates the limited value of reference points discussed in isolation from management objectives. The two must be linked clearly to allow straightforward assessment of what is being proposed.

Using reference points to trigger conservation oriented management reactions that minimize the likelihood that anthropogenic sources of mortality will contribute to further declines in seal populations should undesirable thresholds be crossed is a good idea. For example, a priori agreements with the sealing and fishing industries that directed and incidental killing of seals by these industries be drastically reduced or eliminated if confidence limits on seal population estimates overlap with N_{conservation} would be an example of the above. However, using target points to attempt to manage the seal populations themselves with anthropogenic sources of mortality as a significant structural agent, is not a good idea. We object to a strategy that would allow "riskier" levels of anthropogenic killing to take place in response to seal population estimates that did not overlap with N_{conservation}. We feel reference points may have their place and may serve us well in providing points around which a priori and binding agreements could be made with the sealing and fishing industries to help avert manmade "managed" collapse of seal populations as we have managed to achieve with so many other species we harvest. But we do not wish to see them turned into targets that facilitate the temptation to follow riskier behavior or eco-engineering management style objectives.

We also caution against using reference points to manage seals in Atlantic Canada unless accurate and precise population estimates are available and when a clear knowledge of demographic parameters at the different reference levels is available (e.g. life tables under different population levels). Unfortunately, We do not see any evidence of clear knowledge for either; therefore, we are concerned that these scenarios may be purely hypothetical and potentially absurd for management purposes.

Question (#2): In a 'Data Poor' situation would you prefer that a seal population be managed by automatically moving to one or two reference point levels lower or would you suggest that in a 'Data Poor' situation harvest decisions would be based using a Potential Biological Removal (PBR) approach?

Response: In a "Data Poor" situation, ideally we would prefer that a seal population is NOT managed until accurate and precise knowledge of population size and demographic parameters (i.e. birth and death rates) are elucidated. Harvest decisions based on the PBR approach, however, seem like an appropriate approach, where the more years away from the survey the more the population estimates are treated as uncertain.

Again, we reiterate that if the parameters included in the PBR model are not well known or unreliable, no harvest should occur until further data are collected **unless rules of thumb can be developed based on a minimally realistic understanding of the ecological rules that govern the potential for our actions to undermine the sustainability of both the seal population and our harvesting practices.** We are unaware of any discussions or studies at the present time that are addressing the type of qualitative qualification (in bold above) of what has so far been a purely quantitative approach to fisheries and seal management. Therefore, we make this suggestion to raise the topic, not to suggest that such an option has been developed and put on the table.

Harp Seal Management Scenarios

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Briefly, "Conservation reference points are intended to constrain harvesting within safe biological limits for both the target species and other components within the ecosystem, while target reference points are intended to meet management objectives (ICES 2001)." (Please refer to the document titled Control Rules and Reference Points and the tables provided). The Department of Fisheries and Oceans has produced two sets of Reference Points: "Conservation" and "Fisheries" based on the present known maximum population of 5.2 million harp seals.

Question (#3): Do you prefer the "Conservation" or the "Fisheries" Reference Points model? Why? **Response:** At this time we do not feel that we have an adequate understanding of the differences between these two options to select one over the other.

We note an unfortunate consequence of the use of the language "Conservation" vs "Fisheries" for labeling the two options here. At the Seal Forum and within the discussion group of which we were a witness we feel that most people in the room, including ourselves, did not have an adequate understanding of the question to answer it. Many did answer it however and it is our opinion that they answered based on the psychology of the labeling. People identifying themselves as being part of the Fisheries industry simply selected the option labeled as such. We object to the use by DFO of answers collected under such circumstances as justifications for any decisions. As an exercise in collecting informed response to the questions posed, the Seal Forum, in our opinion, was a farce.

Again, we caution against approaches that specifically rely on accurate and precise population estimates that cannot be collected. This is the problem with most single-species stock assessment models to date and has likely contributed to the FAO finding that ½ of the commercial exploited fish species around the globe are fully exploited, ¼ are overexploited and only ¼ have the potential to increase. We have a need for new management approaches or we will sustain the long-term declines in commercially exploited fish species (Dr. Kullenberg, Plenary Lecture, ICES Centenary Conference, Copenhagen, Denmark, October 2002). We should learn from our history of exploiting marine resources that we need to incorporate a multi-age structured population model and a precautionary approach to exploitation if we are to continue a sustained yield over the long-term.

Because there is a lot of information available on harp seal abundance and other vital rate parameters, harp seals would be managed under a 'Data Rich' scenario.

Question (#4): Do you have any suggestions for other reference points that should be used? **Response:** We have several suggestions for other potential reference points that would inform decisions concerning management of human-induced mortality and human consumption of seals. These include:

- Toxicology of animals
- Age structure of the population
- Age at first maturity (sexual maturity)
- Whether or not harvest is conducted humanely
- Whether or not the killing of animals is conducted within a climate of hatred towards seals

We are unable to elaborate here as to how such references can be operationalized. We simply point out the need to consider these other factors in managing how we get to kill seals and how many we are allowed to kill. For example, a climate of hatred towards seals is a potentially strong influence over the number of

seals killed and not landed (struck and lost) as well as on how humanely seals are killed. These things have direct and indirect effects on fisheries bycatch of seals, the level of informal culling that coastal residents may engage in and the overall conduct of the sealing industry as well as on how that industry is perceived by others. We feel that the potential to develop and sustain socioeconomic benefits for Canadians from the harvest of seals is very strongly influenced by the attitude that we as a people have towards seals in general and more specifically the attitude that sealers have towards the privilege they currently have to harvest seals.

Question (#5): Are there more specific control rules (management measures) that you would like to see at any reference point level?

Response: If the population were to drop from Ncons to Nmin, the harvest should be stopped completely to allow the population to recover. Otherwise, we may inadvertently drive the population below Ncritical, at which point a population may be too low to recover. Considerations, such as the Allee Effect (or "depensation" in fisheries literature), should be considered prior to the decline in a population. For instance, are we sure that we can even define Ncritical, or the population size below which the population will not recover and will continue along an extinction trajectory until all individuals are gone? If so, we would like to see a clear definition of this population estimate and how it was determined (e.g. based on history of other natural seal populations?). The reason we bring this up is because we are unaware that this has been defined for populations other than those that are overexploited and not recovering and those species that have become extinct or locally extirpated from a region. Without this knowledge or at least careful consideration and explanation, discussion of these reference points becomes purely hypothetical/academic and potentially misleading.

Seal Panel Management Scenarios (Please refer to the Seal Panel Report and the tables provided).

Question (#6): Which Management Scenario for harp seals do you prefer and why?

Response: In the current highly politicized and controversial climate within which our sealing industry is operating we recommend adoption of the most conservative scenario suggested, which is the use of PBR. The DFO resource person in our discussion group indicated PBR as the most robust strategy to select for the long-term, delivering the most reliable stable access to the resource by industry and requiring the least intensive capital investment by management (Stenson, pers com). It seems obvious that DFO marine mammal science is hampered by a lack of funding and so even though harp seals have been judged as data rich we suggest that until we have advanced more in the development of a sustainable approach and countered the climate of anti-seal sentiment that exists, that we adopt the most conservative harvesting strategy put forward as an interim measure. Our understanding from the Seal Forum was that PBR would allow for total removals of roughly 312,000 and a current TAC of roughly 100,000. We feel that the industry would benefit from more focus on how to maximize the socioeconomic benefits derived from each seal killed rather than the current focus on high TACs which may or may not be sustainable or good for the industry in the long term.

Question (#7): Which management scenario proposed by the Seal Panel would be your second choice and why?

Response: Our second choice would be the Status Quo as it atleast allows for a controllable TAC. In contrast, Scenario 2 could lead to a free-for-all, when no limits to the catch are given. Similarly, Scenarios 3 and 4 are uncalled for both in principal and based on what we know of harp seal diets, especially in the context of the level of cod cannibalism. Here, we wish to quote from the Panel Report (see below) whose modeling exercises indicate that if a large set of assumptions that they make are correct (and this is a big if) very large numbers of seals would have to be removed in order to have any positive impact on the recovery of cod stocks.

Quote from Panel

"Extrapolation of the calculated reduction in removals to provide an estimate of the potential benefit to groundfish fisheries requires a large number of assumptions... Recovery of northern cod will only occur when a number of large year classes have appeared and have been recruited to the spawning stock. Seal numbers are unlikely to have much effect on the probability that the first of these events will occur, but they may affect the probability that when such an event does occur those year classes will recruit to the breeding populatin. That is, a very strong year class will be able to escape from any predator pit, but a moderate year class my not. However, most of the culls described above will only reduce the quantity of cod consumed by harp seals by around 10%. Much larger culls may be required if the objective is to "rescue" cod from such a pit." (p. 88-89 Panel Report)

We wish to stress that this prediction on the part of the Panel is based on a large set of assumptions which we do not judge as minimally realistic or representative of an ecological approach to managing human induced mortality on seals. Taking the eco-engineering approach (which DFO and the Panel seem willing to entertain) we could just as easily be looking at other species, as well as seals, that might be hindering the recovery of cod (e.g. jellyfish, herring, cod themselves). As we have learned through the effective elimination of Atlantic cod from the Northwest Atlantic, ecosystems are perhaps better understood as in dynamic equilibrium with the potential to shift between a number of functional stable states. It is possible that we have undergone a regime shift in the Northwest Atlantic, both through physical forcing (coldest year on record in 1991), destruction of bottom habitat and overfishing of cod. The altered stable state appears to be favourable for the exploitation of invertebrates (e.g. crab, shrimp) and we may have to accept that it is possible we will never shift back to a groundfish-dominated ecosystem state, even if all seals were eliminated.

