



House of Commons
CANADA

Standing Committee on Fisheries and Oceans

FOPO • NUMBER 026 • 1st SESSION • 39th PARLIAMENT

EVIDENCE

Thursday, November 9, 2006

—
Chair

Mr. Gerald Keddy

Also available on the Parliament of Canada Web Site at the following address:

<http://www.parl.gc.ca>

Standing Committee on Fisheries and Oceans

Thursday, November 9, 2006

• (0905)

[English]

The Chair (Mr. Gerald Keddy (South Shore—St. Margaret's, CPC)): Pursuant to Standing Order 108(2), we're going to call this meeting to order.

I would like to thank all of our witnesses for appearing today. It's very much appreciated.

The committee has been in St. Anthony, on the Great Northern Peninsula of Newfoundland. We started out in the *Îles de la Madeleine*. We left there quite late. We got in at 3 o'clock in the morning last night, so committee members, I thank you all for getting up and making it here this morning.

I'd like to welcome Robert Thibault to the table. It's nice to see you here, Robert.

I think Rodger Cuzner is here somewhere. He's another committee member. Rodger is having breakfast. He's a committee member from Cape Breton.

Earlier I saw the MLA for Shelburne County, Sterling Belliveau. Sterling, are you in the room? Good morning. It's nice to see you here.

And we have the warden for Shelburne County, Ms. Scott, here. How do you do?

Again, I would like to thank our witnesses for appearing today, and certainly the members of the audience. I will tell you, it's nice to have a good turnout. We've had that in every community we've been in. It's good to have a nice large audience. It shows the interest in this issue.

We have the speaking order in front of us. How many people have prepared texts? Ouch! How many of them are less than 10 minutes? Okay, thank you.

Maybe what we'll do is go to Mr. Wadman first. I don't want to put you on the spot, but I just did.

• (0910)

Mr. Glenn Wadman (Operations Manager, D.B. Kenney Fisheries Ltd.): There's nothing like cold turkey. We Newfies are tough.

The Chair: We'll work around the table in no certain order. That way, everyone will have an opportunity to speak.

This meeting is on the Canadian seal hunt, in particular the grey seal issue here on the southwest coast of Nova Scotia. The next meeting we hold will be on boat stability tests by Transport Canada.

With no further ado, I ask Mr. Wadman to begin.

Mr. Glenn Wadman: Good morning, and thank you, Mr. Chairman. I'd like to thank the committee very much for this opportunity to appear and speak on this pressing problem.

First, I'll give you a 10-second background. My name is Glenn Wadman. I'm an operations manager for D.B. Kenney Fisheries Ltd. We're located on Brier Island in the Bay of Fundy. We're a vertically integrated fish processor/harvester, importer/exporter, and we market primarily in the U.S., but we do \$4 million or \$5 million worth of business each year in Canada.

Anyway, enough with the pleasantries.

I'm going to speak to the grey seals over the last 20 years, because it's been 20 years now since I moved from my own country down to the Bay of Fundy. Twenty years ago, we basically did not have to candle fish from the Bay of Fundy. The existence of seal worm parasites in the flesh were basically non-existent. You might get one or two in a day's production and many days you'd get none. Now the fish from my local area are heavily infested, to the point where, with fish from some fishing areas, we have a 50% reduction in throughput as employees attempt to detect and remove parasites.

This has caused a significant competitive problem with our competing with low-labour countries. It's also caused a quality problem, as when you're cutting up, or stripping up, fillets to get the parasites out you're not putting nice firm whole fillets on the market. You're putting pieces of fillets that are winding up in fish bits or cod blocks or on the lower end of the spectrum. As I said, it's a 50% reduction in throughput, which is basically a doubling of cost. When we do miss a worm, believe me, we get some very significant phone calls from people wondering, what is this? Am I going to die? Is it going to live? Is it alive? Is it dead? What doctor do I see?

Because of the lack of harvesting of seals, we now see seals at our plant coming to the water effluent to look around for pieces of fish. They are everywhere. There are small herds of seals that have started living on the back of our island that we've never seen before. I've talked with fishermen on the island who are 70 or 80 years old who have never seen these things except in the last seven or eight years. The necessity for a hunt to reduce the numbers and to reduce the parasite load is tantamount. We have to get over the fear that some tourist will say, we can't go to Nova Scotia because they kill the seal. That same tourist would also say they can't eat Nova Scotia fish because they found a parasite.

I'm not going to harp on it very long, but one of the other problems we're seeing because of the abundance of seals is this. Traditionally, especially back in Newfoundland, we see seal worms as a problem in cod fish. Due to the abundance of seals and since, unlike the Newfoundland harp seals that visit Newfoundland for about three or four months a year and then move back north, our grey seals stay here 12 months a year, we're now seeing seal parasites occurring not only in our codfish stocks but in haddock, in some instances in ocean perch, in flounder, and also a few in pollock.

I would ask the committee to look very favourably at supporting a grey seal hunt in the Maritimes.

Thank you.

The Chair: Thank you, Mr. Wadman, and thank you for your brevity. We're not used to that at this committee.

Hon. Gerry Byrne (Humber—St. Barbe—Baie Verte, Lib.): Where did you say you were from?

Mr. Glenn Wadman: Bar Haven, to Placentia via Joey Smallwood, to Arnold's Cove via my father.

The Chair: Very good.

Hon. Gerry Byrne: And that didn't give him his brevity, I can tell you that, being a Newfoundlander. His birth was longer than his address.

• (0915)

Mr. Glenn Wadman: Actually, for the record, I was born in Come By Chance, one of the most famous communities in Canada.

The Chair: There you go.

And it would be useful for the committee for all of our presenters, when you introduce yourselves, to say who you represent and where you're from.

I'm going to ask Mr. Hammill to be our next presenter.

Dr. Mike Hammill (Research Scientist, Maurice Lamontagne Institute, Department of Fisheries and Oceans): My name's Mike Hammill. I'm with the Department of Fisheries and Oceans and I'm a scientist working on the seals in Atlantic Canada.

I did prepare a short presentation. I think it's been distributed to everybody.

As you know, just to put you back into the framework, we've switched areas. You've been through an area that is heavy on the harp seal and now you're switching over to the grey seal. The grey

seal is much bigger than the harp seal, roughly double in weight, and probably about another 30 to 40 centimetres longer.

The Chair: Before you continue, I'll interrupt you for a second. I apologize for that, Mr. Hammill.

A couple of the fishermen in the room brought in some pictures that I'll pass around to our members at the table. This is a halibut that weighed about 30 pounds that was preyed on by grey seals. It's very typical of what the fishermen are seeing.

I'm sorry to interrupt you. Go ahead.

Dr. Mike Hammill: Harp seals, as you heard, reproduce in March. The grey seals start to reproduce just before Christmas and the mating season continues into about mid-February, depending on where you are.

There has been a change in the population. Back in the 1970s, there were probably 20,000 grey seals in all of Atlantic Canada. Today the population has increased to about 250,000 or 260,000, and the largest concentration is found around Sable Island on the Scotian Shelf. Probably about two-thirds of the population is on the Scotian Shelf and one-third in the Gulf of St. Lawrence. It varies because animals do migrate in and out of the Gulf of St. Lawrence. Some animals from Sable Island will move into the gulf to spend the summer and then they'll return to the Scotian Shelf to spend the fall and winter.

There are different ways to look at the diet of the grey seals. One way is to look at stomach contents or fecal contents. That's where you look at the otolith or the hard parts you can find in these different samples. You use these to reconstruct the diet and it gives you an idea of how much fish of different species are in the diet.

Another way is to look at fatty acids, the idea being that you are what you eat, so if an animal consumes a fish, the fatty acid profile will reflect the fatty acid profile of the fish. We see that things like cod are very low in proportion as a component of the diet. The diet is dominated by species such as sand lance in particular and also redfish.

All these samples were taken from the Sable Island area, so they reflect what the seals are eating within about a 100-mile area around there.

There is another study by Bowen and Harrison, and it is based on the fecal analysis approach. In some samples at some times of the year you can see that the proportion of cod really does jump. It can be as high as 40% in some samples—for example, in a sample collected in October 1997. It also varies down to less than 10%.

One of the problems in trying to allocate or evaluate diet is that you get large fluctuations depending on what animal you may have sampled and where that particular animal has been feeding. You get a big jumping around. This is different from what it would be from the fatty acid, which reflects what has been incorporated in the diet over a long period of time.

The idea behind that information is that cod is not a major component in the diet of grey seals on the Scotian Shelf.

