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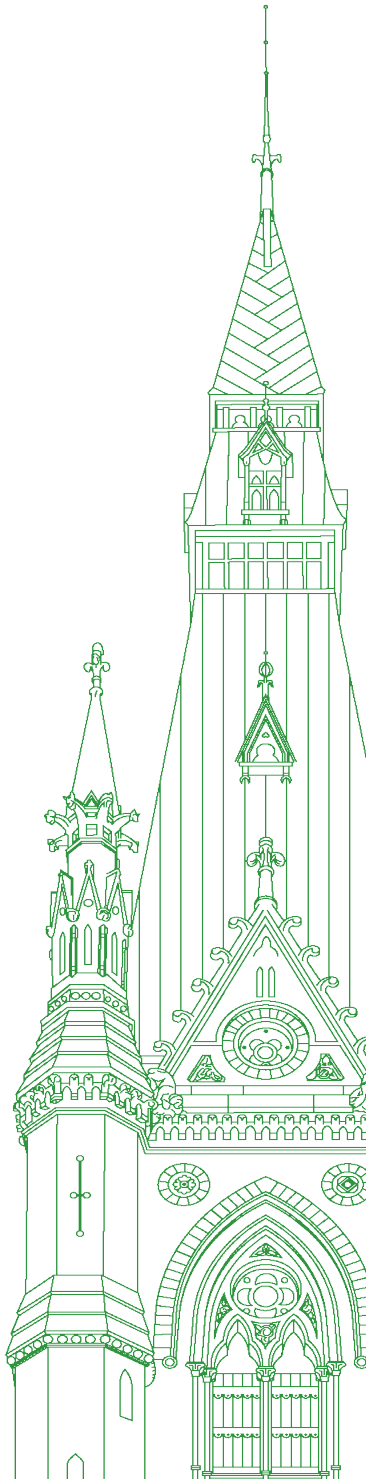

Chair: Mr. Ken McDonald

Standing Committee on Fisheries and Oceans

Friday, October 21, 2022

● (1350)

[*English*]

The Chair (Mr. Ken McDonald (Avalon, Lib.)): Welcome.

We have two witnesses who are signed in for the first panel. We have Moira Brown, senior scientist with the Canadian Whale Institute, and Lyne Morissette, marine biologist and environmental mediator, representing M-Expertise Marine.

I know that Ms. Morissette has presented to committee before, and I think Ms. Brown has as well.

I'd like to remind those participating by Zoom that you have the choice at the bottom of your screen of either floor, English or French. As a reminder, screenshots or photos of your screen are not permitted. As well, when you're asking a question, please identify who the question is going to.

I'm sure there's something else I'm supposed to say, but we'll get into the presentations by the witnesses to enable us to ask them some questions.

What I've decided to do is to split the two panels equally, with 35 minutes each. Wherever we end up at that 35-minute stop is where we'll finish off.

I'll now ask Ms. Brown for her five-minute opening statement.

[*Translation*]

Mrs. Caroline Desbiens (Beauport—Côte-de-Beaupré—Île d'Orléans—Charlevoix, BQ): A point of order, Mr. Chair.

I'd just like to ask you to let everyone know that everyone has passed the sound test. Thank you.

[*English*]

Dr. Moira Brown (Senior Scientist, Canadian Whale Institute): Thank you very much, sir.

I am a senior scientist at the Canadian Whale Institute and the Campobello whale rescue team that responds to entangled whales in the Canadian Maritimes and Quebec. I'm also a scientist emeritus at the New England Aquarium in Boston, Massachusetts.

I started right whale research in 1985, and, my goodness, that's 37 years ago now. I've studied right whales in all of their habitat areas, from the calving ground in Florida to the fairly new habitat in the Gulf of St. Lawrence. We use all of the data that we have collected on right whales over the years in all of these different habitats.

I was the lead author on the first recovery strategy for Fisheries and Oceans Canada. I led a working group in the early 2000s to relocate the Bay of Fundy shipping lanes and an area in the Roseway Basin area to deal with vessel strikes in the two critical habitat areas for right whales in Canadian waters. Our conservation efforts at that time were focused on vessel strikes, because that was the leading cause of mortality in the 1990s and early 2000s.

We started studying right whales in the Gulf of St. Lawrence in 2013 and 2014, partially because we were seeing fewer and fewer animals in the Bay of Fundy. Now, of course, since the unusual mortality event in 2017, most of my work is focused in the Gulf of St. Lawrence, doing field research, responding to entangled whales and using those data to work with the various advisory groups led by Transport Canada and Fisheries and Oceans Canada to respond to the right whale emergency that came up in the gulf.

I would say that Canada has done an incredible job, with a very fast response, on what happened in the gulf in 2017, and again in 2018, with the high number of mortalities from human-related activities, vessel strikes and gear entanglements. After working in this for most of my adult life, and also spending part of that time in the United States, I can tell you that this work was started down in the U.S. in about 1996. In the five ensuing years since 2017, we have not only met similar protection measures for right whales in Canadian waters, but we have exceeded what's being done by our partners in the states to the south.

There is still work to be done—we haven't solved the problem yet—and like many conservation actions, it is not “one and done”. This is something we will have to keep doing in an iterative way for years to come, if we're going to recover the North Atlantic right whale and have coexistence between fisheries and the shipping industry in Canadian waters.

Thanks very much. I look forward to your questions.

The Chair: Thank you for that.

We'll now go to Madame Morissette for five minutes or less, please.

[*Translation*]

Dr. Lyne Morissette (Marine Biologist and Environmental Mediator, M-Expertise Marine): Mr. Chair and honourable members of the Standing Committee on Fisheries and Oceans, thank you for inviting me to this meeting.

My name is Lyne Morissette, and I'm a marine ecology researcher specializing in ecosystem functioning, fisheries and ocean conservation. Since 2015, I've been interested in the situation of the North Atlantic right whale from the perspective of its ecology, migration and interactions with human activities, including fishing in the Gulf of St. Lawrence. I had the opportunity to dive into this world and to participate in a multitude of brainstorming sessions, management meetings, scientific exchanges, sea trials of new fishing technologies, as well as necropsies on whales. It is in this context that I present my remarks today, with the aim of improving the situation and giving the best possible chance to the survival of both species at risk and of humans who must coexist on the same territory.

The situation of the right whale is critical. We're talking about a species that could be extinct in 20 years if nothing is done. In that context, we have to be effective and don't have the luxury of doing without anyone's knowledge.

Since 2017, key representatives in the fisheries sector have consistently encouraged the development of improved knowledge and tools to prevent negative interactions with right whales. Unfortunately, in several critical aspects, there are still major gaps in our knowledge and actions. These gaps also raise risks that are important to note.

First, the lack of knowledge about certain aspects of whale ecology can lead us to spend time and energy on ineffective or unnecessary management and protection measures.

Second, there is a large category of knowledge that isn't optimally integrated into the usual way of doing things, namely, our knowledge of fisheries. These knowledge gaps also pose significant risks, both socioeconomically and environmentally, such as harming fisheries without a clear, valid and quantifiable reason, or ignoring fishers' knowledge of the environment of the species at risk. This is particularly true in the case of threatened species, and we don't have the luxury of turning our noses up at knowledge and ideas in this area.

The current challenge is to try to save a species, the North Atlantic right whale, by managing crab or lobster fishing, in most cases. Saving the right whale is done on the basis of what is called the best possible science, while managing fishing fleets is done by having conservationists and biologists protect whales with crab or lobster fishery management tools without knowing how the fishery operates, its limitations and its opportunities.

Trying to drive a nail with a screwdriver can be ineffective. It's a bit like asking a neurosurgeon to drive a race car. They are both areas of excellence, but you can't ask an expert to switch from one to the other. This mismatch is at the root of the current inefficiency and lack of cohesion in our actions to protect the right whale.

In addition to this imperfect fit, I've noticed over the past five years a distinct lack of consideration for fishers, who are invited to meetings, on a few days' notice and are seen more as decorations or names on a list, rather than being included for all the highly relevant input they can provide to discussions and decisions.