It is important to remember that by removing seals we not only remove the direct predation on cod that those seals engaged in, we also remove their predation on everything else that they ate and however large their consumption of cod is painted, they eat much more of most everything else than of cod. The release of that predation will accompany any release of seal predation on cod achieved by reducing the seal population. The structural influence of the removal of for example, predation on arctic cod by seals, could have the indirect effect of increasing the population of arctic cod which compete with northern cod as juveniles and may or may not yield the desired effect of reducing overall mortality of cod or boosting recruitment into the spawning biomass by young cod. The Panel does not mention such indirect effects, nor others such as the virtual elimination of large historical sources of predation on cod by species like Hake and Skate which were once much more abundant in our waters than at present. The only indirect effects that the Panel alludes to are those linked with direct predation on cod by other prey of seals.

We take issue with the Panel's contribution to the potential misconception that cod are in fact caught in a predator pit from which we could release them by killing seals. Depensation may or may not be happening. Even if it is though, depensation is not synonymous with a "predator pit". We feel that the discussion of cod ecology is unhealthily focused on predation on cod by seals. Our concern is that this is a political and psychological trap into which we continue to fall by "blaming" seals for the low number of cod.

Question (#8): Which scenario(s) do you not like at all and why?

Response: We reject outright management scenarios 4 and 5. In terms of managing sealing for the long-term socio-economic benefit of Canadians, it simply is not practical to increase the TAC temporarily to absorb a management objective of reducing the seal population. Any other form of killing would be unacceptable. For the longterm health of the industry alone, we advise against using the TAC as a front for what would be a cull. We make a significant distinction between the allowable killing of a limited number of seals for socioeconomic benefits to coastal people versus a cull that would have eco-engineering objectives as the principal motivation. Neither do we judge that we are competent to manage our killing of seals to optimize the configuration of the ecosystem or the part of it focused on at present, namely cod. We feel that the only realistic objective for our management of seals is to manage our own killing of seals such that it is kept at a level low enough to ensure that it is not the principal factor influencing seal population dynamics. Only in this way do we feel can we develop a sealing industry that is decent and sustainable and of which Canadians can be proud.

Question (#9): Are there any other management scenarios that you would like to have considered? Please describe.

Response: A shift from managing the number of seals to managing our influence on the number of seals. The objective would be to keep our influence on a scale that would not make of it the most important factor influencing the number of seals. We would also wish to add to this, a management of the climate within which seals are harvested such that education efforts are increased substantially to ensure that harvesters have a respect for seals and an ecological perspective on the role of seals in our environment.

Hooded Seal Management Scenarios

Issue

The Department of Fisheries and Oceans has produced "Conservation" Reference Points model and a "Potential Biological Removal (PBR)" model. (Please refer to the document titled Control Rules and Reference Points and the tables provided). There have only been two hooded seal surveys, and the last survey was in 1990. Furthermore, other vital parameter data are limited.

Question (#10): Would you agree that hooded seals should be considered as a 'Data Poor' situation? Response: Agreed.

Question (#11): In a 'Data Poor' situation would you prefer that hooded seals be managed by automatically moving to one or two reference point levels lower or would you suggest that harvest decisions would be established using a Potential Biological Removal (PBR) approach?

Response: According to the Panel Report:

"The lack of a reliable estimate of the current size of the Northwest Atlantic hooded seal population, or of natural mortality rates in this population, make it impossible to provide any specific management advice. As noted in section 2.6.2, the Replacement Yield in 1990 for this population was probably in the range of 12,000 to 57,000. Average annual removals, taking account of animals struck and lost, have averaged around 23,000 since 1993 and may therefore have exceeded the Replacement Yield." (emphasis ours).

We feel ill equipped to compare the options offered except to note that as noted in the Seal Forum Kit, if one applied the U.S. Marine Mammal Protection Act use of PBR to hooded seals at the moment no harvest would be permitted since it is over ten years since the last survey. Given what the Panel points out about our level of understanding concerning population dynamics combined with recent harvest levels that may have exceeded Replacement Yield we feel comfortable with supporting the absence of a harvest until such time as there is a new survey with which to update the population estimate.

Question (#12): Do you have any suggestions for other reference points that should be used? **Response:** See Question (#4) above.

Question (#13): Are there more specific control rules (management measures) that you would like to see at any reference point level?

Response: See Question (#5) above.

Grev Seal Management Scenarios

Issue

The Department of Fisheries and Oceans has produced two sets of Reference Points for grey seals: "Conservation" and "Potential Biological Removal (PBR)". (Please refer to the document titled Control Rules and Reference Points and the tables provided). Grey seal abundance was last evaluated in 1997. Unlike hooded seals, several earlier abundance estimates are available along with some vital rate data. Since the last survey was 5 years ago it has been proposed that grey seals be classified as 'Data Poor', although another survey would likely be sufficient to reclassify grey seals as 'Data Rich'.

Question (#14): Would you agree with grey seals being classified as 'Data Poor', but could be readily reclassed as 'Data Rich' with a new survey?

Response: We are comfortable supporting the classification of grey seals as 'Data Poor'. We are unclear as to the criteria for moving from a classification of 'Data Poor' to 'Data Rich' and our current understanding is that this is an arbitrary shift in classification. We are therefore, not comfortable supporting the change of category at this juncture without knowing 1. the criteria by which such a shift is made and 2. the consequences to management of being classified as one or the other.

Question (#15): In a 'Data Poor' situation would you prefer that grey seals be managed by automatically moving to one or two reference point levels lower than they would have been based on the results of the 1997 surveys, or would you suggest that harvest decisions would be established using a Potential Biological Removal (PBR) approach?

Response: We feel that the question is not posed with enough information to compare the options offered. For example, no management objective is specified and therefore the meaning of the reference points is not clear.

Question (#16): Do you have any suggestions for other reference points that should be used? **Response:** See Question (#4)

Question (#17): Are there more specific control rules (management measures) that you would like to see at any reference point level?

Response: See Question (#5)

Question (#18): How should any control rules (management measures) distinguish between the different components of the grey seal herd (e.g., gulf of St. Lawrence and Sable Island?)

Response: Since we are opposed in principal to applying management measures that would have as their objective a "target" population level that we would attempt to control independent of our interest in killing seals to harvest them as a natural resource we would not advocate having different management measures for different seal stocks, unless it was a reaction to an increased need for their conservation. Since the Gulf herd is assessed as declining while the Sable population is increasing there could be an argument were there a commercial harvest of grey seals to reduce the take from the Gulf herd. Since there is no commercial hunt for grey seals the question seems irrelevant unless one is talking about managing seals rather than managing our killing of seals. We are opposed to the management of seal numbers, rather we advocate the management of our influence over these numbers. In the absence of a consumptive interest on our part in killing seals and assuming that other sources of human induced mortality in the case of the Gulf herd are already at a minimum there is nothing in our opinion for us to manage about the grey seal herd. The principle question we would have is why the Gulf herd is declining and if it has anything to do with human induced mortality.

Seal Panel Management Scenarios

(Please refer to the Seal Panel Report and the tables provided).

Question (#19): Which Management Scenario for grey seals do you prefer and why?

Response: See Question (#18). We have selected PBR throughout this set of questions as an interim management approach that seems relatively safe with regard to conservation of the resource and that could bring benefits to the sealing industry for the longterm as a consequence of it's greater likelihood of providing sustainable levels of harvesting opportunities that client relationships can be built on for the longterm. We believe that a hunt based on smaller harvest levels than present has greater potential to achieve more consistently humane harvesting practices and develop into a decent industry. Such an industry would maximize the chances for socio-economic benefits to accrue from our predation on seals while minimizing the controversy that currently surrounds the seal hunt.

Question (#20): Which management scenario proposed by the Seal Panel would be your second choice and why?

Response: See Question (#7).

Question (#21): Which scenario(s) do you not like at all and why?

Response: See Question (#8).

Question (#22): Are there any other management scenarios that you would like to have considered? Please describe.

Response: See Question (#9).

Seal Exclusion Zones

Question (#23): Are seal exclusion zones needed?

Response: If seal exclusion zones are needed to save northern cod, then northern cod are already lost. From this perspective it is absurd to ask if seal exclusion zones are needed.

Question (#24): Do you have concerns about the benefits and costs of seal exclusion zones?

Response: Most definitely we have concerns. We feel that the potential benefits are unpredictable and unmeasurable leaving us nothing but conjecture both before and after attempting such measures. The costs of most concern to us are the indirect costs of furthering a management trajectory that is driven by mob psychology and a willingess to play God with wild species interactions. While the mob psychology of blaming seals for the current poor state of northern cod is understandable and we empathize with people whose livelihoods appear to them to be threatened by seals, we caution that this is akin to hysterical grasping at straws to save oneself from what is indeed a distressing situation. We caution against blaming seals for our current woe over groundfish. Seals are only the most visible predator of fish; not the only predator and not necessarily the most significant predator. Our competence in the marine environment is just too limited for us to support any management efforts that presume to know how to fix anything by taking actions that are themselves fraught with the potential for destruction. Killing seals to save fish is such an action. We are concerned that by encouraging this kind of reaction to assuage our distress over cod we pay less attention to other more relevant areas of enquiry and potential. For example, why not put a moratorium on any further destruction of bottom habitat by fishing gear? If we are so concerned about the current status of cod why are we not asking more questions about the level of bycatch in other fisheries and how to reduce it? Why are we not asking questions about the age structure of that bycatch and how comparing amounts of fish biomass killed by fisheries compared to seals makes a mockery of ecology? Why are we comfortable creating brand new fisheries using bottom trawls for things like sea cucumbers?