Switching subjects a little bit and moving on to the management approach for seals in Atlantic Canada, we use what is called an objective-based fisheries management approach. This is based on the idea of a precautionary approach, where you identify targets and conservation measures to try to make sure the population stays above certain levels to avoid running into an endangered species situation.

There are two schemes in this. The first is data rich. This is what we apply to our harp seal hunt, and the idea is to make sure the population of harp seals stays above 4.08 million animals in eastern Canada.

For grey seals, our information is not as good. We're almost there. We need to do a couple of more surveys, a little bit more work, and then we can shift them over to what we would call a data-rich category. For now they fit into what is called a data-poor category, and that means that if we're trying to set quotas for harvesting we set very conservative quotas that allow the population to continue to increase.

The quotas currently are 2,100 animals in the Gulf of St. Lawrence and 8,300 animals on the Scotian Shelf, but hunters are not allowed to hunt at Sable Island. The harvest in 2006 was close to 1,800 animals. The harvest is quite small compared to the available quota.

• (0920)

This winter we intend to carry out another survey, also with the help of hunters, getting new samples on things like reproductive rates. After this survey we hope we can move the grey seal into the data-rich category, which means we can probably increase the quota and accept a greater level of risk as far as our decision on harvesting goes.

The last two slides I have are extra. One is just to show you the idea of the objective-based fishery management approach and the idea of reference points. When we get into a data-rich situation, this is the framework we follow. The idea is to keep that population of animals above the 70% maximum mark. If it falls below the 70% maximum, then you would adopt more conservation-minded quota recommendations.

The last slide shows the general area where the grey seals are found, mainly based on the pupping areas. The major pupping area is Sable Island. Around 50,000 to 60,000 pups are born there, according to the last survey, which was done in 2004. The remaining animals are born in the Gulf of St. Lawrence, on the ice when there is some, or on the small islands in the southern gulf, and also on some islands along the east coast of Cape Breton Island, down to roughly Ecum Secum in Nova Scotia.

Thank you very much.

The Chair: Thank you, Mr. Hammill.

I'm going to ask Ms. MacKenzie to present next.

I understand you have a presentation of your own, and you also have another presentation. I'm going to ask you to read your own and present the other one to the committee in writing. We have six presenters, and timewise we're going to be very limited.

Thank you.

Ms. Debbie MacKenzie (Chair, Grey Seal Conservation Society): My name is Debbie MacKenzie representing the Grey Seal Conservation Society based in Nova Scotia.

Three years ago, I explained to this committee that starvation is the major factor preventing the recovery of the cod stocks and that this has resulted from a decline in plankton. Unless fisheries managers begin to consider the health of the ocean overall, we stand to see a total collapse of everything. Three years ago, my comments to this effect were not included in your report on Atlantic fisheries issues.

There is one reason why ecosystem-based fisheries management is not now used in Canada. It is not because we lack scientific understanding of what must be done; it is rather because fisheries managers, including the seal hunt managers, simply refuse to acknowledge that this information exists and that it pertains to their work. Objective-based fisheries management, as described, is not ecosystem-based fisheries management unless the objectives are ecosystem conservation objectives. There's a difference. That single-species approach, when you count the seals and try to keep them above 70% of the maximum, is not ecosystem-based.

Scientists now realize that fishing has undermined the fundamental workings of sea life, altering the entire web from top to bottom. The problems we now see in Atlantic Canada—the starvation of cod, the decline of numerous other species, including everything from shark to herring to barnacles and seaweed, along with a general degradation of ocean water quality—are manifestations of the ecological end result of centuries of human fishing.

As grim as that sounds, this conclusion is well supported by the scientific literature. The removal of virtually all large predatory animals from the sea is now acknowledged as a major cause of the current collapse of the ecosystem. That is why Canada should place a moratorium on commercial seal hunting, because seals are the last surviving large ocean predators in Atlantic Canada. As such, their presence is needed. Large natural predators are needed, because the ocean is dying and because the fish are starving.

Predators play an important role in cycling nutrients and in maintaining the health of fish. The tonnage and types of fish eaten by seals is beside the point. That question is like asking, how much blood is cycled through a person's lungs? Fish removed by humans is like blood drawn from a vein, while fish eaten by natural predators is like blood following its normal course, a crucial process that must continue for the survival of the larger entity, in this case the ocean.

DFO ecologists have used the word "catastrophic" to describe ecological changes that have been caused by large predator removal on the Scotian Shelf. Consider, too, that the ecological impact of marine mammals was recently analyzed by other DFO scientists, including Mike Hammill. The conclusion of the study was that the beneficial predation effect is even greater than the predation itself, leading to an overall positive impact of the predator on the system. Why are these facts not considered by seal hunt managers?

Must the ocean exhibit signs and symptoms beyond catastrophic before fisheries managers take notice that all is not well, and before they take the necessary steps to protect ocean health? New ecological insights are ignored by fisheries managers, who control what scientists are allowed to tell them during their science advisory process. It seems that fisheries managers must not be told certain things that the fishing industry does not want to hear. Why do taxpayers fund ecological studies that are then ignored by our public resource managers?

Ecologists are excluded from fisheries management consultations, and if anyone else tries to enter their findings into the record—as I did at DFO's Seal Forum last November—then the information is still ignored. When I tried to include DFO's own ecosystem science in the 2005 Seal Forum, my written submission was lost and it was omitted from the record. Despite being asked repeatedly, DFO management refused to correct their error.

I have tried for years to warn the government about the ecological damage caused by fishing. I have suggested, since 1999, that a decline in plankton production has been caused by fishing, and I have asked that plankton ecology become a focus of DFO science research. Two years ago, I warned of an impending crash of the herring stocks, and today that seems to be happening in the Maritimes. Crustacean stocks are showing signs of starvation too, and these fisheries will also be doomed if the ecological breakdown continues.

● (0925)

Our recommendations are as follows.

This committee should undertake a study of the issues affecting ocean health, because oceans are your mandate too, with particular attention to the ecological impact of fishing. In this regard, I'll leave you with a selection of relevant documents that I ask you to review.

Direct the seal hunt managers to include a full and open discussion with ocean ecologists before approving any seal hunt plan. As it stands now, DFO does not even have a seal management plan, although one was supposed to have been produced by last spring.

Direct DFO Science to provide a comprehensive report on the full scope of what scientists have learned about the ecological impact of fishing. Make it clear that this information is to be considered by fisheries managers.

Create a new body, like a minister's advisory council on oceans. A previous entity by that name provided only broad policy advice, but a new advisory council on oceans should have the mandate to advise the government on the practical implementation of ocean conservation. This must not be controlled by fishing interests.

Stop the seal hunt under the Oceans Act, for ecological reasons already given. This will be preferable to stopping the seal hunt after Canadian seal marketing causes an international food safety incident. In this regard, I recommend that you consult with veterinarians on the wisdom of processing seals for human consumption using only fish inspection protocols, as is the current practice. Marketing seals as if they were fish instead of meat is dishonest, it potentially threatens the health of consumers, and it may thereby ultimately damage the good reputation of Canada's legitimate fish and meat exporting industries.

Thank you.

The Chair: Thank you, Ms. MacKenzie.

We'll go to Mr. Victor Wolfe next.

Maybe just before you start, Victor, there is one other person in the room that I had meant to recognize. That is Denny Morrow. Denny, it's nice to see you here. Denny has been an advocate on this issue for some time and certainly has kept most of us in Ottawa apprised of the situation as he sees it on the ground.

Mr. Wolfe.

● (0930)

Mr. Victor Wolfe (Chairman, Shelburne County Competitive Fishermen's Association): Good morning, ladies and gentlemen. My name is Victor Wolfe, and I am the chairman of the board of directors of Shelburne County Competitive Fishermen's Association, a small association here in Shelburne County.

My background in the fishing industry goes back 58 years as a commercial fisherman. Over that period of time I have seen many changes. There was a downturn in the fisheries in the early 1950s that took 16 years for recovery. During that recovery, some fishermen of my generation went out to Vancouver and Prince Rupert and fished as crew members on boats, longlining halibut and seining salmon. I did this for 14 seasons.

During those years, from 1954 to 1970, time needed for the fish to come back, there was no predation from grey seals. That was because the grey seals did not start showing up here in coastal Nova Scotia until around 1980.

This time, however, I cannot see how the groundfish can recover. The groundfish are almost totally gone from the coast of eastern Nova Scotia because of grey seals, and if something isn't done very soon, in a very few years the same will happen on this part of the coast.