Coexistence is defined as the simultaneous existence with other people or phenomena. Its antonym is succession, which in an ecological sense means that new species can supplant existing species in the quest for resources, leading to the extinction of the main species. Coexistence is a concept often used in ecology to describe the interaction between different species in an ecosystem. We may not realize it, but we're really dealing with issues of two species here: *Homo sapiens* and *Eubalaena glacialis*. It reminds us that we humans are also part of the ecosystem.

To coexist is to avoid the disappearance of one of the two components of our system. It's trying to save the fisheries and the whales, and allow them to survive simultaneously in the same territory. To coexist is to ensure that we don't ban fishing and that we don't ignore the plight of a species at risk.

The right whale is an endangered species. As with all species facing the same fate, urgent action is needed. This urgency requires effective measures, not intimidation or indiscriminate actions. The precautionary approach is a solution, provided it isn't one-sided and also assesses the impact of saving whales on a fishery and coastal communities. To have the best chance of saving the right whale, we need to be effective, both with the tools we use and with the experts we bring to the table. Whenever we've included the views and experience of fishermen in the process, we have had great opportunities, probably the most promising and the most effective.

● (1355)

I think it's by working together that we'll arrive at the best solutions for coexistence.

Thank you.

[*English*]

The Chair: Thank you for that.

We will now go to Dr. Sean Brillant, representing the Canadian Wildlife Federation, for an opening statement for five minutes or less, please.

Dr. Sean Brillant (Senior Conservation Biologist, Marine Programs, Canadian Wildlife Federation): Good afternoon, everybody.

My name is Sean Brillant. I'm the senior conservation biologist at the Canadian Wildlife Federation for the marine programs. I have been working on right whales since 2007. I have the benefit of sitting on several national and international committees concerning the management and study of North Atlantic right whales: the Ropeless Consortium; the North Atlantic Right Whale Consortium; Transport Canada's technical advisory committees for vessel safety; and DFO committees such as the large whale disentanglement advisory committee, the right whale technical working group and the advisory committee for right whales.

I'm grateful for the invitation to appear before this committee. I hope I can bring you some additional information today.

CWF is a national wildlife conservation charity with over 200,000 supporters. We have been working on endangered species for 60 years and on the threats to right whales for coming up on 13 years.

I'm also really pleased to be the third set of witnesses to be speaking with you, because I won't need to spend too much time giving you information. I recognize you all have a good understanding of the dire and urgent situation that is being faced by one of the most endangered large whales on the planet and by our fishing industry, particularly with respect to its access to the U.S. market.

I am going to get right to it. I have three recommendations for your consideration.

First, we need to reduce the risk to right whales by at least 90% to ensure it survives. If nothing changes, it will go extinct within our lifetime. We will all be around when the last one dies.

As you've already heard, my team and I did an investigation to determine how much risk has been reduced between snow crab fishing gear and right whales due to the static and dynamic closures that have been in place since 2018. This was approximately 60% to 65%; it's commendable. We need to get to 90% for all fisheries. This is not a time to tap the brakes or to cut corners. The job is not done.

You've also heard that there are probably fewer than 350 individuals remaining in this population. Research published just last week shows that at the beginning of 2018, there were only 72 reproductive females, and that was four years ago. As we all know, females are the most important part of a population for a variety of reasons, but most especially because they're the only ones that can create new individuals. We talk about an endangered population with only 350 animals, but in reality, the situation isn't even that rosy.

Second, we have to continue to study and monitor this species and other whales.

Looking for whales isn't easy. The only ways we can detect whales is by seeing them, which is hard because they live underwater, or by hearing them, which is hard because they don't always make noise. Let me repeat that last point: They don't always make noise. That means that when you hear a right whale, you know there's a right whale around; when you don't hear a right whale, that doesn't mean there isn't one around. That is why closed fishing grids can't be reopened using acoustic detection, for example.

We also need better knowledge about the harm we cause them. More than 85% of the individuals of this population have scars indicating they've been entangled at least once in their lifetime, and some as many as seven times. Every year, a quarter of the population has new scars. A quarter of this population runs into ropes every year. Our ability to determine the origin of the entangling rope is very poor, because by the time we can investigate an entanglement, the gear is unidentifiable more often than not. Any fishery that is leaving rope in the water is part of the threat to entangle these animals and other animals. It is the rope that is the problem here.

Third, solving this problem is going to require leadership and change from the fishing industry, from Canadians and from our governments. We want to make sure we continue to benefit from using the ocean, but we have to do it in a way that doesn't destroy other species. We can't continue to fish the way that we have been for the last 400 years. This change is difficult, and it must be done collaboratively and be guided by the best available science.

For the last four years, CWF has collaborated with fishermen to study ropeless or on-demand fishing gear. Contrary to what you may have heard, this technology is not science fiction, it is not a science fair project and it is not a threat to the industry. It works. This is based on more than 600 trials of seven different ropeless systems we have been working with, and we tested this with 14 different snow crab and lobster fishermen throughout the maritime provinces.

This past summer, with support from DFO's now sunsetting whalesafe gear adoption fund, we set up a gear lending program. We call it "CanFish". It's a fisherman assistance program, similar to a community tool library. We did this just in time. In early May, right whales showed up on the fishing grounds of snow crab fishermen out of Tignish, P.E.I. These grounds were closed to fishing and remained closed for the rest of the season. The fishermen contacted us in a bit of an understandable panic, and we were able to help them out. We provided 54 units of on-demand gear to 10 different fish harvesters. We taught them how to rig it, we taught them how to use it and we taught them how to fish with it on their vessels.

● (1400)

They fished for between four to six weeks in closed zones, using on-demand or ropeless gear. They did more than 150 hauls and landed more than 370,000 pounds of snow crab. This also eliminated 500 buoy lines from the area, making the entire gulf that much safer for right whales.

I'm very pleased by this. It was a real accomplishment that helped fish harvesters, and it helped whales. I'm confident that this is the way of the future.

Thanks for your attention. I look forward to your questions and discussion.

The Chair: Thank you for that.

We'll now go to our round of questions. For this portion, we'll only have one round.

Our first questioner will be Mr. Small for six minutes or less, please.

Mr. Clifford Small (Coast of Bays—Central—Notre Dame, CPC): Thank you, Mr. Chair.

My first question is for Mr. Brillant.

Mr. Brillant, it seems like we have a one-size-fits-all policy for Atlantic Canada. I'm just looking at a map here now on Whale Insight, and I'm looking at the sightings in the Newfoundland and Labrador side of it. Why I'm going to a one-size-fits-all question here is that there haven't been very many sightings.

I look at the dates, and every single date of a whale sighting—and I only have five here since 2016 around the island portion—is outside the crab and lobster seasons. There is a sighting there on June 17, I believe it was, in 3Ps, but that's outside of their lobster season even. That's the end of their lobster season.

The ones on the Avalon Peninsula—two in 3L and the two in 3K, and none in Labrador whatsoever—were all in September or late November, well outside the lobster and snow crab seasons.

Why would these harvesters be subject to any of the requirements of right whale protection when there is zero chance of their being there? You're well inside your 90% chance or your 90% protection, because there is zero risk. What do you have to say on that?

● (1405)

Dr. Sean Brillant: Many of the fish harvesters that we work with have a saying, and I like this saying. They say you don't have a whale in your area until you have a whale in your area.

One of the things we've seen in recent years with these whales is that their habitat is shifting, and they are moving to different areas. Yes, if there's a very low chance of whales being in an area, then that's excellent. We still need to be attentive to tools that are available to fish harvesters to reduce the risk of entanglement, but we have to be attentive to the fact that because there has never been a whale there yet doesn't mean there never will be a whale. We need to make sure that everybody is prepared and improving the sustainability of their fishery.

That's part of the answer.

Mr. Clifford Small: I'm looking at these sightings, these whale observations: “definite visual”, “opportunistic”, “opportunistic”. How verifiable are some of these sightings, in fact?

Dr. Sean Brillant: There's quite a lot of confidence with regard to those types of sightings. Everyone's very attentive to the fact that there can be misidentifications. Often there are photographs that need to be seen by experts who can identify right whales or parts of right whales. We're quite certain that those are correct.