Question (#25): If seal exclusion zones are established, how should decisions be made on the establishment and continuation of any zone?

Response: Decisions of seal exclusion zones should be based on specific information on the distribution of seals in relation to cod aggregations and then on seal diets within these areas.

Question (#26): If anywhere, where would you favour the establishment of seal exclusion zones, i.e., fiord-like areas, inshore, offshore, or specific areas where cod over-winter or spawn? Please specify any area where you believe there should be such a zone. Please also indicate if you are concerned about the creation of any zone in areas near communities, etc.

Response: We refer you to the Panel Report: "The establishment of exclusion zones to protect overwintering aggregations of cod from harp seals is probably feasible only in fjord-like environments like Smith Sound in eastern Newfoundland."

Question (#27): If established, during what period or season should a seal exclusion zone be in effect?

Response: None.

Question (#28): If established, who should be allowed to hunt seals within a seal exclusion zone -a specially trained team or licensed professional seal hunters?

Response: If the exercise is pursued as the "experiment" complete with appropriate levels of replication and controls (however unrealistic this is) that the Panel recommended then there is no choice but to use specially trained and scientifically supervised teams to ensure that the chosen methodology is internally consistent and replicable. While such a team could be recruited from the ranks of licensed professional seal hunters it is their training and supervision for the specific exercise that would be of paramount importance not whether or not they were seal hunters or not.

Question (#29): Given that DFO has no current funding for any seal exclusion zone program, do you have any ideas on how any new seal exclusion program could be financed?

Response: No.

Question (#30): Should there be a limit or quota on the number of seals hunted within a seal exclusion area and should those seals be sold to processors or just collected for diet research?

Response: Since the use of exclusion zones has only been recommended by the Panel under experimentally designed circumstances the number of seals to be excluded from an area is a question of experimental design that is not answerable here. We seriously doubt whether it is honestly answerable at all.

Question (#31): The Marine Mammal Regulations limit hunting methods to the use of clubs, hakapiks and firearms with minimum requirements as prescribed in those regulations. Do you believe that any other humane-harvesting method should be looked at for use in any seal exclusion zone? If so, which method?

Response: Methods not currently deemed acceptable for use by commercial sealers should not be considered for use in any seal exclusion zone pseudo-experiments. We object to the use of lethal means for such an exercise at all and suggest that before stooping to killing seals in such an exercise that the use of other means of excluding seals from the targeted fiord be exhausted first.

Question (#32): How should DFO assess the effectiveness and impacts of any seal exclusion zone?

Response: We find it difficult to imagine how this could feasibly be done, but suggest that if DFO thinks it has developed a convincing methodology to do it that the proposed methods be subjected to peer review in a scientific publication before being approved.

The Blueback Issue

Issue

Revoke the current prohibition under the Marine Mammal Regulation (Section 27) on the sale of bluebacks and protect younger hooded seals by closing this harvest until the animals have been weaned.

Question (#33): Do you agree or disagree with this proposal? What is the basis for your views?

Response: We do not in principal object to the killing of young of the year seals. We do object to killing unweaned seals. The current prohibition on the sale of bluebacks deters sealers from killing hooded seals until they have moulted in their second year. While the use of the moult as the threshold distinguishing seals that may be commercially harvested from those that may not has the advantage of being relatively easy to interpret, it has the disadvantage of being unfair when compared to the harp seal situation in which the seals moult at a much younger age. We would prefer that the prohibition be based on the ecology of the harvest rather than the most convenient way to define what a 'baby' is. If a baby is defined as an unweaned seal and it is the killing of baby seals that we wish to avoid then there would seem to be room to lift the

prohibition on killing bluebacks once weaned. The devil as they say is in the details. We do not have sufficient background information on the logistics of the hooded seal hunt and breeding behavior of hooded seals and whelping patch scenarios to fully consider the potential implications that lifting the ban would have. We wish that a fuller discussion of the practical issues would have taken place at the Seal Forum which was attended by many sealers with first hand experience of the logistics peculiar to this hunt. We request that such a detailed discussion be developed in public forum before a final decision is taken. In principal though, we do not object to the lifting of a ban on the commercial harvest of weaned hooded seals that are still in their first year of life. We caution though that such a regulatory change be pursued with careful attention to the details of implications regarding the behavior of sealers in hooded seal whelping patches.

Hooded seals are weaned and independent within a few days, but are provided with protection for at least 16 months, when they shed their blue coat.

Question (#34): Do you believe there is a reason why this extended protection should remain in place or not? Please indicate your reasons.

Response: See our response to Question (#33)

The blueback pelt is a valuable product that the industry would like to be able to process.

Question (#35): Do you support or do you not support industry's wish to access the valuable market for this product? Please indicate your reasons.

Response: It is easy to see why sealers would wish to access a valuable market currently not available to them. Whether they should be able to or not is a different question that is more complex.

Younger hooded seals could be protected by closures until the vast majority of animals has been weaned.

Question (#36): Do you support or not support this approach? Please indicate your reasons. If not, do you disagree with the approach entirely, or do you have another suggestion?

Response: Time and area closures would seem to be absolutely an essential and central ingredient in the regulation of any blueback hunt. We would support this approach provided it was honestly practical to conduct a humane hunt without undue disturbance to the whelping patch and that the execution of the hunt be closely monitored.

The Eminent Panel considered that a blueback hunt could be undertaken provided a new population survey for hooded seals showed that there would not be a conservation concern.

Question (#37): Do you agree or disagree with the Eminent Panel that a blueback hunt could be allowed provided a new population assessment was done and showed that such a hunt would be sustainable? Please indicate your reasons.

Response: We agree, with the caveats expressed elsewhere in our responses to questions above.



International Fund for Animal Welfare Fonds international pour la protection des animaux

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November 29, 2002

Grace Mellano
Fisheries Resource Management Officer
Resource Management – Atlantic
Department of Fisheries & Oceans
200 Kent St.
Ottawa K1A 0E6

Dear Ms. Mellano,

Attached please find the International Fund for Animal Welfare's submission on the 2002 Soul Forum.

As we indicated in our statements at the Forum, we question the very legitimacy of this consultation. Given the Minister's repeated public statements — made well in advance of the Forum — on the likely size of the 2003 harp seal Total Allowable Catch, given the systematic exclusion of animal welfare organizations from participation in the Forum, and given the selective agenda of the Forum itself, it would seem that the Forum was meant to provide justification for decisions that have already been taken.

It is time for the government to begin to manage the commercial seal hunt on behalf of all Canadians, consistent with Canadians' values.

Simply put, if this hunt is going to occur, Canadians expect it to be sustainable and humane. The government's recent statements – including your own e-mails to groups that were excluded from the Seal Forum – dismissing criticisms of government sealing policy as being motivated primarily by the desire of animal welfare groups to raise money are not only patently false, they betray a complete disregard for public opinion.

I would suggest that a necessary precursor to moving the management of Canada's commercial seal hunt into the 21st Century is the Department's acknowledgement of the sincerity of its critics, and the validity of their arguments.

Sincerely,

Richard J. Smith, Ph.D. National Director

encl.

cc David Bevan

Autralia/Auseralie-Belgium/Belgique Cetuelis China/Chine East Africa/Afrique Orientale france Germani/Allemagne Memini/Memique Norberlands/Peys-Ris

Roma/Roma Seath Africa/Mraper do Sud United Kongdom/Royanne-Uni United Status/Euro-Unit

International Fund for Animal Welfare

Comments on DFO's "2002 Seal Forum"

Summary

- In order to comply with its statutory mandate to implement a precautionary approach to management, the government must institute a truly risk-averse management regime for all seal species, across all population levels. Two examples of such models (and certainly not the only possibilities) are the Potential Biological Removals (PBR) approach developed in the United States and the revised management procedure of the International Whaling Commission. The other possible management options presented at the Seal Forum do not constitute precautionary approaches.
- Under no circumstances should the government proceed with the
 implementation of seal exclusion zones -- which are more properly termed
 "species cleansing zones". The establishment of such zones would be
 impossible to implement, impossible to manage, impossible to evaluate, and
 impossible for the government to defend both within Canada and on the world
 stage.
- Under no circumstances should the government proceed with revoking the 15-year old prohibition on the commercial killing of baby hooded seals. The best arguments in favour of retaining this prohibition were articulated by Justice Department lawyers arguing the Ward case in the Supreme Court of Newfoundland, the Newfoundland Court of Appeal, and the Supreme Court of Canada.

Comments

IFAW is not an "animal rights" group.

For the record, please note that IFAW is an animal welfare organization, concerned with the welfare of individual animals and their wild populations. It is not an "animal rights" group and we object to such characterization by DFO, most recently at the forum. In future, if DFO insists on characterizing IFAW, we would request that it use correct terminology.

The forum did not address the government's stated objective for the seal hunt.

The stated objective of the Seal Forum was "to consult with stakeholders on the development of a new multi-year seal management plan, based on the report of the Eminent Panel on Seal Management" (DFO 2002, p.1).

In other words, the meeting was about management. Management, of course, is part of the political process; it deals with societal values, attitudes and objectives. Science and scientists normally play a peripheral role in the process (Doern 1981).

Regardless, in order to evaluate and comment upon any proposed new management plan, it is necessary to know the government's objective(s) for the seal hunt. As the Eminent Panel recommended (Anon 2002, ix):

"Management of seals in Atlantic Canada should have explicit objectives."