The grey seals will range over a large area of ocean. I watched a large grey seal one morning when I was fishing. I was 14 miles off the coast, at dawn, in 55 fathoms, or 330 feet of water, and I saw the seal towing a large cod by the tail. The cod weighed about 40 pounds. Needless to say, that was a bigger fish than I caught for the day.

The grey seal will raid lobster traps for the bait that is in the traps, bait intended for lobsters. It is common to have up to 20 traps in a row raided for the bait. This is 20 traps we must haul for nothing in them, because they raid the traps as soon as those go to the bottom. There are 20 boats fishing lobster out of this one harbour—that's our harbour at Port Hebert—so that could be up to 400 traps a day that are emptied and damaged due to the grey seals.

There was a survey of all the fishermen in this harbour, Port Hebert, about 12 years ago, on what they thought their losses were from seals raiding traps. The fishermen estimated their losses in dollars anywhere from \$3,000 to \$7,000 per boat in the six-month lobster season.

When I was a teenager fishing with my father, we used to set herring gillnets by anchoring them in the bays and entrance to the harbour. The nets would be anchored in these areas from Sunday afternoon until Saturday morning. This cannot be done now, because the seals pick the nets as soon as the herring get caught in them.

DFO science information, as of this fall, indicates that in 1962 there were 350 pups born on Sable Island; this year, there is in excess of 40,000 pups. Large males weigh 770 pounds, and the females weight 440 pounds.

I understand the longliners are being raided by seals. The seals are taking the fish off the lines when they are being retrieved. They go for the body cavities to get the liver, which destroys the fish.

If left unchecked, the seals will totally destroy the groundfishing and lobster industry. The impact on all the small fishing communities will be horrendous, and there will be no future here for our children and grandchildren.

Thank you.

The Chair: Thank you, Victor.

Again, I just want to remark how brief and concise the messages are here, gentlemen.

Mr. Stoddard.

Mr. Peter Stoddard (Procurement and Resource Manager, Sea Star Seafoods Ltd.): Good morning, fellow committee members, witnesses, ladies and gentlemen.

My name is Peter Stoddard. I'm the procurement and resource manager for Sea Star Seafoods Limited, Clark's Harbour.

Sea Star has enjoyed 23 years of successful business. The Cunningham name has been synonymous with fish harvesting and processing for over 100 years. Sea Star currently employs about 70 people from the surrounding communities.

Our company supports a controlled cull of the seal herd for the following three reasons.

Number one is declining cod stocks. Norway, Russia, and Iceland, to mention a few countries, have had a seal hunt. Today, they enjoy healthy groundfish stocks that we can only dream of. They control their seal population, and they make no apologies for it. Norway has even adopted the policy of inviting tourists on a seal hunting expedition to witness the humane way in which the herd is culled.

After three years of a cod moratorium in NAFO area 4VSW, industry has been informed by DFO scientists that the 20,000 metric ton biomass of cod will probably continue to decline because of increased natural predation, namely seal. In our area, it is the grey seal. To date, the estimated biomass in NAFO area 4VSW is 4,000 metric tons, and we have had no fishery.

Unlike the harp seal, which moves gradually northward, the grey seal remains in our coastal waters year-round, eating juvenile lobsters, not to mention that they shadow the lobster boats to chow down on the short lobsters being thrown back. They chew the bellies out of our groundfish that have been caught on longlines. They eat the bait off the hooks before they have a chance to settle to the effective fishing depth.

I remember as a child that it was an exciting event to see a seal sunning itself on the rocks; now they are competing for space. There are a few local fishermen in the audience. Ask them the extent of how they are being affected, not only in the inshore but now in the offshore. I had a local fisherman tell me that while fishing 60 miles offshore he witnessed a 500- to 600-pound grey seal floating on its back, waiting for him to launch his hooks. When he did, they were nearly torn away. Upon hauling it back, he saw that all that remained were a few straightened hooks. I could give you many more accounts, but I only have seven minutes.

Number two is increased parasite infestation. Sea Star currently processes cod from all parts of the world. The parasite infestation levels in cod caught in our local waters is unequivocally the worst, even to the extent that sometimes the entire fish is deemed unusable and has to be discarded. I have personally witnessed this on numerous occasions. In one case in particular, I had my staff take the extra time to remove 200-plus worms. Subsequently, the fish looked as if it had been shot from a distance with a 12-gauge shotgun. That fish was unusable.

It is a proven fact that seals have worms, and lots of them. Seals eat the fish. Their feces settle to the bottom and are eaten by small crustaceans that in turn are eaten by the bottom-feeding groundfish. Thus the infestation has begun. With this in mind, it should indicate to anyone with any sense of logic that we have a problem. That problem stems from grey seals.

You can sit and listen to the countless unfounded, factless stories of those opposed to the seal hunt if you wish, but we have science and personal accounts to back our cause. Please join our cause and act responsibly and proactively to correct an ecosystem that is in a tailspin. We need a seal hunt—period.

I'll quote you a statement from April 2003, when the federal Minister of Fisheries and Oceans was lobbying the FRCC:

Given the Minister's request to the FRCC to evaluate the prospect for an immediate, substantial and durable improvement in the stock condition, the only credible response by the FRCC to this is to seek from the Minister—once again—immediate, substantial and durable action to reduce natural mortality on all cod stocks by reducing the predation by seals. The only means of achieving this is to reduce the seal herd size.

Again, I appeal to you. We need a seal hunt.

Number three is developing markets for seal meat. The Grey Seal Research and Development Society has all but closed an Asian deal that could potentially open the door for the export of 10 to 20 containers, up to 450 metric tons, of frozen seal meat. What an efficient utilization, not only taking the pelts, but selling the meat too.

I recently read an article from the Halifax *Chronicle Herald* in which Ms. Mackenzie stated that you can become very sick from eating seal meat. She goes on to associate brucellosis, an infectious disease passed from cattle to humans, with seals. Trichinosis is a painful disease caused from worms that work their way from the gut into the muscles of those who eat undercooked meat. Trichinosis has been found in Arctic seals. Well, I guess the Eskimos should have been extinct a long time ago, because they've eaten a lot of raw seal meat.

● (0935)

In closing, I was taught, and I know myself, that overpopulation eventually equals starvation. When—not if—this fishery collapses and the carcasses of the dead and rotten seals begin to wash up on our beaches, I'm just curious to know if Paul McCartney or, for that part, the Grey Seal Conservation Society will be there to take credit for that also.

Thank you.

● (0940)

The Chair: Thank you, Mr. Stoddard.

We have two witnesses left. Mr. John Levy, go ahead, please.

Mr. John Levy (President, Fishermen and Scientists Research Society): Good morning, and thanks for the opportunity to speak on this subject. My name is Captain John Levy, and I am a fisherman from Chester Basin. I'm also an elected representative of the South Shore Gillnet Fishermen's Association and the Lunenburg and Queens groundfish management board, an organization that represents hundreds of inshore fishermen along the south shore of Nova Scotia. As well, I am the president of the Fishermen and Scientists Research Society, as well as the president of the Grey Seal Research and Development Society.

The first thing I will speak about is what we, the fishermen, are seeing on the water with respect to what the grey seals are doing.

This past spring, I was fishing for groundfish—

The Chair: I'd ask you to slow down a little bit, if you could. We have simultaneous interpretation occurring, and most of the time they can't keep up with the fast talk.

Mr. John Levy: I know, but you gave me five minutes.

Voices: Oh, oh!

The Chair: And I'm sure that, like some of our members, you will take seven.

Mr. John Levy: Thank you.

This past spring, I was fishing for groundfish 100 kilometres west of Yarmouth, in the Bay of Fundy, in 600 feet of water. I set my nets in the night, and when I started to haul them back the next morning, most of the fish in the nets had the stomachs torn out of them and the liver and gonads gone. The seals target the part of the fish that is the highest in protein. The fish were ruined, and the seals had also torn holes into my nets when they tore out other fish. I had to give up fishing and come home. I saw a couple of seals around the boat only for a short time, because they mostly stay underwater. I don't know how many were there, but I had never seen anything this bad before for seals in this area. This is happening all over Nova Scotia.

Several years ago, you hardly ever saw a grey seal in the western part of Nova Scotia, but they have moved in. They are more like an invasive species in these new areas into which they have moved, because they weren't here years ago. They are disrupting the whole ecosystem. What few natural predators they did have years back, like the shark, are mostly gone, so there is nothing to keep their numbers in balance.

These animals grow very large. They are huge animals with big appetites. They aren't the small, little seals that some groups advertise on TV. They are vicious animals.