The opportunistic sightings refer to sightings of right whales that occur when there aren't dedicated surveys looking for right whales. Someone happens to see one and gets a good picture. It gets verified by somebody, and it gets included in the mapping program.

Mr. Clifford Small: Okay. Thank you for clarifying that for me. I appreciate it.

Some of the fisheries off the Labrador coast and all around the northeast coast and east coast of Newfoundland and Labrador have quite deep water. In fact, sometimes they're using gear that's down 800 fathoms. That's a mile deep, pretty much.

These breaking string mechanisms cannot work. The rope is so taut on those vertical ropes, and there is so much strain, that it's basically like a steel pole. I've been out there. I've seen it myself. You can hardly get that buoy aboard sometimes, so there is extremely low risk of a whale tangling up in something that is a taut as that.

I can't see how those release.... I don't know what you call them. I forget the terminology now, but they blow up on the bottom—

Dr. Sean Brillant: You mean the on-demand systems.

Mr. Clifford Small: Yes.

There's an extreme risk of having ghost gear in those types of waters, so what types of solutions do you propose for those harvesters?

Dr. Sean Brillant: It definitely takes experimentation, and it takes experimenting with the fishermen.

We've not fished this on-demand gear in 800 fathoms of water, so what you're saying is exactly correct. There are a lot of challenges and stresses that are involved in those kinds of fisheries, especially if you have 800 fathoms of buoy line and you're probably fishing a two-to-one scope, so maybe you have 1,600 fathoms of buoy line. That is a lot of rope that can entangle whales, and maybe not even right whales. Now we're talking about northern bottlenose whales or sperm whales as well. It is a long piece of rope that whales are going to be able to run into and bend.

I know it seems like an immovable object to little weaklings like you and me, but a 50-tonne animal that runs into that rope is going to find itself capable of winding that up.

What is the solution to that? It's not clear. It can only be solved by testing, and involving fishermen in the testing. We could find out if this on-demand stuff works or not.

● (1410)

Mr. Clifford Small: Industry stakeholders who have real families, real bills to pay and real communities are extremely stressed out about some of these measures. They are finding that these breaking mechanisms don't work. On top of that, they're extremely low-risk to the right whale populations.

I think one-size-fits-all for this is not right. Do you think there's a possibility you could modify it?

The Chair: Thank you, Mr. Small. We've gone just over your six-minute mark. If I let it go over, somebody is going to be cut short at the end.

We'll now go to Mr. Kelloway for six minutes or less, please.

Mr. Mike Kelloway (Cape Breton—Canso, Lib.): Thanks, Mr. Chair.

Hello to my colleagues and to the witnesses.

My questions will be for Ms. Brown and Ms. Morissette.

We heard a lot in our last meeting, and we've heard in this meeting so far, about concerns with weak rope gear. It's mainly that it creates more ghost gear and could be potentially unsafe, and that more testing is needed.

I have a series of questions, and then I'll hand it over to Ms. Brown and then Ms. Morissette.

Can you speak to those concerns and possibly help explain why such measures are being pursued as they relate to trade, and specifically the Marine Mammal Protection Act in the United States?

The second question is, is weak rope gear working elsewhere?

The third question is, are the claims of it being unsafe and untested true?

How do our measures compare to the United States?

We'll start with Ms. Brown and then Ms. Morissette. If you need clarification on the questions, I would be glad to provide it.

Go ahead, Ms. Brown.

Dr. Moira Brown: Thank you, Mr. Kelloway.

I'm going to start with your last question first. How do our measures compare to the U.S.?

The closures that Fisheries and Oceans Canada is putting in place in Canadian waters due to the presence of right whales is unprecedented. It is a solution that removes rope from the water that overlaps with whales, but it causes a great burden to the industry. There are several examples, in addition to the ones Dr. Brillant presented, such as snow crab being caught in CFA 12 and getting to market over the last few years using ropeless gear in closed areas.

I will add that ropeless is not truly ropeless. It's rope on demand and line on demand.

I would add, for Mr. Small, that a lot of the manufacturers of this technology started in the oceanography business, where they were recovering gear from 5,000 feet of water. In likelihood, as we work with fishermen, we can start to address some of these bigger problems.

To the weak links part of the question, Mr. Kelloway, there is a concern that this is going to cause ghost gear. There's no doubt about that. The work is being done in Canada. There's also work being done in Massachusetts waters with lobstermen in that area, who have come up with a couple of different kinds of weak links that are being tested. They are finding that they can do it.

The key in all of these measures.... There is no single silver bullet to solve this problem and there's no single gear type, whether it be rope on demand or weak links, that is going to solve all of the problems for all of the fish. One size does not fit all in this issue.

That's why programs from the Canadian Wildlife Federation and others that we're working with, primarily in P.E.I. and down in the U.S., are demonstrating that when you bring all the various kinds of systems to the fishermen and let them try them, they can figure out what works best and what adapts to their fishery.

I hope I've hit all your questions.

Mr. Mike Kelloway: I think you did, for most of them. Thank you, Ms. Brown.

Perhaps I can pass the mike to Ms. Morissette for her comments on those questions and any elaboration she may want to make on them.

● (1415)

[*Translation*]

Dr. Lyne Morissette: Thank you, Mr. Kelloway.

Actually, Dr. Brown's answer is fairly comprehensive. We know that weak links work. This is one of the potential solutions being tested and that works in England and Australia. There are also examples in Brazil in various fisheries, but it's not the only solution.

As Dr. Brown and Dr. Brillant mentioned, the important thing is really to test under in a variety of conditions, taking into account the different needs of the various fisheries, be it crab, lobster, offshore species or coastal species. Some crab fishers, particularly Acadian and Gaspesian, have completely different fishing grounds. The parameters or the context of the tests vary. Obviously, no one solution will work universally, and that's where the risk lies. There is no silver bullet. There's nothing that works 100% right now.

At this point, we shouldn't be too quick to believe that we have an effective and functional solution. We really need to continue to document our knowledge of potential solutions as best we can. I would reiterate that the people who know the most about how their fisheries work are the fishers, and we're trying to work with them more and more. The other two witnesses today are really inspiring proof of that.

[*English*]

Mr. Mike Kelloway: Thank you, Ms. Morissette.

Mr. Chair, how much time do I have?

The Chair: You have 30 seconds. I don't think you have much time for both a question and an answer, so I think we'll move on.

Mr. Mike Kelloway: Absolutely. Thank you.

The Chair: Thank you, Mr. Kelloway.

Madam Desbiens, you have six minutes or less, please.

[*Translation*]

Mrs. Caroline Desbiens: Thank you, Mr. Chair.

I'd like to thank our witnesses for being with us today. It's always very interesting and valuable to hear from you.

Dr. Morissette, you said something very interesting earlier. You talked about the coexistence of two realities and that the knowledge of the people on the ground isn't properly taken into account, when we want to save the whales and the fishery.

What would be the ideal approach to address urgency and effectiveness?

Dr. Lyne Morissette: Thank you very much for your question.

I think the ideal approach would really be to bring all the knowledge to bear, whether it's the reality of managers having to impose legislation or deal with the economic threats to us, such as the Marine Mammal Protection Act, or the knowledge of fishers on the ground and the scientific knowledge of conservation and biological experts about these species at risk in Canada. All of this knowledge should be brought together to provide the best possible options.

In fact, it's being done more and more. There is an understanding of the value of a coexistence and collaborative approach. And since there are similar problems in the shipping industry, I see that it seems easier on the shipping side than on the fisheries side. However, the will is there. We still have some work to do to get there. It's critically important to bring everyone's knowledge together. With the clock ticking and time running out, we don't have the luxury of doing without anyone's knowledge.

Mrs. Caroline Desbiens: Thank you. That's very interesting.

You said earlier that there wasn't one solution to these problems.

Do you think a sectoral approach, depending on area, type of fishing, water depth and the various fishing exercises within that large area, would be promising, in co-operation with the fishers?