This recommendation was overlooked in the documentation provided to participants in the Seal Forum. No information was provided on the government's management objectives for Canada's seal hunt, or more generally, for all seals in Atlantic Canada. As a consequence, most of the discussions, and our responses to it, are largely "academic."

In a bizarre twist, however, some individuals who were denied the opportunity to participate in the Forum were actually provided with a statement purported to be the government's management objective. In an email dated 6 November 2002, Grace Mellano, Resource Management Officer, DFO, Ottawa, states:

"The government's objective is to gain the maximum socioeconomic benefits for Canadians in general, and for those who depend directly on the resource in particular."

If this really were the objective for the seal hunt (statements by the Minister in recent months would, however, suggest otherwise), then we would have further evidence that the forum was, and remains, a "smoke and mirrors" exercise. Its agenda, and the so-called management options it presents, do not attempt to address any socio-economic benefits, either for Canadians or for those who depend directly on the resource. Even the Eminent Panel was unable to obtain reliable information on the value of the sealing industry and noted that "data are somewhat imprecise and sometimes lacking in consistency." And nowhere has the government attempted – to our knowledge – to examine the socioeconomic benefits for "Canadians in general," the ignored government "client" in this exercise.

No updated information on current status of seal populations.

The forum was not provided with updated information on the status of the harp seal population, trends in numbers and or in pup production, or with revised estimates of replacement yield for the Canadian hunt.

According to the most recent published information (Healey and Stenson 2000), the harp seal population numbered about 5.2 million in 2000, and was declining at about 0.7% per year (not significantly different from stationary, but certainly not increasing as virtually every government and industry commentator seems to think). The replacement yield was estimated to be 257,000. DFO scientist, Dr Garry Stenson, confirmed to us at the Forum that more recent numbers are not available.

Without information on current status, it is difficult to evaluate in any meaningful way the effects of recent hunts, or proposed management actions, on the current and future status of seal populations.

4. The 2002 hunt was - by definition - a cull

Based on the above information, the 2002 TAC (275,000) was set above the estimated "replacement yield" (257,000) — the number of animals that can be removed from the population without causing it to decline (the government's "benchmark for sustainability" in recent years, e.g. Fisheries and Oceans 2002).

By late April, 2002, however, the entire TAC had been landed. But rather than stop the already unsustainable killing, which would have been the expected response in a hunt the government has described as "tightly regulated" and "well managed," it was allowed to continue.

Then, as the scheduled closing date of the hunt (15 May) approached, the minister extended it to 30 May. He did this with the knowledge that the landed catch was already more than 25,000 higher than the TAC, more than 40,000 higher than the replacement yield. Government figures indicate that the landed catch for Canada's 2002 hunt exceeded 307,000 harp seals.

The same harp seal population was then hunted off West Greenland throughout the summer of 2002. If recent trends are anything to go by, that highly subsidized and unregulated hunt will have once again landed more than 100,000 harp and another 100,000 or so will have been "struck and lost." Total removals of Northwest Atlantic harp seals by hunting alone in 2002 will likely exceed 580,000 animals.

Such massive and unregulated killing makes a mockery of Canada's claims that the harp seal hunt is carefully "managed" and "sustainable," and that management decisions are based on the best available science, in accordance with modern conservation principles, such as the precautionary approach (see Canada's Oceans Act).

5. A policy in search of justification

Since the end of the 2002 seal hunt, the minister of fisheries has repeatedly stated that he would like to increase the size of Canada's seal hunt even further. He has also indicated that he would like the "flexibility" (such as that employed in 2002) to ignore established quotas and closing dates whenever the mood strikes.

Consistently, the Canadian Sealers Association has called for an increase in the harp seal quota to something approaching 350,000 harp seals.

Both the Minister and the Canadian Sealers Association obviously want to increase the size of the 2003 cull, with the implicit aim of reducing the size of the harp seal population. The problem is, there is no existing science that could be used to justify such an increase in quota at this time.

With that as background, let's move on the section on Control Rules and Reference Points.

6. Control Rules and Reference Points

Normally, a management authority would establish an objective, or objectives, and then ask the relevant experts – scientists, economists, etc. – to examine options for achieving the objective(s).

In the present case, the government has established a socio-economic objective (see above) and then asked its scientists to provide a series of management actions to achieve (in theory, at least) a number of biological (or ecological) objectives, including a reduction in the size of the harp seal population. Of course, this approach would be entirely illogical except for the fact that, clearly, the government is searching for a scientific justification for a predetermined objective (namely, increasing the numbers of harp seals killed, irrespective of the economic or ecological implications of such an objective). One cannot, therefore, take this entire exercise very seriously.

For instance, if the government wanted to implement a precautionary approach to the management of the seal hunt, the tools are available. Two examples are the Potential Biological Removals (PBR) approach developed in the United States (e.g. Johnston et al. 2000, Hammill and Stenson 2002, Table 1, Option 3), and the revised management procedure of the International Whaling Commission (e.g. Cooke 1995). Certainly, in the case of the US scheme, there is sufficient flexibility for dealing with different management objectives, different degrees of

uncertainty in the available data, and differing levels of risk that managers might be willing to accept. Further, the approach is transparent, relatively simple and straightforward to apply, and truly precautionary (Johnston et al. 2000).

The PBR option (3) was rejected because – according to Hammill and Stenson – the "scenario [is] not applicable in [a] data rich situation." That conclusion is not based on any analysis that we are familiar with. In fact, the Eminent Panel did some calculations and examined the implications of applying the PBR approach to Northwest harp seals. It seems clear that the rejection of this approach by DFO was necessitated by the government's a priori objective of increasing the size of the seal hunt. In short, application of the PBR approach would require a reduction in the quota (Anon. 2002) rather than the desired increase.

We do not have the time (or indeed the enthusiasm) to examine the other four management options provided by Hammill and Stenson (2002). These options obviously follow from "a number of different management scenarios" discussed in the Eminent Panel Report. Of course, the Eminent Panel did not have the mandate to examine all possible management scenarios and, as such, their offered list not only reflects a limited set of values; it is also quite arbitrary.

Regardless, Hammill and Stenson (2002) apparently were asked to implement – well, sort of – the second management recommendation of the Eminent Panel (2002, p. ix): that "DFO should commission a study to develop a generic set of control rules and Reference Points that could be applied to any of the management scenario described above."

Of course, the first part of that recommendation – that "Management of seals in Atlantic Canada should have explicit objectives" – was overlooked entirely. And what Hammill and Stenson present – likely because of time constraints and limited budgets – is not a proper scientific "study" aimed at developing a generic set of control rules and reference points, but rather an entirely arbitrary, value-laden framework that a naïve reader might be fooled into thinking actually represents what a conservation biologist would call a "precautionary approach to management. Needless to say, it does not.

Some of our other concerns include:

- Option 1 (Table 1) is not, in fact, the "Status Quo." The status quo (using the 2002 hunt as the reference point) is of course Option 4.
- All the reference points are arbitrary.
- The lower bounds on exploitation (the point when all removals are stopped)
 are set at levels that deny the last 30 years of research in conservation
 science. Compare them for example with limits established by the IWC New
 Management Procedure in the 1970s, and the Revised Management

Procedure of the 1990s. Compare them with the usual criteria for classifying populations as depleted, e.g. Optimum Sustainable Population size under US law.

- Another weakness in the government approach is somewhat unintentionally identified by Hammill and Stenson (2002, p. 3): "In order to determine sustainable levels of removals, current estimates of fecundity, mortality and abundance are needed. If these are not available the uncertainty associated with any management action will increase significantly...." The fact of the matter is that the government does not have estimates of natural mortality for harp seals or, for that matter, any other species of seal in Canadian waters. Inconsistently, this lack of information does not stop DFO from classifying harp seals as "data rich."
- Besides the obvious uncertainty about natural mortality rates in harp seals, the management options do not take into account environmental uncertainty associated with climate change in the Gulf of St. Lawrence in recent years. Lack of ice in the Gulf over the past 5 years or so has had unknown effects on the breeding success of harp (and other) seals, and Environment Canada has recently predicted another warmer than normal winter this year.
- Exacerbating that situation is the fact that we do not know whether harp seals
 breeding in the Gulf and on the Front constitute two reproductively isolated
 stocks or a single interbreeding stock. Currently, quotas are allocated at will
 between the two regions under the implicit assumption that we are dealing
 with a single stock. If the two stocks are indeed somewhat isolated, we could
 have a situation where the Gulf stock is declining because of climate change
 and reproductive failure, and the Front stock is being grossly overhunted
 because most of the quota (estimated for the two possible stocks combined)
 is being removed from one.
- The power of the government harp seal management model is sufficiently low that it would take many years and a considerable decline in numbers before any change would likely be detected.
- There has been much talk over the past year about the need for flexibility and the desire by some to transfer quotas not only between regions but also between years. We suspect that the latter is what DFO had in mind when it convened a forum to discuss a "multi-year management plan." In this regard, it is important to note that no scientific analyses have been presented that could be used to justify or inform a decision to transfer quotas among years. As a consequence, TACs based on scientific assessments can only be set annually with no transfer of quotas among years. Consequently, it seems pointless for the government to lock itself into a "multi-year management plan," which could only have a constant annual TAC for the duration of the plan. Transferring quotas from one year to the next cannot be justified on the

basis of existing scientific information and the practice should be stopped immediately until we can evaluate the likely consequences for the population.