As lobster fishermen along the south shore, when we are hauling our lobster traps, we find the seals are following our boats. When we put back small lobsters, the seals are diving down and eating them. So much for conservation of the little lobsters. This is going on all over Nova Scotia, but it just isn't restricted to Nova Scotia anymore. I've been talking to fisher friends of mine in the U.S., and they are starting to see the same thing, because the grey seals are now moving into their area.

When do we finally do something to bring these numbers of seals to a more historic level before it is too late for our fisheries? Back in the 1960s—and these are DFO records, not mine—there was an estimate at that time of 10,000 grey seals, mostly in the eastern part of Nova Scotia, and none in the western part. From 1976 to 1983, there was a bounty on grey seals, with x number of seals taken every year for the bounty. From 1967 to 1983, they had a cull. Actually, DFO would go out to different islands with the fishermen and actually do a cull. Starting in 1967, when there were only 10,000 animals in the early sixties, DFO thought these animals were detrimental to the fishery, and they started reducing their numbers with these programs. What do you think is going on now when these numbers are now over 300,000 animals and they are showing up in areas where they never were before? Unfortunately, the program was stopped in 1983, I guess due to pressure by people who don't know the real facts.

In other countries like Scotland, where there are wilderness protected areas such as the ones we have, areas that are set up to protect the flora and fauna of sensitive species, grey seals actually move into these areas and upset the whole ecosystem. The very flora and fauna that were being protected were being destroyed by the grey seals. They actually had to implement a cull in these countries to chase the seals off these islands.

This is just a small explanation of what is actually going on. I didn't mention the seal worm that comes from the grey seals and affects our fish, weakens them, and may eventually kill them. We need to do something now to bring the numbers of grey seals to a more historic level before it is too late for our fishery.

I did it in five minutes. Thank you.

• (0945)

The Chair: Thank you.

We have one more witness here, Robert Courtney. Robert has driven to get here today; he wasn't on the original list. We're going to welcome him to the table.

Go ahead.

Mr. Robert Courtney (As an Individual): To give you a bit of background, I'm originally from Newfoundland—actually, Bill's area. I'm the guy without a home, as they called me at one time at DFO.

Some hon. members: Oh, oh!

Mr. Robert Courtney: I am the vice-president of the North of Smokey Fishermen's Association. Today I am here representing the sealers of Cape Breton.

I don't have anything written down, but I'm going to shoot off the hip. Anyway, I'm here representing the sealers. We do have licensed sealers in Nova Scotia; there are 117 of us. We can do a harvest, but every time we turn around to try to do something, we have blocks fired in our way. This is where we're coming from today.

Actually, I'm not supposed to be here today. I'm supposed to be in court in Sydney for another issue, where I tried to harvest seals.

The Chair: You're on you're own there.

Some hon. members: Oh, oh!

Mr. Robert Courtney: Anyway, this is the whole problem. You guys can go back and say, yes, there should be a harvest of grey seals. But if you're not going to take down the areas and allow us where the seals are, you can set whatever quotas you want, open it up, but if you aren't allowed where the product is, what's the good of it? You can't harvest it. It's ridiculous.

We have an allocation of 10,000 now. The reason there's only a small amount of it harvested is because we aren't allowed where the seals are. You can't harvest them any time of the year; the juveniles can only be harvested in a two- to three-week window, and it's in February and March. Otherwise it's impossible.

We've worked at this for 12 to 15 years at the North of Smokey Fisherman's Association and with sealers in Cape Breton. We've harvested seals; we've sent meat overseas. We even made a trip one time over there to look for markets, and so on.

It's a touchy issue when it comes to the areas that we go into, but I don't know what other way we could do it. There's definitely a problem with the seals, and something has to be done. But to go out and, say, fire up another 1,000 licences or whatever into history, it's really over capacity right now. We have 117 licences, we have the manpower to do it, but we're not allowed where the product is. That's the problem.

Everybody's calling for a harvest. There is a harvest, we have allocation, but we can't do it. That is one issue.

I know the issue here today is about the grey seals. But since it's the committee, I have to inform you about the share of the harp seals that was given to Nova Scotia.

Last year Nova Scotia, P.E.I., and New Brunswick had an allocation of 1,800 animals for the three provinces. With 92,000 animals for the gulf harvested right off our doorstep, it was an insult to give us 1,800. We were licensed sealers walking around with thousands of animals at our doorstep, and we couldn't harvest them because the allocation for harp seals was stuck.

Anyway, thanks for your time.

The Chair: Thank you, Mr. Courtney.

As you can see, we have a myriad of routes that we come at this issue from, and there are a number of opinions represented at the table. The job of committee will be to study this issue and make some recommendations.

Let me tell the audience that in the past, and I would hope in the future, we've been very fortunate on this committee. We have an all-party committee; every party is represented here today except the NDP. We have always been able to reach a consensus in the past, so we don't have to send in reports. We would hope to be able to do that on this issue as well.

With those comments, I'm going to go to Monsieur Thibault.

Welcome.

• (0950)

Hon. Robert Thibault (West Nova, Lib.): Thank you, Mr. Chairman, and thanks for the invitation to join the committee on your western Nova Scotia leg.

I want to join Gerald in congratulating all the panellists for having briefs. I know I have had the opportunity to sit on a number of committees and had presentations from a number of sectors and a lot of lobbyists and experts, and none of them seemed to be able to fart in less than 12 minutes. Such a good, concise presentation in five minutes is excellent.

Mr. Hammill, on the point about the balance in the ecosystem, when I'm looking at the level of predation by seals, it seems to be rather low on the stocks that we, on the coast, see affected directly by seals. I have seen reports before on the effect of the catches on the quality of cod, and it seems to be directly linked. If you look at the health of the cod in eastern Nova Scotia, it seems to be directly linked to the number of seals being caught going up.

Is there a direct competition in feed between the cod and the seals? Would the cod be feeding on the sand lance, or might other species be feeding on the sand lance, so that while the predation might not be direct, the effect of the seal would have an indirect effect on the health of the cod stock?

Dr. Mike Hammill: There is overlap. The problem is that cod are probably eating smaller sand lance, whereas the seals are eating big sand lance. When you start to try to quantify this impact, it gets more complicated than just the nice link that you're stating. Yes, there is overlap in diet, but the size composition of the diets for the two groups would be different.

Hon. Robert Thibault: Where would the worm come from? Would that be from the feces that generally puts the worm in the ecosystem?

Dr. Mike Hammill: Yes. The cod seems to be the best adapted species for the worm. The grey seal is the best of all the seal species as a host for the worm. The adults live in the seal, then the eggs are shed and they go through a couple of invertebrate hosts, they are eaten by fish, and at that stage they stay in a certain larval stage, and it's when they're eaten again that they mature into adults in the seal. That's a cycle. Yes, they can stay for several years in the fish.

Hon. Robert Thibault: My last question for you is on that 70%, or that ideal population of grey seals that would be stable, not at risk, but at the lowest possible level to have the least negative effect on the fisheries. Do you have an estimate of where that would be? Would that be 10,000 animals, 20,000 animals?

Dr. Mike Hammill: The N70 is calculated more with the idea of protecting the resource, which in this case is the seals. That's where you're minimizing any sort of conservation risk. We do not apply this

to grey seals right now. If we did, we would prevent the number of seals dropping below 70% times 250,000. I can't do the math in my head.

Hon. Robert Thibault: That would be the assumption that the level now is the stable level, but we have heard evidence that the population was stable at 10,000. I would presume that you could have a population level of much less than 70% of 230,000 and have a stable population.

Dr. Mike Hammill: The way the framework works, it's 70% of the largest estimate ever seen, so the largest estimate that we've seen in the last 50 years is current, for sure.

Hon. Robert Thibault: Thank you.

I think I would agree with these gentlemen that we need a new framework at that level.

Glenn, Peter, or whoever can answer, I have a double question. Would we have more effort in harvesting if we had a larger quota? Would it encourage the market investment and all the work that's needed to get the harvesting and the marketing, and is there a market? Can we use it for mink feed, can we use it for human feed, is there a market out there, or are we going to have to have a cull? Is a true cull the only...?

Mr. Peter Stoddard: There's definitely a market. There's an existing market. Right now we're on the doorsteps for 450 metric tons of frozen seal meat at present, and that's potential. It's all but a closed deal.

• (0955)

Mr. Glenn Wadman: That's for human consumption?

Hon. Robert Thibault: Yes, seal meat for Asia.

Mr. Glenn Wadman: As Mr. Courtney said, the main problem we have right now is that where seals are fishermen can't go. That is the one overbearing problem.