Dr. Lyne Morissette: Indeed, the knowledge that fishers have of their fishing grounds and a finer scale approach are crucial. We've done some modelling that allows us to compare at a finer scale the position of the whales at the locations where fishing gear is deployed, which allows us to determine what Dr. Brillant would describe as the risk of co-occurrence of fisheries and whales. This fine scale should be used to identify where the risk is lowest. There will always be some risk, but there has to be an opportunity for fishing to occur where the risks are lower and to make conservation gains while allowing the industry to continue.

I think the best allies we have in saving this species are the ones who have the greatest impact on it. Unfortunately, for all their knowledge, it's not the scientists who have an impact on the species, it's the fishers. So we need to have them as allies. For them on board with our vision to protect the species, we need to involve them in the process.

● (1420)

Mrs. Caroline Desbiens: I'd like you to talk about capacity and efficiency. What would you suggest to the committee and to Fisheries and Oceans Canada to improve the capacity to react quickly and the effectiveness of that response?

Is the idea to set up a round table, divide the interventions by sector, and divide the scientists and fishers according to their specialty in order to intervene in different areas as quickly as possible? What would work best?

Dr. Lyne Morissette: Issue tables, advisory committees and meetings already exist. The time has come to look at these ideas in a tangible way in order to implement them. It needs to be more than just holding dozens of meetings every year.

The time has come to really have the audacity to do what is being discussed in these meetings and to take into consideration all the recommendations that are being put forward, not just by scientists, but by all the marine experts, in order to give ourselves the best possible options.

Mrs. Caroline Desbiens: What could we do to help you and to ensure that the department hears what you are telling us this afternoon? Should the committee give a specific directive to the department?

Dr. Lyne Morissette: It is absolutely necessary to encourage real consultation and to highlight everyone's knowledge.

[*English*]

The Chair: Thank you, Madame Desbiens.

We'll now go to Ms. Barron for six minutes or less.

Ms. Lisa Marie Barron (Nanaimo—Ladysmith, NDP): Thank you, Chair.

Thank you to the witnesses for being here today.

My first questions are for Dr. Brillant.

I note that you talked about the success you were seeing in the whalesafe gear adoption fund. I'm wondering if you could clarify what the participation rate looks like throughout that time. What was the response from the fishers who participated?

Dr. Sean Brillant: The participation rate was quite good. We had 10 fish harvesters who took advantage of our lending program. They were the ones who were the most put out because of the closures and most immediately needed access to this gear to allow them to keep fishing in those closed areas.

We probably could have outfitted more, but we didn't have enough gear at the time. We've since been able to expand the inventory. Our hope is that if there is another opportunity in the future, we'll be able to support more fish harvesters to give them the tools they need to keep fishing safely around whales.

Ms. Lisa Marie Barron: To build off of that question, what does the future look like? What have you been told? Have you been told when funding ends for this program? Have you been told whether you'll be getting any further funding to continue this project?

Dr. Sean Brillant: That's a tough question.

We haven't received any clarity about whether this will continue to be supported. My organization is very committed to finding a way to make sure that we can continue providing this equipment to fish harvesters to use. Many of our fish harvester partners have become quite committed to seeing this program continue. They recognize the value, because you don't know if you have a whale in your area until you have a whale in your area. I think they're starting to see the real value in having access to this gear.

We're in the process of trying to find support from philanthropic organizations and other groups and talking to fish harvesters about the value of supporting this kind of thing. The whalesafe gear adoption fund was only a two-year program that will be ending this year, but it is our hope that we'll find a way to keep the Government of Canada a partner in it as well.

● (1425)

Ms. Lisa Marie Barron: I have one final question for you. Can you share your thoughts around how this might be best reported back so that we're hearing about the successes you experience? What do you feel would be the best process to ensure we're getting the best information, and who should be involved in that conversation?

Dr. Sean Brillant: I'm so pleased to hear from the fish harvesters who work with us, who do the experimentation, and especially the ones who benefited from the lending program this year. In their words, they talk about how access to this equipment saved their fishery, with 375,000 pounds of snow crab fished out of a closed area, because otherwise they would have had to steam many hours away to fish. At the same time, we also eliminated 500 buoy lines from the area, which is a great conservation success and allowed the fishery to continue.

The fishermen provide some really clear evidence and plain statements about the value of these kinds of programs. Organizations like mine, as well as those of Dr. Morissette and Dr. Brown, are looking at the benefits we are bringing to the whales in terms of prevention. That is also something that's really important, but the real value is this intersection between the fisheries and conservation value. The fish harvesters are a powerful voice in explaining what that is.

Ms. Lisa Marie Barron: Thank you, Dr. Brillant, for your work in making our fisheries more sustainable and of course for helping to protect the North Atlantic right whale.

My next question is for Dr. Brown.

You mentioned your work in the U.S. Could you clarify what you saw regarding the death rates and perhaps some of the causes that you saw in the U.S. around the North Atlantic right whale?

Dr. Moira Brown: There really is no difference between Canada and the U.S. in what causes serious injury and mortality in North Atlantic right whales. It's entanglement in rope and it's vessel strikes.

There are a number of programs whereby both Canada and the U.S. are addressing it by using different methods, such as rope on demand or weak links. We have success stories on both sides of the border in small experimental fisheries. For example, a fishery that's been closed for 10 years in Florida, North Carolina and South Carolina has recently been reopened. After 10 years of fishermen not being able to fish sea bass, they simply switched over to rope on demand gear and got experimental fishing permits to do so.

We're at a stage where we have many examples. We were drinking from a fire hose in 2017, 2018, and 2019, when we were responding to all of these carcasses and all of this habitat shift as the animals moved into the Gulf of St. Lawrence. We're in a position now to start narrowly tailoring responses—somebody mentioned a sectoral approach—as we learn more and more about the right whales and potentially as they learn about the Gulf of St. Lawrence, because this is probably a new habitat for them as well. We can start putting this into practice en masse, and not an experiment here and an experiment there.

Let's get the gear in the hands of the fishermen. Let's triage this and get various kinds of ropeless gear or rope on demand gear into the hands of fishermen. Let them try it in the closed areas next season.

The Chair: Thank you, Dr. Brown and Ms. Barron.

We'll now go to Mr. Perkins for five minutes or less, please.

Mr. Rick Perkins (South Shore—St. Margarets, CPC): Thank you, Mr. Chair.

I'll follow up on Ms. Barron's question with regard to the U.S. You said you had studied this since 1985. I won't tell you what I was doing in 1985, but I was at a university.

Specifically, the pieces of information that we're looking for that would be very helpful are actual numbers. We know that in the 1970s, before any changes were made to protect right whales, there were around 250 animals, which rose to as high as 400, and we're now down to between 330 and 350. There's been this variation from 250 to 400 with those first changes to shipping lanes and fishing rules, which paid off, but what we haven't seen are actual numbers on the U.S. performance.

We know and see the right whale death numbers in Canada. Officials here said that in the last five years, the biggest category from necropsies was “undetermined”, that none had been entangled and died from lobster gear, and that only one had dies from crab gear. What kinds of numbers are there from the U.S.?

We're seeing this used perhaps as a trade barrier for us, and people want to use it for all kinds of reasons in the U.S. What is the American actual performance? Do they track it the way we do? Do we know how many deaths there have been? Do we know the results of those necropsies?

● (1430)

Dr. Moira Brown: Yes, we do, and a lot of that is published in scientific papers.

In the U.S., since 1996, they've had the Atlantic large whale take reduction team, which has been focused on trying to reduce the risks of gear entanglement for right whales in U.S. waters. They've done broad sweeping measures, such as sinking groundline from Florida to the Hague Line, and measures like that. There are some closures. There are a variety of measures.

Right whales are at risk for entanglement wherever there is rope in the water. With the habitat shift out of the Gulf of Maine in the springtime and up into the Gulf of St. Lawrence, there is still risk in the Gulf of Maine, but the animals are feeding up in the Gulf of St. Lawrence. There seem to be lower densities in the Gulf of Maine, including the critical habitat areas in Canadian waters—the Bay of Fundy and Roseway Basin.