7. Seal Exclusion Zones

This discussion is reminiscent of the predator eradication programs of the early 1900s that depleted and extirpated terrestrial predators in the continental United States. That anyone, including the Eminent Panel, could take such a preposterous recommendation seriously is beyond us. The establishment of seal exclusion zones would be impossible to implement, impossible to manage, impossible to evaluate, and impossible for Canada to defend on the world stage. Further, after examining this proposal, the Eminent Panel was not convinced that lethal removal of seals would afford significant protection of overwintering aggregations of northern cod. The Panel's recommendation to investigate non-lethal methods to deter seals from these zones does not appear to be under consideration by the department. As we have said repeatedly, we oppose any move to establish seal exclusion zones.

8. Bluebacks

We wonder how many more times DFO is going to ask for comments on this proposal. In February, 2002, the Supreme Court of Canada upheld a ruling that protects bluebacks from being hunted. Ironically, it was DFO (with IFAW as an intervenor) that argued the merits of the blueback hunting ban through three levels of the Canadian court system.

The question of whether or not to hunt bluebacks is a question of values (or attitudes), or objectives. As the Royal Commission on Seals and Sealing – and later, the Government of Canada – recognized years ago, the killing of whitecoated harp seal pups and blueback hooded seal pups is "abhorrent" to Canadians and to the world at large. That should be the end of the discussion.

If the hunting of bluebacks were now to be permitted, nursing bluebacks under the age of four days will be hunted. Because of the "lookalike" problem (pelts of nursing hooded seals are indistinguishable from pelts of weaned hooded seals) there is no way to monitor illegal hunting unless, of course, there is a fishery officer with each and every sealer.

As others have noted, if the regulation were changed, the total TAC for hooded seals would almost certainly be taken. The problem here is, as DFO scientists have noted, there is a lack of recent data and it is not at all clear that the current TAC is either appropriate or sustainable.

Ken Jones, Senior Fisheries Management Officer, stated at the Forum that the decision on bluebacks would be made by the Minister based on advice coming from the Eminent Panel and from the forum itself. Of course, the irony of this statement is that neither the Eminent Panel, nor the Forum, had a mandate to discuss and debate ethical issues. And, as noted earlier, the blueback debate is just such an issue.

Clearly, changing the existing regulations and lifting the ban on the hunting of bluebacks can not be justified on ethical, scientific, or even purely pragmatic management grounds.

9. The Greenland hunt

It has been recognized – for the last 30 years at least – that value in the marketplace, combined with movements across international boundaries are but two traits that are common in mammals on endangered species lists (Ehrenfeld 1970; also see Ragen and Lavigne 1999).

Consistently, the Eminent Panel reiterated a recommendation one of us made years ago (Johnston et al. 2000), that "Canada and Greenland should cooperate in the conduct of scientific research and in the management of seal species that are common to both jurisdictions" (p. ix).

Any management plan for Northwest Atlantic harp seals that does not involve Greenland, with its heavily subsidized, unregulated and growing summer hunt for harp seals, will be both deficient and risky, to say the very least. It is time for Canada to call Greenland to the table to negotiate a single management plan for Northwest Atlantic harp seals.

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David Lavigne, Rick Smith, and Sheryl Fink 29 November 2002

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Canadian Sealers Association

November 28, 2002

Ms. Grace Mellano Department of Fisheries & Oceans 200 Kent Street Ottawa, Ontario

Dear Grace

The responses of the Canadian Sealers Association to the questions posed at the Forum are attached. As most of the questions are really sealers issues, I will answer from that perspective. Unless otherwise indicated, you can assume that these answers reflect the view of SIDC as well.

As we have with each Forum, and we might as well follow the trend, we object to having to work on a management plan with the industry detractors at the table. This is largely the reason we declined to answer the questions at the time – and to participate in the other aspects of fact finding. We recognize and accept the concept of transparency but believe that, in truth, the only interest that IFAW has is publicity to raise their profile for the purpose of fundraising. Whereas, for the sealers and processors, it is a matter of livelihood.

We believe also that the early portion of the workshops, with the application of stickers, etc was not thought out or planned very well. Most of us felt that we had gotten through with playing with stickers in kindergarten. There were some very good aspects of the Forum and, to the degree that we felt we could participate, we felt it was a good experience.

From a personal perspective, it was good to see you and Ken again.

Yours truly

Tina Fagan

Executive Director

Dedicated to the wise use of the earth's marine resources.

Canadian Sealers Association Responses to Questions Seal Forum 2002

General Questions on Reference Points - Page 15 of Booklet

 We do agree with the concept of using reference points and wonder why it has taken so long for some sort of "reference" scenario to be developed. For too many years we have managed the seal harvest almost willy nilly. At least this scenario would give us some very strong sense of where we are going with management.

However, we note strongly that this concept can only work if there are regular population counts. If not, we will find ourselves in a "data poor" situation far too often and unable to make the right decisions.

We have also been asked to note that leaning to a "data poor" situation where the seal harvest of either species of seal could be stopped because of the lack of good information should not be the objective of DFO in avoiding the seal issue.

2. This issue is not really as simple as it sounds. There are many factors to take into consideration. Let's use the current situation with the hooded species as an example. At this stage, we are data poor because there has not been a count since 1990 – yet there is a TAC of 10,000 seals. Due to the lack of consistent harvests in this species, we can only assume that over 12 years, the number would likely have grown. Yet, as we understand it, under the current available data, combined with penalties, if we were to use the PBR approach, we would not harvest in this species at all.

If we were to conduct a population study this year, we might well find that the TAC could be increased rather than eliminated.

To look at the use of PBR without all the appropriate, current data would be a mistake. It would be our preference that we move one to two reference points lower and immediately take whatever action is needed to justify taking this move. Should the action show that there is a need, we would agree to going to the PBR route. There should be consultation on any action planned by DFO on this.

Harp seal management scenarios - Page 16

- 1. This is really a difficult question to answer. An examination of the Tables provided show some benefits in many of the scenarios. The pressure that will be brought to bear on the Department to kill more seals will be strong, particularly given the situation with the groundfish. The general consensus, and given the decisions taken as the sealers conference just prior to this Forum, is that we should adopt Management scenario 1, which is the same in both the fisheries and conservation Reference Points, except we should not limit ourselves to a specific number, i.e. 275,000. The CSA advice to the minister will be to raise the TAC to a maximum of 350,000 with conditions.
- 2. The reference points which have been provided seem to be adequate. The only concern we would have is the scenario which could evolve if we were to have one or more bad years due to weather, ice conditions or flagging markets for fur which we all recognize is cyclical. Could market considerations, in relation to TACS, be somehow considered in this case?
- 3. No.
- 4. As stated in the answer to Question 1, the Management Scenario in both the Fisheries and Conservation Reference Points chart is similar and we prefer this one but without tying ourselves to a specific number – but recognizing a number that fits well within the conservation limits, yet is not too high for the market demands.
- 5. No.

Hooded Seal Management Scenarios

- 1. Under the present situation, hooded seals do fit into a data poor situation.
- 2. If you examine the example of hooded seals we gave as part of question one, it is apparent that while they are in a "data poor" situation because of the time frame since the last count, we do not believe they are in such a state that PBR should be invoked. It is our belief that the reference levels could be lowered temporarily, but that an immediate effort is needed to carry out a population survey to determine the true status of the herd.
- Not at this time. Once a current population number has been established, then we have to reconsider and look at the numbers versus the markets.
- 4. We believe that, as long as there is a TAC number for this species, we should be taking the young of the species for a variety of reasons. The Regulations governing the sale of bluebacks needs to be amended to allow the harvest and sale of said seal.

Grey seal management scenarios:

- While we are not that familiar with the grey seal issue as we generally do not harvest a significant number of them, we would, based on available information, agree with this assumption.
- Again, while it has no bearing on the Newfoundland situation, based on available information we would agree that the movement one or two levels of reference points would be preferable to PBR. However, like Hooded seals, we have an obligation to obtain the necessary data to make judgements on the present status – not on five-or-ten year old data.
- 3. No.
- 4. No.
- We would not have sufficient information and historical data to be able to make a judgement on this. This is better answered by those who are affected by the grey seal issue.
- 6. Again, this has no relevance for us.
- Again, not a question for us to decide except to say that we agree with any scenario that is conservation oriented.
- 8. Why is this the only species with second choices?????

Seal Exclusion Zones:

- We agree, in principle, with the concept of exclusion zones at least as a pilot project. Given the state of the fishery, some action has to be taken.
- Yes, we do have some concerns about the benefits and costs. We will add a section to this questionnaire which outlines all of our questions and concerns.
- 3. Carefully and in close consultation with science, fishermen, sealers, etc.
- 4. Smith Sound would seem to be a good place for a "pilot project" which we believe the first effort should be. This is a new concept which must be tested, evaluated and studied before further decisions are made. We would have some concerns about the location vis a vis any communities for a number of reasons. One of these is a safety issue with rifles being used close to communities where children and others might be near the shore and endangered. Secondly, and very important, is the visual of seals being killed in what would be described by our detractors as a "cull" or a "slaughter" and what that can do from a PR point of view. Do not think that IFAW and others would not try to obtain videos and use them. We will have to ensure that there is good PR at hand to deal with this.
- 5. This is a question we have been asking and we feel that DFO should give us the answer to this and other questions so that we can have informed input on this very important question. It almost seems that the people at DFO are also at a loss for answers on some of this, as we are. There should be industry consultation on this issue – but only with the true stakeholders – not the detractors who will use whatever stumbling blocks they can find.
- 6. Again, this is difficult to answer. The purpose of an exclusion zone is to drive the seals away from spawning stock. Is this a twenty-four/seven effort? Is it just during the sealing season? Or the time when the fish might be spawning? Or continuous? In our opinion, instead of a questionnaire, there should have been a couple of scenarios prepared and presented for our consideration.
- 7. In answer to this question, it depends on what is going to happen to the seals harvested. Are they part of the TAC? Are they going into the market? If the answers to both are yes, they it should be sealers. If no, then it could be a trained team but who enforces the killing as per the regulations? There are great pratfalls in how we deal with this issue and this is one of them.