Hon. Robert Thibault: I think we all have to recognize that harvesting on Sable would have huge difficulties, huge problems. Are there other ways to get it, other than Sable, to harvest commercially sustainable levels?

Mr. Glenn Wadman: I question the logic of harvesting on Sable being difficult.

Hon. Robert Thibault: That's why you're here.

Mr. Glenn Wadman: The perception is that it's difficult. And why? It's because Sable is a park, so it's a protected area.

So do we protect it until we wipe out the groundfish population? The herd is basically on the Nova Scotian Shelf, based on Sable Island. We've expanded the herd from 10,000 to 250,000. Do we protect it until it gets to half a million? Do we protect it until it gets to a million? Do we protect it until they've taken all the groundfish stocks, until they've gone to oblivion? Or, as more than likely will happen, Mother Nature will have an answer for this. It happened in the North Sea when their seals overpopulated. Mother Nature will introduce a disease. It should make good video. I dare most of the conservation societies to show it, when you have nice 600- or 700-pound rotting carcasses—thousands and thousands of them—floating ashore on Sable Island.

What is the logic? Because it's a park, fishermen can't earn money? Because it's a park, we have to waste a Canadian resource?

Hon. Robert Thibault: Perhaps the question I should be asking is, how do we do it? How do we get on and off Sable and harvest the seal in a commercially sustainable manner without having unacceptable environmental repercussions?

Mr. Robert Courtney: We've been on islands before and have harvested the seals. We take them right off, take them to the boats, and do the biggest part of the processing on the boats. There's no damage. There's nothing left on the island. Everything is taken off. If going onto the island is going to damage the island, they'd better get all those ponies and everything out of it too, because with just 100 fishermen going on there and doing the harvest, there'd be no damage to the island.

The other concentration of seals is at Hay Island, which is down by Scatarie. We were on there and we're in court over it now, but there was no damage done to the island. We took 600 or 800 seals off the island. There was no damage to the island. We did it very well, and the same thing can be done on Sable. But until we're allowed there, we don't want another court case like the one we're in now.

The Chair: Thank you, Mr. Thibault.

Mr. Blais.

[*Translation*]

Mr. Blais, please.

Mr. Raynald Blais (Gaspésie—Îles-de-la-Madeleine, BQ): Thank you, Mr. Chair.

[*English*]

The Chair: Let's just wait a second until our witnesses....

[*Translation*]

Mr. Raynald Blais: I would like to let you know that Mr. Cuzner and Mr. Thibault are here today. I would have preferred that they be in the Magdalen Islands or elsewhere in the field. I would like to say that we had an opportunity to dine on seal yesterday. We are a little tired today because we got here at three o'clock this morning, which has nothing to do with what we ate yesterday in the Magdalen Islands. Seal meat is very good. We ate smoked harp seal and seal rillettes, which is a mixture of dough and seal meat. It is delicious and very healthful. It contains omega 3s and all kinds of other things.

My first question is for Mike Hammill. I would like to know what is happening at Fisheries and Oceans on the seal file. We have been hearing about seal diets for some time now. Nobody seems to know exactly what is happening. I am having a hard time understanding what we can do about this. Why is it so hard to figure out how many tonnes of fish seals eat per year? I think Mr. Stoddard was saying that one seal eats two tonnes per year. Why is it so difficult? Science should have an answer to that.

•(1000)

Dr. Mike Hammill: Thank you.

The current challenge is not estimating how much fish seals consume. For example, a grey seal eats about a tonne and a half of fish per year. We even have a pretty good idea of the percentage each

species' diet represents. We have a problem with the samples because it all depends on where we go. Sable Island seals do not have the same diet as Magdalen Islands seals. So there is a sampling problem. However, we can measure things to a certain extent and figure out average consumption. We do that quite well.

That said, we have a hard time measuring the impact of consumption on the target species. Are seals responsible for 30%, 50% or 90% of the natural mortality for cod? That is where we run into problems because we do not have good ways to measure cod mortality and to determine causes of mortality in the species.

The second problem is determining how killing all the seals would benefit the cod. Is there a direct connection between seals and cod? Would other predators fill the niche created by killing the seals? The ecological link is a problem.

Mr. Raynald Blais: Given what you are telling me, is it true that Fisheries and Oceans has fairly limited financial resources to do research on seals? That is the only explanation I can see for the lack of data. How can you justify that lack of data? Is it because not enough money is being spent on research?

•(1005)

Dr. Mike Hammill: We recently completed a major research project on seals in eastern Canada, and our data are current. The problem is synthesizing all of that information. We need money for that. That is part of the problem. But it also takes a lot of time to tabulate and harmonize all the information in order to assess the impact.

Mr. Raynald Blais: I do not want to put you in an uncomfortable position, but I would like to know how much money would have to be invested in research and how much money is currently being spent on it.

Dr. Mike Hammill: Are you asking me how much money we want and how much is being spent on research now?

Including professionals, our current budget for eastern Canada is \$200,000. We would like another \$100,000 or even \$200,000 to get an accurate picture of the situation.

Mr. Raynald Blais: That is not a huge amount.

Dr. Mike Hammill: We have spent a lot of money over the past two years. Fisheries and Oceans spent \$5 million over two years to assess that. We updated our information on marine populations and distribution. We have already invested a lot of money and now we need a little more to pull it all together. I do not mean that it is not done, but we will—

Mr. Raynald Blais: Would it be correct to say that it is not just a matter of money? Yes, it is about money, but it is also about dedicating human resources to intensive research. Is that right?

Dr. Mike Hammill: To a certain extent. We need more people trained in modelling. We need people with expertise in creating quantitative models and simulations to evaluate the impact.

Mr. Raynald Blais: Do I have any time left?

[English]

The Chair: Go very quickly, please. You don't, but you can have a very quick question.

[Translation]

Mr. Raynald Blais: Do harp seals and grey seals eat crab and lobster? Are they eating more than they used to? How much do they eat?

Dr. Mike Hammill: Yes, they do, but not a lot. We found five, six or eight snow crab in the stomachs of harp seals around the Magdalen Islands. We kill one in 600 or 700 seals. Snow crab is a very small part of the seals' diet. A big part of the grey seal diet is the meat that fishers put in traps to attract cod and snow crab. They also break the traps, especially the wooden ones.

[English]

The Chair: *Merci beaucoup, monsieur Blais.*

We'll go to Mr. Lunney.

Mr. James Lunney (Nanaimo—Alberni, CPC): Thank you very much.

I'm curious about the numbers. For the first of the cull, the harvest levels weren't what the allocation allowed in terms of seals.

I'm looking at your statistics, Mr. Hammill, from the presentation you've put before us. You'd be about the third panel, I guess, to show the total population of grey seals during the period from about 1966 to about 1981 being less than 50,000—maybe around 30,000 until about 1981 plus—and gradually going over the 50,000 mark around 1983. I guess that's when the seal hunt was stopped. And you can see the numbers increasing exponentially from there to over 250,000.

That would sort of indicate that we have a huge shift in the population of seals, and our fishermen here are recording the effects on the stocks. How is it that we need science and science and science to produce evidence that there's actually a problem here, when it seems to me that it's quite clear that the populations were lower and the fisheries were better? I guess I'd like comment....

When we were on the Magdalen Islands, they don't call them, of course, seals there. They don't call them *phoques*. They use the word *loup-marin*, sea wolf. I look at these pictures that have been circulated of the halibut that have been visited by the seals and what's left of them, and it does sort of look like a wolf has worked them over. Some of the images have been around the table.

Then we hear our lobster fishermen talking about being stalked. They're going out to pick up their traps and having young ones.... Now, we're concerned about lobster fisheries. We have management protocols in place about size limits and so on. They're trying to be responsible and protect the stocks of lobster, and when they toss the little ones overboard, they're being eaten by the seals.

I know you just said that there doesn't seem to be a lot of evidence that that's a big part of their diet, but I imagine that if you had sampled one of those grey seals, you might have found something to change what you're finding in stomach contents, and so on, in favour of the lobster fishermen's observations.

What is holding us back from actually recognizing that there's a problem here and taking the necessary steps to remedy it?

• (1010)

Dr. Mike Hammill: I guess several things need to be examined here.

First, seals are responsible for what percentage of natural mortality in cod? In the analyses we've done, it's fishing that has driven down the cod population. Is what limited fishing that now exists the main factor limiting the recovery, or is it what is being consumed by the grey seals? When we look at overall mortality, is the mortality that we can attribute to grey seals the major feature, or are there other aspects that we don't understand? That's where one big gap is right now. What component of total mortality can be allocated to grey seals versus other sources of mortality?