We have more of a problem in Canada now than we did before, because when the right whales were in the two critical habitat areas in Fundy and Roseway, it was not during the fishing seasons. The lobster season doesn't start until various times in November. In the Gulf of St. Lawrence, it overlaps with crab fisheries and lobster fisheries.

There's a lot of overlap with right whales and various kinds of fisheries in the U.S. Some have been closed. There have been mortalities. There have been entanglements. All of those numbers exist. I don't have them on the very top of my head, but they could certainly be provided to the committee pretty easily.

I think it's really important for the committee to realize that Canada has done more in five years to reduce risks than the States has done in 25 years. We have a lot of support from industry to try to solve this problem. They want to solve the problem. I've never met a fisherman who wanted to entangle a whale, ever. It's a big pain in the neck for them in a lot of ways.

I think we need to embrace that. We use a lot of measures in Canada that are not used in the States, such as closures. They may or may not recognize that as equivalent. The bottom line is that when an area is closed or there are no ropes in the water because the fishermen in the closed areas are fishing without rope, it's a much safer situation for whales. I think we're there in Canada. We just need to do that in a bigger way, in a bigger area, with more fishermen.

Mr. Rick Perkins: Thank you.

If you have those numbers, it would be great if you could email them to the clerk. We can table them so we can make that part of our report. That would be appreciated.

As a follow-up to you, but slightly different, you referenced that the feeding ground used to be Brier Island. They've now moved into the gulf, and that's changed all of the dynamics that you outlined. A former DFO scientist lives in my riding and was a whale scientist. He's written quite a bit in The Chronicle Herald about the issue, particularly what happened in the two years when, I believe, we had 12 right whales die a few years ago.

I talked to him personally about it. He said that part of their new route was following food, as they do, but actually up in the Labrador Straits. He believed that a number of them were dying because they were following food when there was ice there, and they weren't able to surface. Their carcasses would drift down into the Gulf of St. Lawrence once the ice let them go, and they may or may not have been hit by a ship.

He claimed to have done more necropsies than anybody on them, and he could tell that a lot of them had been dead for a long time. That makes you wonder—

● (1435)

The Chair: Thank you, Mr. Perkins. You're well over your five minutes.

We'll now go to Mr. Morrissey for five minutes or less, please.

Mr. Robert Morrissey (Egmont, Lib.): Thank you, Chair.

My first question would be to Ms. Brown.

Are you familiar with the recent review that an organization called Seafood Watch in the U.S. did on the Canadian fishery? Based on the testimony you're giving here today, would you say that they were completely out to lunch or off the mark?

Dr. Moira Brown: Well, I'm not necessarily familiar with all of the criteria they use to do this, but I think they made a huge mistake in lumping U.S. and Canadian fisheries all into one red-listing measure. These are very different fisheries, pursued at very different times of the year, with very different protection measures for right whales.

I will add, again, that I think our Canadian measures exceed those of the U.S. They may not yet be enough, but I'm of the opinion—and I don't think many would disagree—that our measures provide more protection for right whales in our waters than our neighbours' measures do to the south.

It certainly drew a line in the sand, and it caused a lot of angst. It has not improved the situation for our working relationship with the fishermen, and that saddens me. I think that's almost the tragedy of it.

Mr. Robert Morrissey: Thank you. I think it's important for this committee to understand that Canada's measures that have been put in place have been leading North America in protecting the North Atlantic right whale. Contrary to what you may hear, fishers are a big part of that.

Mr. Brillant, I'm here in Tignish in my constituency office. I'm very familiar with the work that was done out of this particular fishing community. You are correct; everything you've provided to this committee is accurate. I can attest to that, because I spoke to the fishermen who gave a good review of the ropeless technology that allowed them to fish in restricted zones, get their catch and protect the whales.

Are there things we could do to enhance that and improve on it?

Dr. Sean Brillant: Having access to the gear is a key thing. This gear is not easy to come by, and it is expensive. This is why, for example, the gear-lending program is a great model for these early days so that fish harvesters don't need to make these tremendous investments into this gear just yet. Rather, we can have this shared pool, this community gear library, and they can access it when they need to.

Being familiar with it and trained with it is very important, as is being open-minded, being willing to try it and discovering that this stuff will work for a fisher. These are all the things that need to happen.

Mr. Robert Morrissey: Thank you.

My last question will go to Dr. Morissette.

I want to pass along to you that my colleague from Caraquet, Mr. Cormier, could not make the committee meeting today. He had been looking forward to questioning you.

My question will focus on some testimony given about the acoustic technology. Could you comment to the committee on whether it is as effective to use these same acoustic technologies to reopen an area as it is to close it? There appeared to be some conflicting testimony given to this committee on that. Could you express your opinion on whether that is good technology that would allow the fisheries to reopen an area that had previously been closed?

Dr. Lyne Morissette: I'm not sure what the protocol is for using acoustic data to close or reopen a fishing area, but for sure we need to do the same thing for both actions, for closing it and reopening it. At the moment, acoustic detection works for detecting the presence of whales, but it's not used as a trigger to reopen an area when it's closed. That discrepancy might be problematic, yes.

Mr. Robert Morrissey: That's actually where I want you to comment from—namely, your background as a marine researcher on how whales migrate. Do you feel that it would be reliable as a method for allowing an area to open? Do you see any reason for not using it?

● (1440)

Dr. Lyne Morissette: No, I don't see any reason for not using it. The best way to use it is by triangulation to make sure that we have the exact location of the whales for reopening or closing an area.

Another thing is that I think would be important to include is the behaviour of whales. When they are transiting to their feeding ground, they don't stay in the area. If we close one area after another after another, that becomes problematic. It should be included in the way we survey these whales to know if they are feeding and aggregating somewhere or if they are just transiting to an area. That happens north of the Magdalen Islands, where we're closing areas that are not that risky. They are just transiting through.

Mr. Robert Morrissey: I think my time is up, Chair.

The Chair: Yes. You're a little bit over. Thanks, Mr. Morrissey.

Madam Morissette, Ms. Brown and Mr. Brillant, thank you for your testimony here today and for sharing your knowledge with the committee as we do this particular study.

I'll allow you to sign off now while we transition into the second portion of our presentations this afternoon. Again, thank you.

We'll suspend for a minute or two.

● (1440)

_____(Pause)_____

● (1440)

The Chair: We're back for the second portion of our witness panel right now, and we have with us Ms. Elmslie and Ms. Fuller, and that's it. We have two witnesses.

We'll start off with opening statements. We'll go to Ms. Fuller first, for five minutes or less, please.

● (1445)

Ms. Susanna Fuller (Vice-President, Operations and Projects, Oceans North): Yes, please just give me one second. I had planned to go after Kim. Just hold on one second. I'll be right there.

The Chair: Okay, we can hear from Kim first if that's better for you.

Ms. Susanna Fuller: It would be slightly better for me, because my children are coming home from school any second.

The Chair: Okay. We'll allow Kimberly to go first.

Go ahead when you're ready.

Ms. Kimberly Elmslie (Campaign Director, Oceana Canada): Thank you.

Thank you for the invitation to appear before you today. My name is Kim Elmslie. I'm the campaign director for Oceana Canada.

Oceana Canada was established as an independent charity in 2015 and is part of the largest international advocacy group dedicated solely to ocean conservation.

Our vision is to return Canada's formerly vibrant oceans to health and abundance, then reap the social, cultural and economic opportunities that follow. Simply put, we want to see more fish in the water and more fishing.

I'm here to address concerns about critically endangered North Atlantic right whales, which are facing an imminent extinction, with only about 330 animals left in the population, of which only about 80 —I think we heard 72 earlier—are breeding females. Researchers have found that right whales are no longer dying from natural causes, but from human-created ones, the top two threats being entanglements in fishing gear and ship strikes. Approximately 85% of right whales have scars on their bodies from encounters with fishing gear.

There are many reasons to protect right whales. It's an endangered species, so it's the right thing to do. Polling from 2021 has found that 90% of Canadians want them protected. It's required under the Species at Risk Act, and protecting right whales also protects access for Canadian fisheries to lucrative U.S. markets.