Grace Mellano
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November 22, 2002

Dear Ms. Mellano,

On behalf of the Canadian Veterinary Medical Association, we appreciate the opportunity to provide comments on the issues discussed at the 2002 Seal Forum. Our responses to the questions posed in the information kit are contained below.

As a preliminary statement, we believe it is very important to include estimates of seals struck and lost, and the incidental catch, in reports of the total number of seals that are killed annually, and in determination of harvest levels. We therefore support the clarification of terminology about harvest levels of seals, so that "total removals" — mortality due to landed harvest + seals struck and lost + incidental catch. This makes it clearly evident that the harvest level (number that can be killed and landed) is only one component of the total annual kill.

Management of the harp, hooded, and grey seal populations

The deadline for returning these comments did not give us much time to study the document (including the "Report of the Eminent Panel on Seal Management" by McLaren et al., 2001) and consult with colleagues. In particular, we do not profess to have the expertise in the areas of fisheries biology and dynamics of wild animal populations to be able to thoroughly understand the various management plans proposed. However we offer the following general comments, and answers to the questions posed.

Because the human species has a long history of overexploitation of natural resources, we strongly believe that the main principle that must guide policies on this issue is conservation of the species. The current harp seal population seems to be at a healthy level, but perhaps no higher than that in the pre-exploitation era. Even if its numbers were substantially above Normander we would not support a management option that would aim at reducing that level. We favour instead a strategy that would ensure stability of the current population. There have been quite dramatic environmental changes in the Northwest Atlantic and adjacent regions in recent decades, including shifts in movements of fish stocks and poor ice formation (particularly in the Gulf of St. Lawrence). We cannot predict how these ongoing changes in the habitat of northern species such as harp seals and hooded seals will affect their populations in the long term. Therefore, caution in managing these species must remain the guiding principle. In particular, we do not believe that market forces should in any way determine the total allowable catch.

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Harp seals

Based on the above general comments, and our reading of the documents provided, we support the use of the "conservation reference points" model, rather than the "fisheries reference points" model, for "data rich species" such as the harp seal. Within that model, we support Management Scenario #1, the Status Quo, which includes allowances made for Nunavut and Greenland catches, and for by-catch, and struck and lost.

Hooded and grey seals

Hooded and grey seals fall into the "data poor" species category, since there is no recent estimate of abundance for either species. For hooded seals, we would support the Potential Biological Removals management model. For grey seals, we also support the Potential Biological Removals model, with the caveat that management scenarios must be developed separately for the Gulf herd (declining) and the Sable island herd (increasing).

Scal exclusion zones

We seriously question the soundness of this management tool. We believe that this strategy would result in an unacceptably high proportion of wounded animals or animals killed but not retrieved. According to a recent study (Sjare and Stenson, Marine Mammal Science 18:710-720, 2002), the proportion of harp seals older than one year that are shot in water and subsequently lost varies from 13.8% to 50%.

In addition to the above concern, we wonder how a reduction in local populations of seals can have a significant impact on fish stocks, unless it is done on a very large scale. Can the habitat of commercially important fish species be assessed so accurately from year to year that it can provide a clear indication of the precise location of these exclusion zones? A high level of hunting pressure would probably be needed in order to achieve a significant reduction in local seal populations, and it would be unacceptable to kill seals without making good use of the carcasses.

At the very least, we would insist that, as recommended by McLaren et al (2001), "any attempt to establish such zones should take the form of a scientifically designed trial" and that the establishment of exclusion zones would probably only be feasible in fjord-like environments like Smith Sound in eastern Newfoundland (McLaren et al, 2001, #6, p. viii and p. 91). We also support the recommendations of the Eminent Panel for further research on seal diets and on all aspects of high mortalities in groundfish stocks.

Harvest of bluebacks

We agree in principle that the killing of bluebacks after they have been weaned is comparable to that of young harp seals at 3-4 weeks of age (beaters). The killing of young animals while they are still nursing will remain unacceptable to a majority of Canadians, however brief this nursing period is. Therefore, we strongly support the clause that the opening date for hunting bluebacks should be "late enough to ensure that the vast majority of animals are weaned". We would want to see assurances of how such a regulation would be enforced, for example if the hunt for young harp seals preceded that for bluebacks. As per our letter of October 1999 (attached), we believe that DFO must increase enforcement of the Marine Mammal Regulations in general (including the requirement that sealers check that the skull is crushed, or

for the absence of a blink reflex, to ensure that all seals are killed humanely). We also support the recommendation by McLaren et al., (2001) that a new population assessment of the hooded seal population should be done first in order to ensure that an appropriate harvest level is chosen to maintain the population at its current level.

We trust that you will give due consideration to these comments.

Yours truly,

Pierre-Yves Daoust, DVM, Ph.D.

Associate professor of anatomic pathology and wildlife pathology,

Alice Crook, DVM CVMA spokesperson, seal hunt.

Coordinator, Animal Welfare Centre Atlantic Veterinary College, University of Prince Edward island

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Translated from French

Dear Ms. Mellano:

The Comité de défense des intérêts du Québec [committee for the defense of the interests of Quebec] and the Groupe de travail sur le poisson [groundfish task force] submitted a preliminary document on seal management at the 2002 Seal Forum held in St. John's on November 14 and 15.

As agreed upon at the forum, the Comité de défense des intérêts du Québec and the Groupe de travail sur le poisson are submitting a position paper on seal management to the federal steward. This version reflects the current position of these two Quebec stakeholder groups; please replace the previous version with this one. Also attached are the committee's views on seal exclusion zones, as requested by the Department of Fisheries and Oceans in a questionnaire handed out at the Seal Forum.

Thank you and have a good weekend.

Aldo Mercier, Secretary/Coordinator Comité de défense des intérêts du Québec

<<Phoque, document Colloque-MPO .doc>> <<phoque, zones d'exclusion.doc>>

Seal Management

Translated from French

Presented by:

The Comité de défense des intérêts du Québec

and

The Groupe de travail sur le poisson de fond

At the 2002 Seal Forum

St. John's, Newfoundland

November 14, 2002

1. FINDINGS

1.1 The economic importance of the commercial fishery and the seal hunt

The fishing industry is a significant economic activity in the Maritime Provinces and Quebec. Areas such as the Lower North Shore, the Gaspé Peninsula and the Magdalen Islands depend heavily on this industry.

The income generated by the sealing industry and the economic benefits from this industry are also considerable. As well, there is a definite momentum in the seal hunt. A number of high-potential projects are underway, and the results are awaited with anticipation. In light of the fact that the maritime regions have been badly hit by the groundfish collapse, residents of these regions would be the first to benefit from this new economic activity.

In addition, various training programs are being offered to hunters to ensure that they master technical concepts and that they treat the seals with greater respect. Existing hunting methods are respectful of the animals and are not at all as they are portrayed in the smear campaigns conducted by certain pressure groups against the industry.

1.2 Fish species interaction

1.2.1 Seal predation on groundfish, shellfish and other species

The most recent assessments of seal stock status indicate that all seal species are found in great abundance. These large populations consume impressive quantities of fish and shellfish. Seal predation is the principal source of cod mortality, and the amount of cod consumed each year by seals far exceeds the amount harvested by commercial fishers in the Gulf of St. Lawrence. According to scientific estimates, seals may be consuming between 19,000 and 39,000 tonnes of cod in Area 4TVn, which is far more than this year's total allowable catch (TAC) of 6,000 tonnes. The situation is no doubt similar in Area 4RS3Pn, where the amount of cod consumed annually is estimated to be a number of times higher than the commercial catch of 7,000 tonnes.

This damage caused by seals is apparently one of the main reasons that groundfish stocks are in poor condition and show no sign of recovery. The Fisheries Resource Conservation Council (FRCC) believes that it will be impossible for groundfish stocks to recover in the short and long term, given the abundance of seals in the Gulf. In its latest report, published in April 2002 and entitled 2002/2003 Conservation Requirements for Groundfish Stocks in the Gulf of St. Lawrence, the FRCC recommends, among other things, that seal herd size be reduced to levels that will sustain a long-term seal industry and are compatible with groundfish rebuilding objectives. Like

the FRCC, the entire Quebec fishing industry is convinced that predation by seals is preventing the recovery of the two major cod stocks in the northern and southern Gulf.

2. RECOMMENDATIONS

- 2.1Whereas the current status of the seal populations indicates that these populations are underharvested, we recommend that the TAC be increased significantly to a level higher than the annual recruitment rate, especially for harp seals.
- 2.2We recommend that a TAC for grey seals in the Gulf of St. Lawrence be set at a level higher than the annual recruitment rate to permit the development of the potential market for this resource and its predation, particularly on groundfish stocks.
- 2.3Whereas winter surveys are conducted to determine the abundance of young seals and do not give an accurate count of the adult population, we recommend that the Department of Fisheries and Oceans conduct a survey in summer 2003 to determine the strength of the Gulf of St. Lawrence population, to determine the extent of grey seal predation on groundfish—particularly cod—and on the cod's food species, and to design a sustainable harvesting strategy for this resource.
- 2.4We recommend that a rigorous training program be set up that could become a requirement for obtaining hunting licences later on.
- 2.5We recommend that the federal government establish a genuine policy aimed at the lifting of the American embargo on marine mammal products.
- 2.6We recommend that government authorities put forward programs in support of research and seal product production.