A voice: DFO.

Voices: Oh, oh!

Mr. James Lunney: Well, moving on from the cod....

Dr. Mike Hammill: Let's get after DFO.

The other part is trying to model this, saying, for instance, let's reduce the seal herd by 50%, or by $x\%$, or by whatever percentage you want to choose. What are the costs of trying to reduce this population versus the benefits that would be achieved, and how long would it take to achieve these benefits?

These are the questions we need to answer before we can go that next step—namely, do we want to cull or do we not want to cull?

Mr. Peter Stoddard: Mr. Chair, could I just make a comment?

The Chair: Go ahead.

Mr. Peter Stoddard: If you take a 20,000 metric ton biomass of cod in a four-year period where you aren't fishing it, and it's reduced to less than 4,000 metric tons, then...? You know, here's your sign. It should be obvious.

Look at the natural curve of the fish. Look at the curve of the increase in the seal population. Put them on the same graph. There's your answer.

Mr. James Lunney: Thank you for that contribution.

It's just not the cod here. We're all wanting to see the cod stocks come back. But there also seems to be some pretty clear evidence that halibut and other fish are suffering. Longline fishermen are finding their lines coming in missing fish body parts, sometimes most of the fish.

We have this problem on the west coast as well, where sport fishermen are fighting to get their salmon in when seals have taken the fish up on the rocks. It's easier for a seal to catch one, I guess, if it's already on a line.

I recognize that you're in kind of a sensitive spot, since you're representing DFO in this. We're not trying to abuse you here. However, it seems to me there are some serious concerns here.

Mr. Thibault already brought up a question about 70% of the population being for conservation purposes. That would seem to be a very good thing if the population were stable, but when it's obvious that the population has been increasing tremendously, even exponentially according to your own data, maybe we need to re-examine that tool as an appropriate measurement level for conservation purposes.

Mr. Wadman, there's something you want to contribute?

Mr. Glenn Wadman: Yes. It might be an appropriate level, but perhaps we should have picked 70% of the stable level between 1966 and 1983, not 70% of the inflated level of 2006.

Mr. James Lunney: It seems to me that when there's a huge range like that, logic might dictate that somewhere between the extremes you might take a level, and then take 70%. That would be quite a different thing from taking the maximum sustainable, especially in the evidence of exponential increase. But that point has already been made.

•(1015)

Dr. Mike Hammill: I might add that a lot of this is based on the idea.... This started out looking at the harp seal hunt, which is where we have a profitable fishery. We want to preserve that resource. That forms the basis for the plans, trying to make them fit across wherever we go.

Some of our work is suggesting that the carrying capacity for grey seals could be in the order of 400,000 seals. We're still a long way from there. I mention that not to say that's where we should go; this is just what the ecosystem could be capable of carrying. It's what the pristine levels were at one time. We're a lot higher now. We haven't seen these levels for probably 200 years. Grey seals were one of the first to disappear when colonization occurred. They were an easy resource. They were used for food, they were used for lamp oil, they were used for many different things. It goes back a long way.

Turning to another aspect, Ms. MacKenzie talked about the ecosystem. This gets into how you want to put them in together. The department is moving towards ecosystem management. It is not as easy as it sounds. This is one aspect where we have to identify a few things. What cod levels do we want to have? What pollock levels do we want to have? What hake levels do we want to have? What tools do we need to get to those levels?

Into that equation probably seals will fall. And in that discussion, we may still stick with 70% of whatever the largest number we have seen, or the pristine estimate, or we may come up with another figure that will be lower. This will be part of the evaluation process.

Mr. James Lunney: Let's bring the parasite issue into this. Is that a concern to DFO?

The Chair: This is your final question.

Mr. James Lunney: On the parasite situation, given what we've heard here about the seal worm, which is infesting a lot of the fish now, is that a concern to DFO in terms of management of the health and quality of the fish stocks?

Dr. Mike Hammill: We downsized, or whatever you want to call it, our parasite program in 1998. We moved away from that. We have not been doing a lot of research. There's still one researcher looking at cod worm, I think, and he's based out of Moncton now. We do not

do a lot of science on this aspect right now. For the other aspects you'd have to ask the management people.

Mr. James Lunney: If we're ignoring a serious aspect and not collecting data on it, is that something that perhaps should be included in our decision-making if we're concerned about protecting the ecosystem? We're allowing parasites to proliferate because of an overabundance of a particular species that's damaging other species. Isn't that something we should be doing a little more science on? Shouldn't we be calculating that into our equation on how we maintain balance in the ecosystem?

Dr. Mike Hammill: We can go back and re-examine. In the work that was done in the early 1990s, we looked at impacts and ways it could be controlled. One of them was the delivery of ivermectin, which is a worm control agent that was delivered to seals. The technique worked fairly well as far as cleaning up worms out of the seals goes, but the problem was the delivery mechanism—trying to make sure you gave it to a seal in a safe manner for the person who was doing it and also in a safe manner for the seal.

Mr. James Lunney: You could get them to report to the local clinic.

Dr. Mike Hammill: That's one way of doing it, although probably a more effective way is injecting them on Sable Island or on the ice during the pupping season. You can approach the animals then and you'd just hit them up, so to speak.

We have done a fair amount of this work. Maybe a lot of this stuff needs to be re-examined, because it's apparent from industry that it's more of a problem now.

The Chair: Mr. Stoddard, did you want to comment?

Mr. Peter Stoddard: Am I hearing this right? We're now going to give seals medicare so they can live longer? We have a problem with too many now. We want to reduce the herd size, not make them live longer.

The Chair: We appreciate that interjection.

Dr. Mike Hammill: That's the other approach.

The Chair: Mr. Courtney, did you have a comment?

Mr. Robert Courtney: Yes, I have a quick comment.

The grey seals that are being harvested are juvenile seals; they're only six to eight weeks old. How many of those will you have to harvest and how long will it take before there is any effect on the herd, before it would come down in size?

Dr. Mike Hammill: Are you talking pups?

•(1020)

Mr. Robert Courtney: Yes, that's all that's marketable right now to harvest. In taking those, how long would it be before it affected the overall herd? What's your estimation? How many would you have to take out and how long would it take before you saw a drop in the overall herd?

Dr. Mike Hammill: Without doing the math, the easy answer is that you take all the pups that are born—that's the simplest thing—but you're not going to see any change in population size for about four to five years. It takes four to five years before they become mature, and it's at that stage that you start to see the impact of your culling program, if that's what you want to do. You either do the pups, take a lot, or you would address your efforts towards reproducing females to have a more immediate impact.

The Chair: Thank you, Mr. Hammill.

We have a bit of time here, not a lot, and I'm going to ask my colleagues to try to keep their questions very brief. I know members still have some questions they'd like to ask. Perhaps we could just ask one question each; I know that's not a lot for the members who have not had an opportunity to speak, but it's an additional eight questions around the table. If we did that, we could finish up the last round and it would still put us over time.

A voice: Excuse me, but I'm...*[Inaudible—Editor]*

The Chair: *[Inaudible—Editor]*...to sit at the table. The difficulty with committee always—and it's no different here from anywhere else—

A voice: *[Inaudible—Editor]*

The Chair: I call the meeting to order.

The difficulty is to give everybody an opportunity to speak. It's never easy. We've gone overtime on every meeting; well, we'll go overtime on this one. We have another meeting after this. We ask people to present to the committee so that we can have an organized forum. I realize somebody is always left out, and it's never easy, but it's the way the meeting's run, and it's the only way you can run the meeting and have order.

We're going to go for our final round of questions. We'll have a quick question. There is a lot of opportunity after the meeting for the audience to ask individual questions to the members of committee or to anybody who appeared here.

Mr. Cuzner, would you go ahead.

Mr. Rodger Cuzner (Cape Breton—Canso, Lib.): Ms. MacKenzie, I'd like to ask for a little bit more information on your organization. When did you form? What was its genesis? Who makes up the board, and what access do you have to science? When did you fire up, and what prompted the fire-up of your society?

Ms. Debbie MacKenzie: It's a non-profit society. It was formed two and a half years ago.

Mr. Rodger Cuzner: How long?

Ms. Debbie MacKenzie: It was two and a half years ago, in the spring of 2004. It's concerned with holistic conservation of the ocean, and it's triggered by the awareness of the collapsing ecosystem.