I'm here to present you with three different recommendations that Oceana is making.

One, we'd like to see a transition to a management approach that is permanent, predictable, transparent and adaptable, until such a time that right whales are no longer endangered.

Two, we want the government to continue to work with stakeholders to identify ways to strengthen and improve protection measures.

Three, we want permanent funding for all aspects of the right whale program: science and research, monitoring and surveillance, ropeless gear, disentanglement efforts, necropsies and more.

As everyone has heard, after decades of being found in the Bay of Fundy, right whales are now occurring in the Gulf of St. Lawrence in large numbers. This is an area with some of Canada's most lucrative, important and productive fisheries, as well as important shipping lanes.

As you're all aware, this created a crisis in 2017 in which 12 North Atlantic right whales were killed, and then a further nine were killed in 2019. Finding urgent solutions was important not only for the future of the whales but also for Canadian fisheries. Under the U.S. Marine Mammal Protection Act, Canada must demonstrate that it has put measures in place to mitigate entanglements or risk losing access to U.S. markets.

Here's a little more detail on the recommendations that we're asking for.

In a transition to a more permanent approach, we would like the government, with input from all stakeholders who've responded to the right whale crisis, to put a series of permanent measures in place. The measures so far that have been put in place have created a solid foundation of protection; however, they were created under interim orders and ministerial discretion, which is temporary in nature.

Purpose-built regulations are needed to establish the long-term legal footing to protect right whales for the long run. The regulations need to maintain the strengths of the current dynamic system; be permanent, so that they are maintained; be inclusive of all stakeholders; be transparent, so that everyone has access to the same information; provide certainty to fishers and vessel operators; and be adaptable so that they can apply if there are regional shifts.

The government must seek ways to continually strengthen and improve the measures. Protecting right whales by preventing unnatural, unnecessary deaths will take a sustained effort from all stakeholders and others over a course of years. The government must continue to implement, monitor and enforce clear protection measures, with the goal of zero preventable right whale deaths.

The right whale population is continuing to decline, so the government must continue to refine and improve the existing measures. Another year with multiple deaths, like 2017 or 2019, would be devastating for right whales and could put Canada afoul of the U.S. Marine Mammal Protection Act.

Finally, the entire right whale program needs to be fully funded. Since 2017, the government has created a world-class science team. DFO is developing cutting-edge technology on ropeless gear for snow crab. DFO scientists are utilizing hydrophone arrays, gliders, infrared cameras, satellite imaging and more. There needs to be continued financial support for all of these programs. I said “DFO scientists”, but really it's the whole scientific community.

● (1450)

Finally, at Oceana Canada we believe that these recommendations will help protect North Atlantic right whales and secure access to U.S. markets for Canadian fisheries, which in the long term will support the viability of fisheries in Atlantic Canada.

Thank you.

The Chair: Thank you for that.

You're almost dead on the five minutes.

We'll now go to Ms. Fuller for five minutes or less, please.

Ms. Susanna Fuller: Thank you. It's lovely to see many of you again.

Thank you for inviting me to speak here today.

I work for Oceans North, a Canadian conservation organization focused on ensuring healthy oceans and communities in Canada's Arctic and Atlantic, and with a new organization recently founded in Greenland. We work extensively with indigenous and coastal communities on place-based protection and sustainable fisheries. We also work on shipping impacts and shipping corridor implementation. We have a growing program on oceans and climate change.

My colleagues, whom you've heard from today, are the real experts on the wide variety of work that is being done on the ground to ensure that the North Atlantic right whale does not go extinct on our watch nor at any time in the future.

Oceans North works on place-based protection, fisheries, shipping and, as I mentioned, climate change. The crisis with the North Atlantic right whale population touches all of these issues. It's very hard for us to work on one thing and not take into consideration the measures that are in place with right whales. We know the fishermen are increasingly facing changes in their fisheries, from where they can fish to how they can fish, and sometimes what can be fished. No business likes constant change. However, I would say that the fishing industry is likely one of the more resilient and more used to change, whether imposed by government management or the weather.

This does not make things easier, necessarily. I have heard the testimony of industry colleagues and listened carefully. I know that not one of them, nor the fishermen they represent, want to be implicated in the death of a North Atlantic right whale, or any whale. It is a heartbreaking experience.

I'd like to make three points, many of which have been touched upon by my colleagues.

The first one is on economics. I think while many species in Atlantic Canada have yet to recover from overfishing, those populations that remain healthy, or at least in reasonable shape, have resulted in the fishery being more valuable than ever before. We will always have a market for sustainably caught seafood that originates from comparatively clean waters. In ensuring that these fisheries have as little impact on the North Atlantic right whale as possible—and all whales, for that matter—we'll ensure that they will continue to be seen as sustainable and fished by the people who care for the ocean they depend upon. I think we can do much more to showcase the work being done by our fishers. They should be proud of the changes they have made and, where possible, use this to a market advantage.

My second point is to reiterate that we cannot in any way reduce protection measures. The incredible effort by government, fishers and non-governmental organizations and indigenous fishers must continue. We are in unprecedented times in terms of a changing ocean. The Gulf of St. Lawrence, where most of the North Atlantic right whales have been found for the past several years, is warming faster than any other part of Canada's ocean. It's likely that the prey that the North Atlantic right whale are feeding on will move again, and whales will follow. This means that we have to continue the science, monitoring and stewardship, and expand it so that when whales do move, we are ready. We ended up in the situation we had in 2017 because of a lack of investment in monitoring and stewardship in the preceding years. We also know that things will continue to change and that we need to be ready for those changes as much as possible.

My final point is to emphasize that what Canada does—I think you've heard a lot about the incredible work that has been done—to reduce impacts on the North Atlantic right whale matters. The recent study by the Commissioner of the Environment and Sustainable Development was clear that the DFO needs to increase its efforts to protect aquatic species at risk and become much more adept at putting measures in place before it is too late.

We're in the midst of a global crisis in biodiversity decline. Countries are going to meet in December in Montreal to set goals for the next 10 to 40 years for how we can halt and reverse this loss. Canada's efforts on the North Atlantic right whale are currently an excellent example of what can be done.

We need to remember that being proactive will cost us less than being reactive. I think we've learned that from the impacts of climate change as well.

Canada needs to continue to lead by example and encourage other countries to do the same. I have no doubt that with the continued collaborative efforts that have been happening, we can have more summers with no North Atlantic right whale deaths.

Thank you for inviting me. Those are my three points. I welcome any of your relevant questions.

● (1455)

The Chair: Thank you for that. We'll now go to our rounds of questioning.

We'll go to Mr. Arnold first, for six minutes or less, please.

Mr. Mel Arnold (North Okanagan—Shuswap, CPC): Thank you, Mr. Chair.

Thank you to both witnesses for being here today.

From what we're hearing, it's a collaborative approach that seems to be needed and is working.

I'll start with a question for Ms. Elmslie.

When you look at Canada's versus the U.S.'s approaches, what do you feel are the strengths in the way that Canada has taken action to protect right whales over what the U.S. has done?

Ms. Kimberly Elmslie: Thank you for that question.

It's phenomenal to me, when I look back to 2017 when we had this crisis year of 17 deaths, just how much happened, and how quickly. These whales were entering a completely new area, which we weren't expecting or predicting. Those fishermen in that area rose to the challenge.

We have area closures that are not happening in the U.S. This is a strength. We have a really good foundation of measures that we have put in place above and beyond what the U.S. has put in place.

We have such goodwill from all of the stakeholders involved. It's phenomenal what we have been able to accomplish when we needed to.

Mr. Mel Arnold: Thank you.

What data or information are you aware of that Monterey Bay based its red listing on? Was it science-based and factual, or otherwise?

Ms. Kimberly Elmslie: It did publish, along with its decision, a document of about 60 pages that lists and goes through how it came to its decision. It is transparent in its decision—or on how it made its decision.

A lot of it is based on uncertainty, I guess—the unknowns of what we don't know. This is, again, why I feel that we need to continue with all of the science work we're doing. There still are uncertainties, so we need to continue to fill in that gap.