3. CONCLUSION

There is still a great deal of concern and worry in the Quebec fishing industry about excessive seal predation on cod in the Gulf of St. Lawrence and the resulting absence of signs of groundfish recovery.

In light of this, Quebec stakeholders do not understand the federal government's attitude toward seal management. The consequences of underharvesting these species are too serious for fish resources and maritime communities. There is no doubt that the ecosystem has become unbalanced in favour of the seals. While other animal species with high

commercial potential are, generally speaking, harvested by humans, seals continue to be unjustifiably protected.

Seal overpopulation has been causing considerable damage to a number of fish stocks; if this pace continues, other species will soon be affected and the communities that are economically dependent on them will obviously have difficulty coping with the impact.

The situation is so critical that the federal steward must quickly take major, concrete action, because current management practices are contributing to the imbalance described above.

Finally, stakeholders in the Quebec fishery recommend, from a sustainable development perspective, that seal harvesting levels be increased.

Appendix

List of Members

- Comité de défense des intérêts du Québec:
 - Alliance des pêcheurs professionnels du Québec [Quebec alliance of professional fishers] (APPQ) and affiliated organizations
 - Association québécoise de l'industrie de la pêche du Québec [Quebec fishing industry association] (AQIP)
 - Fédération des pêcheurs semi-hauturiers du Québec [Quebec federation of midshore fishers] (FPSHQ) and affiliated organizations
 - Quebec Department of Agriculture, Fisheries and Food (MAPAQ)
- Groupe de travail sur le poisson de fond:
 - Alliance des pêcheurs professionnels du Québec [Quebec alliance of professional fishers] (APPQ) and affiliated organizations
 - Association québécoise de l'industrie de la pêche du Québec [Quebec fishing industry association] (AQIP)
 - Fédération des pêcheurs semi-hauturiers du Québec [Quebec federation of midshore fishers] (FPSHQ) and affiliated organizations
 - Quebec Department of Agriculture, Fisheries and Food (MAPAQ)
 - Traditional Gaspé cod fishers
 - Les pêcheurs polyvalents de Old Fort-Blanc Sablon [Old Fort-Blanc Sablon multi-species fishers]
 - Le regroupement des palangriers et pétoncliers uniques madelinots [association of Magdalen Islands longline and scallop fishers]

Translated from French

Seal exclusion zones

DFO would like to obtain the views of stakeholders and interest groups on the possible establishment of seal exclusion zones. Not only is it important to know why you would favour or oppose such zones, but DFO would also like to have your views on issues such as the usefulness and feasability of such zones and how and where they could be established and monitored.

Are seal exclusion zones needed?

They could be an effective way of radically reducing seal predation in areas where cod are vulnerable.

Do you have concerns about the benefits and costs of seal exclusion zones?

Of course. The long-term advantages must outweigh the short- and long-term costs.

If seal exclusion zones are established, how should decisions be made on the establishment and continuation of any zone?

Decisions should be based on the identification of areas where groundfish and/or their food species are particularly vulnerable.

The effectiveness of such zones will determine whether they should be continued.

If anywhere, where would you favour the establishment of seal exclusion zones, i.e. fiord-like areas, inshore areas, offshore areas or specific areas where cod over-winter or spawn? Please specify any area where you believe there should be such a zone. Please also indicate if you are concerned about the creation of any zone in areas near communities, etc.

Areas should be identified on the basis of the concentration of food species to be protected and the vulnerability of these species. Areas might include spawning, juvenile or grow-out areas. Technical possibilities for keeping out seals should also be taken into account.

Criteria for selecting exclusion zones could be predetermined.

If zones are established, during what period or season should a seal exclusion zone be in effect?

Zones should be in effect when the species to be protected are present in the zones. Taking offspring into account, this would be in the spring and fall at the most.

if zones are established, who should be allowed to hunt seals within a seal exclusion zone—a specially trained team or licensed professional seal hunters?

A management committee made up of government representatives and local stakeholders could determine how this would work on the basis of predetermined objectives.

Given that DFO has no current funding for any seal exclusion zone program, do you have any ideas on how any new seal exclusion zone program could be financed?

Fisheries resource management is the responsibility of DFO. It is important for the federal government to become technically and financially involved in creating these zones, which would help reduce the extent of seal hunting by targeting specific areas.

Should there be a limit or quota on the number of seals hunted within a seal exclusion area, and should those seals be sold to processors or just collected for diet research?

It is important to make optimum use of harvested seals. All possible avenues should be used.

The quota should permit the objectives of implementing exclusion zones to be achieved.

The Marine Mammal Regulations limit hunting methods to the use of clubs, hakapiks and firearms with minimum requirements as prescribed in those regulations. Do you believe that any other humane-harvesting method should be looked at for use in any seal exclusion zone? If so, which method?

A management committee, as indicated in question 6, could address this issue as needed.

How should DFO assess the effectiveness and impacts of any seal exclusion zone?

The effectiveness and impacts should be assessed in relation to the achievement of the predetermined objectives and the satisfaction of the stakeholders involved.



BAHLE MICURDY

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REG ANSTEY Secretary-Treasurer

November 29, 2002

Grace Mellano
Department of Fisheries & Oceans
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Ottawa
K1A 0E6

Dear Ms. Mellano:

I am writing to forward our organization's views with respect to the issues raised at the recent Seal Forum in St. John's.

1. Sustainability

We support the sustainable management of all seal herds. This should be pursued as an objective in conjunction with the objective of sustainable use of other key marine species, some of which are prey species for seals. The key question is the level at which the herd should be sustained. We believe that the average or midpoint of where it has been for the last 20, 30 or even 50 years would be a reasonable indicator.

2. Reference Points

We agree with the use of reference points as a trigger point for closer scrutiny of the resource situation (and for consideration of a different approach to management), once the reference point was reached, either on the way up or on the way down.

National Automobile, Aerospace and Agricultural Implement Workers Union of Carada, (CAW-Carada) Syndicat national des Travalleure et Travalleures de l'Automobile, de l'Aérospatiale et de l'Outilitique agricele du Carada (TCA-Carada)

We are not convinced that the reaching of a reference point should trigger a predetermined course of action. Rather, this should be considered in light of updated circumstances such as carrying capacity of the environment, current predator/prey relationships, and the like.

With respect to "data-poor" situations, we believe the herd in question has to be managed based on the best information available. The idea of automatically moving one or two reference point levels lower on the table is totally arbitrary and runs the risk of doing even more damage to important prey species than is currently the case. The precautionary approach suggests that in data-poor situations, a more conservative approach is needed. However, the department should bear in mind that we need a precautionary approach to species like cod and caplin as well, and a conservative approach with respect to survival and recovery of these species suggests that the approach to management of seal herds not be overly restrictive.

With respect to options for management of harp seals, the material prepared for the conference offered two sets of reference points, one described as "fisheries reference points" and the other as "conservation reference points". These are loaded terms. In our view these are both conservation reference points. The only difference is the trigger points. We favour the reference points described in the conference book as "fisheries reference points".

Management of Harp Seals

We believe the harp seal herd should be managed based on a combination of options (2 and 5) in the management scenarios presented at the Seal Forum. In other words, we favour a market-based TAC (subject obviously to the authority of the Minister) in conjunction with a management strategy to reduce the seal population by a predetermined amount. We do not believe sterilization of the female harp is a practical alternative. Of the other options, we believe a series of culls of adult females is the best option.

4. Blueback Issue

We do not believe the current management measures governing young hooded seals (bluebacks) is sensible or defensible. We fully support measures aimed at prohibition of harvesting of young seals of any species while they are still depend on their mother. Accordingly, measures should be established which are intended to permit a harvest only after the pups have been weaned. In the case of harp seals, the prohibition on harvest of white coats achieves this purpose.

The current regulations governing harvesting of bluebacks are much more restrictive. We find it particularly annoying that anti-seal hunt groups on the one hand continue to make public statements, including paid advertisements in newspapers, claiming the seal hunt is subsidized (despite the lack of evidence to this effect) while at the same time campaigning in favour of regulations that prevent the harvest of the most valuable animals in the herd.

We believe there are three completely separate issues with respect to management of hooded seals. First, we believe regulations should be designed to reasonably ensure the protection of pups before they are weaned. Secondly, we believe the TAC should be set on the basis of the best scientific advice available, even if that is well short of being ideal. Thirdly, we believe that once they are weaned from their mother, all animals should be permitted to be harvested within the TAC. It is significant to note that scientists within your department said clearly at the forum that based on purely biological considerations, the removal of young animals is preferable to removal of mature adults in terms of long-term sustainability of the stock.

We believe the appropriate control on harvested bluebacks would be an opening date. This could be managed by means of a tentative opening date initially, subject to confirmation or possible change depending on observations of the herd at the time. The purpose of the opening date would be to ensure that the harvest of bluebacks does not begin until whelping has ceased and the pups have been weaned.

5. Seal Exclusion Zones

We look on these as cod protection zones and believe that the implementation of what the FRCC has dubbed "Seal Exclusion Zones" is critical to any hope for recovery in our cod stocks. There may also be other stocks for which this type of protection is needed. An obvious candidate for designation as a Seal Exclusion Zone would be Smith Sound, Trinity Bay. Review of the scientific information clearly indicates that a substantial portion of the remaining Northern cod population overwinters in Smith Sound. To do other than implement a Seal Exclusion Zone would be to further seriously damage the prospects of recovery of this stock. The number of seals that would be involved in a special harvest in this precious area would be insignificant in the context of the total herd. From the point of view of resource management and sustainability the need for Seal Exclusion Zones in this area could not be clearer. The only reasons that have been advanced to do otherwise have been theological in nature.