I have a background of being born and raised and living all my life in the fishing industry. My father's a DFO scientist of the type who used to do fish inspection. He was the head of the fish inspection lab in Halifax. He's now retired. Fish inspection protocols were for cold-blooded fish, which cannot carry bacterial threats as the seals can, because they're mammals.

That's one part of it. That's not the thing that caused the Grey Seal Conservation Society to form; it was ocean conservation of the ecosystem, triggered by seeing the loss of...everything. My original concern was the groundfisheries; why won't they rebuild? The starvation was a shock to me, when I found out that they were starving. My father explained this to me, and I thought it was unbelievable, but now it is actually supported by DFO analysis.

When the issue was raised here of a cod stock that diminished its tonnage when there was no fishing, the obvious negative factor had to be that the seals were eating them. That's not what the ecological analysis shows. The scientists at the Bedford Institute, Ken Frank and others, have done great studies, and they now know that it's a lack of food. When that—

• (1025)

Mr. Rodger Cuzner: Would your society have members from the Bedford Institute sitting—

Ms. Debbie MacKenzie: No, but we communicate with them. We've been over and made presentations to them. We're allied with a few people at Dalhousie University.

I'm the main researcher. I've been reading all the science I can find, all that DFO and others have written for 10 years. What I'm seeing is this. Somebody said here that we had an ecosystem in a tailspin, and we do. The signs of overall decline are massive.

One thing that southwest Nova fishermen should be aware of, besides the poor condition of the fish, is that the Irish moss has disappeared, and when the seaweed's not growing right and the barnacles are disappearing, when the productivity's coming down, that's the ecosystem in a tailspin.

The ecological studies on predators show that they're important to maintaining the structure and function, so it's mainly about protecting predators, because the public thinks the predators are negative.

Mr. Rodger Cuzner: Thank you.

The Chair: Thank you, Mr. Cuzner. That's about as brief as I've ever seen you at a meeting.

Mr. Byrne is next.

Hon. Gerry Byrne: Thank you very much.

I want to thank the presenters as well; it was extremely well done.

Cause and effect—that's really one of the big issues we're talking about here. We're trying to debate cause and trying to debate what the consequences of things are.

Mike, I'm going to give you an opportunity to redeem yourself in terms of talking about general scientific principle and objective scientific protocols. In a food chain, is it the top of the food chain that determines the bottom of the food chain, or the bottom of the food chain that determines the top of the food chain?

Dr. Mike Hammill: You guys make it tough, because you put a five-minute limitation on everything. You just threw out a motherhood statement of a question.

From what we've seen so far in the ocean, it's very hard to tease out the big controlling factor. There are obviously some bottom-up effects and some top-down effects. These are the largest seal populations in eastern Canada that we've seen in 50 to 100 years; for grey seals it's probably 200 years. These large predators are here.

A lot of the other fish predators are missing, and these are important. Shark populations are down, but we don't have good numbers, and they are seal predators. There are interactions.

Hon. Gerry Byrne: In terms of geographic distribution, we've noted that grey seals have been present in west Nova Scotia for some time, but not in the numbers we currently see. Is that indicative of the fact that they've grown? As the herds have grown exponentially, the populations have been evenly disbursed in an equal magnitude or proportion throughout the Maritimes or Atlantic Canada, or has there been an unusual increase in distribution in a particular region of the Maritimes?

Dr. Mike Hammill: What we're seeing is a natural filling in of what was once the grey seal range.

What we've seen in the last 50 years was that the population was largely 70% in the Gulf of St. Lawrence and 30% on the Scotian Shelf. Because the seals were breeding on the ice, this is an area that was not accessible to any hunting.

Since then there has been the causeway. Also Sable Island has been protected, so what few pups you had there have been allowed to increase. They were always there. Many years ago in the 1700s they were there, so now they've just built up. Now roughly 80% of the population is born on Sable Island and 20% in the Gulf of St. Lawrence.

In recent times, we've been seeing a shift. As far as the longer-term distribution of seals is concerned, they're probably just filling in what was once a normal range.

Hon. Gerry Byrne: Thank you.

The Chair: Thank you, Mr. Byrne.

Mr. Matthews, did you have a question?

Mr. Bill Matthews (Random—Burin—St. George's, Lib.): I have just a short question, Mr. Chairman.

First, I'd like to thank the witnesses for coming and for their presentations.

I think it was you, Mr. Stoddard, who mentioned the potential 450 metric tons of frozen seal meat, grey seals. How many grey seals would that represent in a harvest?

Mr. Peter Stoddard: You've put me on the spot now.

Mr. Bill Matthews: Just roughly. I was trying to get my mind around how many grey seals you were talking about.

Mr. Peter Stoddard: Your average grey seal can grow to 300 or 400 pounds. The yield on a seal I'm not sure of. What would you yield from a seal if you were to skin and gut a seal and have just meat, clear bone?

• (1030)

Mr. Robert Courtney: If you're talking about just meat, you would yield 100 to 200 pounds.

Mr. Peter Stoddard: From a 500-pound seal?

Mr. Robert Courtney: Yes. The biggest part of the weight is the skin and the blubber, the fat. When you get down to the carcass on an 800-pound animal, you're only talking probably 300 pounds, 400 pounds.

Mr. Peter Stoddard: And then you've got to remove the bones.

Mr. Robert Courtney: Yes.

Mr. Bill Matthews: Where I'm going with this is that it seems to me your grey seal allocation is really an artificial one, because as Robert said, you can't access the seals. So we're setting a grey seal allocation that's not going to be taken, and it's obvious that everyone knows that before it's allocated.

If you could harvest what you're allocated, do you have markets for it, or is that the problem? Ideally, we would all want to harvest seals and use the full animal, if possible, because if not, that's what causes some problems. If you were to harvest every seal you're allocated this year, would you be able to market the product?

Mr. Robert Courtney: You say it would be a problem, but here we are in the harp seal harvest where we don't use the full animals. What would be any different with the grey seal harvest?

This meat thing is new to me. If the market is there for the meat, then it can be harvested. Some problems have to be overcome with access to the place, but it can be done, and there are people to do it, but a lot of things have to be taken care of before it is.

Mr. Peter Stoddard: In answer to your question, I would say no at this point, because it's new. It's an experimental market, but we do have the potential for 450 metric tons per year, which represents 10 to 20 containers.

Mr. Bill Matthews: Thank you.

The Chair: Monsieur Blais.

[*Translation*]

Mr. Raynald Blais: Thank you. My question is for Peter Stoddard.

You said that seals—I assume you mean grey seals—eat two tonnes of food per year. What is that figure based on? Is it based on personal information or scientific data? What information are you using to arrive at that number?

[*English*]

Mr. Peter Stoddard: That data was DFO science. Mr. Hammill mentioned earlier, a tonne and a half, but it's unclear whether that's actual fish flesh or if it's only the belly content. If it's only the belly content, that gets multiplied by five, because your belly content's only 20% of the fish. So maybe five times that amount of fish is being destroyed. We're not sure, because the science doesn't differentiate, whether it's actual flesh or belly content.

[*Translation*]

Mr. Raynald Blais: I am not sure I understand. Can you clarify your response?

[English]

Mr. Peter Stoddard: In the pictures that were circulated, the whole fish wasn't eaten. They have every opportunity to eat the whole fish, but they go for the belly content, which only represents 20% of the overall weight of the fish. DFO science doesn't differentiate. We can't get an answer as to whether it's 1.5 metric tons of belly content or 1.5 metric tons of fish.

The Chair: Mr. Hammill, do you have a comment there?

Dr. Mike Hammill: It's 1.5 tonnes consumed, actually eaten. So if there's fish that's left over but not eaten, that's not taken into account.

Mr. Peter Stoddard: So it could be multiplied by five.

[Translation]

Mr. Raynald Blais: Thank you.

[English]

The Chair: Mr. Kamp.

Mr. Randy Kamp (Pitt Meadows—Maple Ridge—Mission, CPC): Thank you, Mr. Chair.

Thank you for appearing and giving us some good information that we'll have to wrestle with.

I was part of the standing committee trip to Newfoundland a little more than a year ago, and I think the same holds true for this trip. I don't think I've yet found a fisherman who doesn't believe that the increasing seal population is affecting groundfish stocks. We ran into some scientists who aren't convinced about that, but so far I haven't run into a fisherman. I'm from British Columbia, so our experience there is probably the same as on the other coasts, and that's that often the fishermen are right. In the end, we often find that out.

I have one question, I think, for Mr. Hammill.

Apart from maybe the legal problems and other issues about sealing on Sable Island, are there any biological reasons why you, as a biologist, wouldn't hunt for seals on Sable Island?