Mr. Mel Arnold: Thank you.

Can you identify what might be at risk if more fatalities are found, similar to what we saw in 2017?

Ms. Kimberly Elmslie: My biggest concern is this U.S. MMPA. These are such important fisheries. They are our two most important fisheries on the east coast.

We've had a collapse of finfish and a lack of rebuilding plans for fish that are in the critical stocks in the east coast. We have started to see a decline in snow crab, so we want to arrest that. It would be absolutely devastating for the east coast if we were to lose access to the U.S. markets.

To me, I see protecting right whales as a win-win—for the species itself and also for fishermen in Atlantic Canada. We need to maintain that access. We need to do the right thing for the whales, but we need to maintain that access.

Mr. Mel Arnold: Okay. Thank you.

It seems that the best way of protecting those whales, or one way of protecting those whales, is to know where they are.

I want to reference a satellite tracking program that's been undertaken for wildlife in my province and in my area in the interior of B.C., where satellite transponders are attached to mule deer. They're actually attached to those mule deer for as long as they'll stay on. The information that has been gathered through that has been surprising scientists and biologists. It has been incredibly valuable in planning for their recovery in some areas of B.C.

I'm just wondering if anyone that you're aware of has looked at the possibility of transponder attachment to whales so that we could have real-time tracking to have less impact on our fish harvesters.

I'll put that question out to both of you.

● (1500)

Ms. Kimberly Elmslie: I'll take a first crack at it and then send it over to Dr. Fuller.

I love that question, because it's so important. We need to know where these animals are. You'd think it would be easier than it is, but it's not.

Tracking devices have been used. There are some that go on the surface and can attach to the whale, but these whales seem to understand that they're on them and they hate them. They're violent and they rub them off. It only stays on for a couple of months.

Then there are those subcutaneous ones that can be used. The problem with right whales is that the blubber layer is only about eight inches thick. Right now, the technology is to insert the tracker so that we could see where they are. The tracker itself is about 10 inches long. It's just too big and they would cause infections in a population that is already under tremendous stress.

This is where I send out my SOS to Elon Musk. If he's listening, please get us a better tracker so that we can solve this problem through technology and know where these whales are. That would really help a lot of our problems.

Mr. Mel Arnold: My time is just about up. I have 20 seconds.

The Chair: You have 20 seconds. You're not going to get much in that time.

Mr. Mel Arnold: Thank you.

The Chair: We'll now go to Mr. Morrissey for six minutes or less, please.

Mr. Robert Morrissey: Chair, Mr. Kelloway is going to take my time.

The Chair: Okay. He owes you a big one.

Go ahead, Mr. Kelloway.

Mr. Mike Kelloway: Thank you, Mr. Morrissey.

Thank you, Chair.

Hello to the witnesses.

First let me say that what we're hearing today, from both these witnesses and the previous witnesses, is that it's clear that Canada has some of the strongest protections in the world. I thank fishers for that. I thank folks like the witnesses here and other oceans stakeholders.

I will say—and Mr. Morrissey brought this up in a previous question—that I have my issues with the Seafood Watch assessment that puts lobster on the red list. I think it's unfounded and it's just plain wrong, in my opinion.

My question is for both of you. Given your experience in this field over the years, can you explain why such measures are being pursued as they relate to two things? The first is trade, and specifically the MMPA in the United States. I think it's important to revisit that.

I have another question after that, if time allows.

Dr. Fuller, we can start with you and then go on to the next witness.

Ms. Susanna Fuller: Thank you for that question, Mr. Kelloway.

The Marine Mammal Protection Act is being used as a trade barrier to some extent, but it is also an important act in the United States. It has led to important protections for marine mammals. Unfortunately, they're probably not strong enough; otherwise, we would see much better measures within the U.S. for right whales.

With regard to trade, one of the things that hasn't been mentioned is that the snow crab fishery has lost its marine stewardship certification in the Gulf of St. Lawrence. I think that there is a path to get that back. I don't think losing that certification has led to a huge loss of price or markets, but I support sustainable seafood certifications. They're useful for some markets, and they're useful for the industry to understand where improvements can be made and where they are already doing good work.

Seafood Watch is not going to have a huge impact on trade. I don't think we need to worry too much about it. I reviewed an early version of the report. I made many comments. It is unfortunate that they lumped Canada and the U.S. together. The thing about the criteria is if you interfere with a species at risk, you automatically get into the red list, which is hard to come back from.

I will say that I think the scoring could have been much better on forage fish. Canada has done a significant amount of difficult work over the past year in closing fisheries like mackerel and herring. It has not been easy, but it makes a big difference in the scoring, and it should make a bigger difference in the scoring on these things, because bait is implicated in some of those fisheries.

I would take it with a grain of salt. My advice to industry.... When they called to say, “Have you seen this report?”, I said, “Yes, I've seen it. You all knew it was coming out.” My advice to industry was that in advance of those reports coming out, every week or two weeks, there should have been a press release on the good work that Canadian fishers are doing on whale mitigation measures. I mentioned that in my comments.

I think we can be much more proactive in our communication about what we are doing, and that needs to come not just from the government in terms of management measures, and not just from NGOs, but from fishing associations. It was a missed communication opportunity, and I have been pushing them to start speaking more, particularly when next summer comes, about the work that is being done. Sean Brillant mentioned a lot of his work on ropeless gear and the uptake by fishermen. Ropeless gear is a solution to closed areas.

I think that probably over-answers your question.

● (1505)

Mr. Mike Kelloway: Not at all, Dr. Fuller.

There are many common themes here, but one is the ability for NGOs, industry and government when we can.... There are many times when we can find common ground and we can find common messaging to tell people throughout the globe—in the United States, Canada, within our own region and in my own region of Atlantic Canada—about the work we're doing and the efforts that are being made.

That's not to say that more shouldn't or can't be done, but I appreciate that full answer.

Ms. Elmslie, do you have any comments on that?

Then if I have time, I have one quick question.

Ms. Kimberly Elmslie: I would just add, on the good work that's being done that hasn't come up yet, that Dr. Brown does whale disentanglement. Almost almost all of the other people on her team are fishermen. I believe Martin Noël was here earlier. He goes out, and Robert Haché goes out, and they disentangle whales. These are fishermen in real life saving whales in really dangerous conditions. I think this is a story that's unique to Canada. We need to tell it.

Mr. Mike Kelloway: Absolutely.

Mr. Chair, how much time do I have?

The Chair: You have 40 seconds, and it's counting down.

Mr. Mike Kelloway: Okay. I'll go right to it, then. This is for both of you.

In our conversations with witnesses, we've heard a lot about flexibility when it comes to our measures and the need for more flexibility. In your opinion, is that possible? What would it look like, and what would you recommend?

Ms. Susanna Fuller: I'll be quick, because Kim probably has things to say about this as well.

As Dr. Brown said, there's not one silver bullet, so flexibility is of course important. I think it's where we are flexible that is critical. We more or less know when the whales migrate. We generally know where they are congregating. I think we need to be flexible in terms of our solutions and also be opportunistic and quite rapid. I think fishermen can be very helpful on the ground on that.

You know, the dynamic closures versus static closures were tricky. I know they were tricky for fishermen, not just for the fishing but also for getting access to the plants that they would usually sell to if they were fishing in a slightly different area.

I think there is already in fact some flexibility built into the way that every year there is a convening of all the stakeholders and rights holders to talk about what needs to be done, so it's flexibility to achieve what? I think flexibility to achieve and ensure the conservation of right whales is really important. That would help ensure that our fisheries are sustainable and have access to markets.

On the other side, of course one size doesn't fit all. We heard from Mr. Small about some things with gillnets. One size doesn't fit all with fishing gear as well, or in the Bay of Fundy, or in the Gulf of St. Lawrence. I think that in the discussions, there has been a fair bit of flexibility. I would just make sure that we err on the side of ensuring that this flexibility is for the outcome of right whales. Otherwise, we will tend to slip, and slipping could result in more entanglement and deaths.