We do not believe establishing a Seal Exclusion Zone in Smith Sound would open the door for a flood of such zones. However, we believe the Department should leave open the possibility of creating one or more additional zones in other areas should circumstances dictate such a course of action.

6. Predator/Prey Relationships

Management of the seal herds in Atlantic Canada cannot be isolated from the crucial predator/prey relationship. Cod, caplin, herring and American Plaice are just a few valuable and important species whose sustainability and/or recovery is being seriously jeopardized by the present size and voracious appetite of the various herds.

I appreciated the opportunity to participate in the Seal Forum and to forward the enclosed comments.

Yours truly.

Larle McCurdy

President

EMcC/tp

Northumberland Fishermen's Association

Participant Survey - Seal Exclusion Zones - 2

Question #5: If established, during what period or season should a seal exclusion zone be in effect?

YEAR ROUND

Question #6: If established, who should be allowed to hunt seals within a seal exclusion

a specially trained team, or licensed professional seal hunters?

Question #7: Given that DFO has no current funding for any seal exclusion zone program, do you have any ideas on how any new seal exclusion program could be financed?

INDUSTRY

Question #8: Should there be a limit or quota on the number of scals hunted within a seal exclusion area and should those seals be sold to processors or just collected for diet research?

NO Limit SOLD AND RESEARCH

Question #9: The Marine Mammal Regulations limit hunting methods to the use of clubs, hakapiks and firearms with minimum requirements as prescribed in those regulations. Do you believe that any other humane-harvesting method should be looked at for use in any seal exclusion zone? If so, which method?

NETS & HUMANE + RAPS

Question #10: How should DFO assess the effectiveness and impacts of any seal exclusion zone?

INPROVEMENT IN the

Seal Forum 2002

NAME: RON Heighton

Participant Survey - Seal Exclusion Zones - 1

Input needed: DFO would like to obtain the views of stakeholders and interest groups on the possible establishment of seal exclusion zones. Not only is it important to know why you would favour or oppose such zones, but DFO would also like to have your views on issues such the usefulness and feasibility of such zones and how and where they could be established and monitored.

Question #1: How do we decide if seal exclusion zones are needed?

NUMBER OF SEALS AND the damage to the Fish Stocks in AN AKEA

Question #2: Do you have concerns about the benefits and costs of seal exclusion zones?

NO

Question #3: If seal exclusion zones are established, how should decisions be made on the establishment and continuation of any zone?

INPUT FROM INDUSTRY

Question #4: If anywhere, where would you favour the establishment of seal exclusion zones, i.e., fiord-like areas, inshore, offshore, or specific areas where cod over-winter or spawn? Please specify any area where you believe there should be such a zone. Please also indicate if you are concerned about the creation of any zone in areas near communities, etc.

AMET ISLAND AROA.

Translated from French TABLE FILIÈRE LOUP-MARIN INC. Cap-aux-Meules. Quakas

STRATEGY FOR THE EAST COAST SEAL HUNT

BRIEF SUBMITTED TO THE

2002 SEAL FORUM ST. JOHN'S, NEWFOUNDLAND **NOVEMBER 14-15, 2002**

> TFLM.M2002.1 November 14, 2002

STRATEGY FOR THE EAST COAST SEAL HUNT

1. SEAL POPULATIONS AND ANTI-SEALING GROUPS

The large harp seal populations on Canada's east coast in 2002 and the lamentable status of groundfish stocks in the same region justify changes to the existing seal quota. The most recent estimates of harp seal populations, made in 1999, put the total number of harp seals at 5,200,000, and annual pup production at 997,900. The most recent estimate of hooded seals, made in 1990, puts the population at 469,900, with annual pup production at 85,100. The 1996 grey seal surveys estimate the population at 173,500.

In its latest reports, the FRCC sounds the alarm over groundfish stocks in Eastern Canada, pointing to the role of seal predation in the slow recovery of the stocks. Moreover, given the current status of the seal populations, it cannot be said that they are overharvested. Despite the uncertainties inherent in the management of biological resources, these facts cannot be ignored.

A number of well-funded groups have been campaigning against any form of harvest, regardless of the status of seal stocks, for over 30 years. The industry is just now starting to recover from the collapse of markets following their campaigns. It is fair to say that these groups do not have roots in the community directly affected by the ups and downs of the fishery. They exist primarily as a result of their leaders' ability to raise funds, rather than as a result of their democratic virtues. Their funding comes, for the most part, from individuals or groups from urban centres located far from coastal areas. These groups are insensitive to the economic and social hardships faced by local residents who make their living by selling sea products. The international community is now more aware of the perverse effects of this attitude and of the real issues behind these boycott campaigns.

Despite the hue and cry raised by anti-sealing groups, we believe that the seal hunt must be carried out in accordance with principles similar to those that apply to other species that elicit less public sympathy. We believe that the seal hunt must be carried out using humane harvesting methods in accordance with a rigorous code of ethics.

2. A RESPONSIBLE SEAL HUNT

The state of knowledge in this field is now such that it is possible to put in place harvesting methods that are respectful of the animals harvested. With the recent work by Dr. P.Y. Daoust and his colleagues at the University of Prince Edward Island and the experience acquired by sealers in recent years, we are now in a position to establish responsible harvesting practices.

The implementation of a rigorous training program must not only provide sealers with technical knowledge but must also instill in them a respect for the animal.

Recommendation 1

Implement a rigorous training program in the short and medium term that will eventually become mandatory for obtaining sealing licences.

3. DESIRABLE QUOTA

With respect to the seal quota, it is our view that:

- a) an ongoing commercial hunt based on a long-term stable population must be allowed;
- b) an increased seal quota must be allowed in order to support, in the medium and long-terms, the recovery of groundfish stocks in Atlantic Canada.

According to Healey and Stenson (2000), and as mentioned in the 2001 Report of the Eminent Panel on Seal Management, the harp seal replacement yield for 2000 and beyond is "531,000 for the Northwest Atlantic population." Also according to Healey and Stenson (2000), the portion of the replacement yield that could be landed by the Canadian commercial harvest "was estimated to be 257,000 animals with a 95% confidence interval of 102,000 to 342 000."

We suggest using the upper end of the range and increasing the TAC under a multi-year management plan.

Each of the five scenarios proposed in the panel's report has its strengths and weaknesses. It appears to be difficult to predict the real impact of a decline in the seal population on groundfish stocks.

<u>Scenario 4</u> (stabilizing seal predation on fish stocks) is not necessarily easy to implement and may be costly for government. <u>Scenario 5</u> (reducing seal predation on fish stocks) offers hope for the recovery of groundfish stocks in divisions 2J3KL north of Newfoundland and likely also, but to a lesser extent, in the Gulf of St. Lawrence. In the gulf, this measure will have to be complemented by a possible reduction in the grey seal population. We believe that it is realistic to implement scenario 5 initially for a period of three to four years. This will make it possible to assess the impacts on the various groundfish and seal populations as the approach is applied.

Recommendation 2

- a) Increase the annual TAC to 350,000 seals in 2003 as part of a three-year management plan. During the three-year period, if a quota is not taken in one year, it will be carried over and added to the quota of the following year.
- b) Initiate a grey seal hunt in the Gulf of St. Lawrence on the basis of quotas that are set following a new stock assessment.

The creation of seal exclusion zones, as an additional measure, must be considered not only in fjord-like environments (e.g., Smith Sound) but also in coastal areas where seals are responsible for excessive predation on the spawning grounds of certain species, such as salmon, lobster and herring. Such exclusion zones could be created at the entry to lagoons in the Magdalen Islands and at the mouth of certain rivers on the North Shore and in the Gaspé.

Recommendation 3

Create seal exclusion zones in coastal areas, located such as to protect not only groundfish but also certain other species, such as salmon, lobster and herring. In particular, this need will be analyzed for the lagoons of the Magdalen Islands and for certain major salmon spawning rivers in the Gaspé and on the North Shore.

4. MAXIMUM USE OF SEAL PRODUCTS: AN INNOVATIVE APPROACH

To date, most revenues generated by sealing come from seal fur and oil products. We believe that the industry and governments must increase their cooperation in order to take better advantage of this resource. Such an approach has the advantage of eventually increasing the economic benefits without requiring a substantial increase in the TAC in the long-term.

AVENUES TO EXPLORE

The development of processes for obtaining high quality oil that is rich in omega-3s, gelatin, collagen, high-protein meal, etc. must receive support that is tailored to the capability of the players involved in the industry. Some of the groups active in this sector do not have the financial capability to attract and retain the expertise required to make a project a success.

The small size of this industry in certain regions requires cooperation between government, industry, and innovative research groups. It is important to avoid the passive route, which is sometimes characteristic of funding bodies, and lean instead towards an innovative technology approach, which provides funding not only for the purchase of equipment but also for the structuring of enterprises and projects. Where required, it is important to help enterprises get organized. While there are several large international companies active in this field, there are also a number of small, regional companies that are suffering seriously from the lack of financial resources and expertise required to become organized.

Government must not only allow an increase in the seal quota, but must also be proactive and sometimes assist a regional industry that has been devastated by the collapse of seal products markets. It is a complex operation that requires *more than one government player* in respect of both the harvesting of the resource and its production and marketing.

Recommendation 4

- a) Have the federal and provincial governments tailor their support for research and innovation in the industry to the regional context of the industry. The contribution of departments other than Fisheries and Oceans Canada is essential to this support.
- b) Have the federal government adopt a true policy aimed at having the U.S. embargo on imports of marine mammal products lifted.

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