• (1035)

Dr. Mike Hammill: No. It all depends on how everything's done, of course. If we're talking about a well-managed hunt, then as far as seal hunting goes, it should be fine.

Mr. Randy Kamp: It's not because it's highly sensitive environmentally and hunting there would upset that?

Dr. Mike Hammill: There are things like dune damage that would have to be considered. Running all over with ATVs, or something like that, would have to be considered. Presumably if this is an option, there would be a hunt management plan. That's what's usually prepared. This would be outlined, it would be examined, and then problems would be identified and the hunters, or whoever, would be expected to mitigate.

Mr. Randy Kamp: Thank you.

The Chair: Mr. Manning, I'm sure you have a question. A final question to Mr. Manning.

Mr. Fabian Manning (Avalon, CPC): Yes, thank you.

Thank you to the witnesses.

I'll say to Mr. Wadman that it's great to have another Placentia Bay man at the table. I'm from the top of the bay.

Under the marine mammal regulations—and maybe Mr. Hammill can answer it—you can apply for a fishing licence for what's known as a nuisance seal; I don't know if you're familiar with that, but it's a nuisance seal. I'm trying to get my head around it, because in my opinion, most of the seals are nuisances in regard to what they're doing to our cod stocks. I've heard a difference of opinion here this morning, so I'll simply give mine.

The bottom line is that there are two things we're trying to wrestle with here. One is an allowable seal hunt, plus some way of saving our fish stocks at the same time. It goes a little bit wider than only the seal hunt, when it comes to the fishery.

As for the nuisance seal, could you elaborate on that for the people here? Is it possible that a fisherman could apply for a licence to take some of the grey seal herd under the nuisance seal part of the marine mammal regulations?

Dr. Mike Hammill: It is possible to apply for a nuisance seal licence, but I think this region has to come up with their criteria. The way it has been set up nationally, you have to show clearly that it is a nuisance. It is not meant to be a solution for a problem of too many seals; it's supposed to be a solution for a particular pain in the butt that's causing economic damage. In a way, you're supposed to show, in theory, that other approaches would not work.

Mr. Fabian Manning: Has it been used, to your knowledge? Do you know of fishermen who have applied for licences and received licences for nuisance seals?

Dr. Mike Hammill: There was a policy in this region before where it was fairly open, but new policies have come through nationally and they've been trying to tighten up on that. One factor is that we just have no idea how many seals are actually taken under this licensing scheme. So there are still some things that need to be worked out.

For details, ask Jerry Conway. He's the person most involved, based in Halifax with DFO. He can give you the fine details, but it's not meant to be a solution to what is perceived to be too many seals.

The Chair: Ms. MacKenzie.

Ms. Debbie MacKenzie: I might respond that there is quite a lot of use of nuisance seal licences. The nuisance seal hunt is a fairly substantial hunt, judging by the rotting carcasses that are littering the shorelines, shot by fishermen. It's routine in recent years.

Mr. Fabian Manning: You telling me that fishermen have licences, and they're taking these seals and just sticking them on the beach.

Ms. Debbie MacKenzie: Yes, they do. They leave them where they shoot them. Wounded or dead, they come ashore. They rot on public beaches and private property. Last summer, there was a kayak tour operator who found a dozen shot, eleven dead and one wounded. It's very commonly done.

• (1040)

The Chair: Two more people want to have an opportunity to speak.

Mr. Courtney, and then Mr. Wadman, on this subject.

Mr. Robert Courtney: Yes, we might as well put out a nuisance cod fishery thing too and do away with all the cod fish, because they eat the \$5 lobsters and \$3 or \$2 crab, and all this.

It's an industry that we're talking about. I'm here representing the sealing industry, the licensed sealers, and the nuisance seal licences are out of control. It's an industry, and a good industry, so why not manage it as such? That's all we're asking. Allow us to go to the place where we can harvest the animals and do it properly, not give everybody a gun and say, if anybody sees a seal, shoot it. That's not acceptable.

The Chair: Thank you, Mr. Courtney.

Mr. Wadman had a comment.

Mr. Glenn Wadman: I actually want to get my last 10 seconds in, and not particularly on this topic. I just want to bring up something for the record.

The industry around here at the table has been saying harvest, harvest, harvest. This is not personal, Mike, but I lost track of how many times you used the word "cull". I think you used it 16 or 17 particular times. The industry is not here looking for a cull; the industry is here looking for a harvest. There is a very different distinction between those two things, and I'd like that message to be reflected in the—

The Chair: It is now on the record.

Mr. Manning, do you have a final comment?

Mr. Fabian Manning: No.

The Chair: On that note, I would like to take a moment again to thank our witnesses. I know there are people in the audience who would have liked to appear before the committee and were unable to.

I certainly recognize Mr. Morrow again. I fully expect your submission in writing to the committee. It will be translated and sent to all the membership of the committee.

I see Willie Nickerson has left the premises, but if Willie has something to put in writing, I'd be happy to receive that as well, and all the committee could receive it, and anyone else.

Mr. Stoddard, you have your hand up.

Mr. Peter Stoddard: I'd just like to remind the audience that the media is here. Take advantage of it and get pictures. Use it.

The Chair: Do you have any other public service messages, Mr. Stoddard?

Voices: Oh, oh!

The Chair: I do have a couple of very quick and final questions. The first one is for Ms. MacKenzie.

You talked about ecosystem management. You spoke very well from your point of view, but the question I have is, do you recognize man as being a predator in the ecosystem?

Ms. Debbie MacKenzie: Yes, absolutely, but man's not a natural marine predator. The natural marine predators are integrated into perpetuating the life processes in the sea in a way that man is not. Man is a parasitic predator on the marine animals. The marine animals are interconnected, and the function of the ecosystem necessarily involves predation. Fish have been on the planet for 400 million years, never without predators. They're practically without predators now.

You pointed out that when there were fewer seals a few decades ago, the fisheries were healthier. That's true. There were more predators then because there were sharks and big hake and big cod. There were actually more predators.

The Chair: I agree there were more predators 20 years ago, and a lot of the big sharks especially are no longer in the ocean. Wouldn't it be reasonable that another predator would replace them and wouldn't it be reasonable to say that predator could be man?

Ms. Debbie MacKenzie: No, because man's not integrated into the nutrient recycling and health maintenance of the sea, as the sharks are. For instance, when starved fish hit the wall—and that's what's happened with the groundfish; they can't grow above 20 inches of cod anymore—this slinky, miserable fish is due for recycling, and the natural predator takes them out one at a time and recycles them. Man can't do it.

• (1045)

The Chair: Thank you for that.

Mr. Levy, I'm going to give you the final comment. That was my question.

Mr. John Levy: Since I speed-read my presentation, I have 30 seconds.

Some of this was mentioned, but about the samples of what seals eat, the scientists are basing their information on Sable Island. Unfortunately the cod stocks are completely depleted around Sable Island, and when they're getting this information of what the seals are actually eating, well, that is only based on the seals that are living around or coming to Sable Island. For the seals that are living and eating in the western component of Nova Scotia, where there still is a cod fishery, obviously the diet of the seal and the percentage of cod that they eat would be a lot higher. And where seals are targeting the gonads and the liver of the fish they eat because of the high concentration of protein, and this was briefed on, the amount of fish that is actually killed is substantially a lot higher than what would show up in the amount of fish that is actually eaten by the seals.

That's the last comment I'd like to make. Thanks.

The Chair: I appreciate that.

Once again, thanks to all of our witnesses. Thanks to the people in the audience who are here today. For those who have a submission they would like to send to the clerk for the fisheries committee of the House of Commons, we'd be more than happy to receive it.

On that note, I'm going to adjourn this meeting.

Published under the authority of the Speaker of the House of Commons

Publié en conformité de l'autorité du Président de la Chambre des communes

**Also available on the Parliament of Canada Web Site at the following address:
Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante :
<http://www.parl.gc.ca>**

The Speaker of the House hereby grants permission to reproduce this document, in whole or in part, for use in schools and for other purposes such as private study, research, criticism, review or newspaper summary. Any commercial or other use or reproduction of this publication requires the express prior written authorization of the Speaker of the House of Commons.

Le Président de la Chambre des communes accorde, par la présente, l'autorisation de reproduire la totalité ou une partie de ce document à des fins éducatives et à des fins d'étude privée, de recherche, de critique, de compte rendu ou en vue d'en préparer un résumé de journal. Toute reproduction de ce document à des fins commerciales ou autres nécessite l'obtention au préalable d'une autorisation écrite du Président.