For every year that there are no fatalities, I think everybody breathes a grand sigh of relief. We want to make sure that whatever we do maintains that sigh of relief at the end of the migration period.

The Chair: Thank you, Mr. Kelloway. You've gone way over. I'll get that back off of you the next time you have questions.

We'll now go to Madam Desbiens for six minutes or less, please.

[*Translation*]

Mrs. Caroline Desbiens: Thank you, Mr. Chair.

I also thank our witnesses. It is always very instructive to hear them.

Ms. Elmslie, fishermen are very much consulted when setting up mechanisms to protect whales, but are they consulted on their own knowledge of the field and their observations? After all, they are on the water and they know the environment in which they operate every day. Are their observations sufficiently taken into account?

● (1510)

[*English*]

Ms. Kimberly Elmslie: I'll be interested to hear Dr. Fuller's response to this, because I think she works with harvesters a little bit more.

I'm on some of the technical advisory groups and working groups. I do see a lot of fishing associations, fishermen and others there. There does seem to be input, and more so now than before. I wouldn't say that this was necessarily always the case. There does seem to be quite a bit of input that goes into this. There seems to be broader outreach at the consortium on ropeless gear meetings that are held in Canada.

Certainly when I go to the science advisory meetings in Atlantic Canada, working with fishermen is primary. Again, they're the ones out there. They understand the gear and they're seeing things on the water. I'm not sure if I can make a value judgment about whether it's enough, but I certainly see it being integrated and being listened to.

Ms. Susanna Fuller: I would agree with that. It's probably never enough.

I think we have to consider that fishers' knowledge is not one thing; it is different in each area and fishery. It's not just one thing that can be integrated; it's quite broad and diverse, and it comes at different scales and times.

The more we can continue to work in this collaborative format.... The associations and their members are very involved, and there's communication back and forth. One thing I have heard from friends of mine who are fishermen is.... Sometimes they'll send me a picture of a whale, but they're afraid to report it, because they're afraid of restrictions. I think that piece is something we have to figure out. The reality is that in fact there may be some restrictions coming from that data point.

The more we can encourage fishermen to report that information and be a real part of that dynamic data, the better. Making sure they are part of the solution will, I think, decrease their fear of something coming down on them. Their being able to create the solution from the bottom up is vital. I think we're still in the middle of that. This has all been very rapid and quick since 2017, although there were absolutely measures before that. Moira Brown's team are all fishermen, for the most part.

We need to keep doing the work we're doing, probably on smaller scales and by fishery. I hope that the fishermen's information not only becomes incorporated but also that we continue to get more of it.

[*Translation*]

Mrs. Caroline Desbiens: Thank you both for sharing your thoughts on this matter.

For the benefit of the people who follow our work, what would be the most promising solutions to avoid overly harming our fishermen while protecting right whales? Which of the current interventions and those anticipated by scientists for the future do you think have the greatest potential for success?

[*English*]

Ms. Kimberly Elmslie: In response to that, I think I'll echo what you've heard today: The system we have is working.

The way I see it is that if you have a whale, you want to have a bubble of protection around it as it's moving. Obviously, you need to know where it is. Then you need to remove those threats, be they shipping or rope in the water. I think the closures are good, and they are working, although there are refinements. As we learn more and know more, there will be continual understanding and refinement of the measures we have.

We have seen some changes happening in the closures. For instance, we no longer have closures in under 20 fathoms. That's where we took the science of the whale and how the whales are using the environment. We don't need to do closures in certain areas.

I think that is what's important. That is what's going to help everyone. We need to continue to have measures. Unfortunately, this is not a problem that's going to go away. We're going to have to do this over the long term. We would like to see a permanent system in place so that there is more certainty and fishermen know each year that this is coming and is going to happen. We continue to do those refinements with all the information we're learning so that we can zero in on what the true solution is.

Again, this is why the science needs to be funded, why necropsies need to be funded and why we need to fund our disentanglement folks. They're the ones who are going out and getting the gear so that we can figure out where it came from or what kind of gear it is. All of that information helps us refine the solution that benefits everyone in the end.

● (1515)

The Chair: Thank you, Madame Desbiens. Your time has gone a bit over.

We'll now go to Ms. Barron for six minutes or less.

Ms. Lisa Marie Barron: Thank you, Mr. Chair.

Thank you to the witnesses.

My first question is for Dr. Fuller.

Dr. Fuller, based on some of the work you've done in the past and on your introduction, I'm wondering if you have any perspective or thoughts you can provide on the role of indigenous knowledge-keepers through this process of transferring information about conservation methods, gear being used and best practices. How does this play into the discussion? I haven't heard anything mentioned about that yet.

Ms. Susanna Fuller: I think that with regard to the fisheries that have the potential to interact with right whales, many of those are commercial fisheries, whether or not they are fished by non-indigenous or indigenous fishers. I think that when you hear about fishers' knowledge, we are absolutely including those who are commercially and communally fishing crab and lobster and other species , and other fisheries that are undertaken and owned by first nations, but you can't pull that knowledge on the water apart, necessarily, from the knowledge of non-indigenous fishers.

I would say that one of the things we've actually supported recently.... I'm not sure if you've seen the film *Last of the Right Whales*. We supported that being translated into Mi'kmaq, because often these things get told but not in the communities where they need to be told, and those stories don't get shared.

We did a series of workshops—that were supposed to be in person, but ended up being online because of COVID—to talk to indigenous communities about species at risk and get their perspectives. The ones that came out as most important and the ones they had the most knowledge about were eels, elvers and salmon, but I think it is the knowledge system and the values that are really important, and also the idea that these species have been here forever and we have to think in seven generations.... I do not claim at all to speak for indigenous knowledge, and that indigenous knowledge is not mine, but I think it has to be, as you say, a part of the solution. I do think that at the round tables, indigenous organizations and fishers absolutely participate increasingly. I think that will increase as well.

As Kim said, where everything is iterative, whether it is fishers' knowledge, indigenous knowledge, management measures or science, we're constantly increasing the inputs and hopefully improving the outputs.

Hopefully I've answered your question, but I do think that it's sometimes hard to separate. If you're a crab fisher, you're still out there fishing crab regardless of who you are, so your experiences on the water are reasonably similar.

Ms. Lisa Marie Barron: Thank you, Dr. Fuller. Yes, that answers my question.

My next question is for Ms. Elmslie. Thank you for being here as well, Ms. Elmslie.

You spoke about the benefits of a permanent system in your opening remarks. I really liked the image you provided for us of having the whale being encircled with protection. I really liked that imagery.

When you talk about a permanent system, you're also talking about being adaptable and you're also talking about different regions needing to be specific. I'm wondering if you can share a little more about how we can have the permanency required while also adapting to the ongoing changes in the regions specifically within them.

Ms. Kimberly Elmslie: Yes. I appreciate the question, because it does sound like the two pieces are contradicting each other: How can it be permanent yet flexible?

On the permanency piece of it that we see, currently the system that is in place is done through either interim orders, which are generally on the fishing side, or the use of ministerial discretion. On the shipping side, it's interim orders.

Again, we need to have some sort of a regulatory mechanism for both shipping and fishing that compels the ministers to continue to put measures in place. When you rely on discretion, it's working when it's working, but this is going to be an issue for successive governments over time. We need to keep this priority and pass on that torch, because this is a problem that's going to need many years to find a solution.

The permanency is what compels. Then everybody knows that this is coming every year, and then within that you have all of the inputs required. What is the refinement of the measure going to look like for next year with all of the new information that we have? Have the whales shifted? Is there a new scientific paper that has come out? Have we learned something new so that we can continue to do this until such time that the whale population has recovered sufficiently?

● (1520)

Ms. Lisa Marie Barron: Thank you, Ms. Elmslie.

You also mentioned the interconnection between protecting the North Atlantic right whales and the shipping processes. I'm wondering if you could share a little bit about what you're seeing around the risks and protections that are happening through our shipping processes and the protection of whales.

Ms. Kimberly Elmslie: There are two large threats to whales. Of course there's fishing, and shipping is the other large one. There are quite a few whales that have died due to ship strikes in Canadian waters. There's a lot of work that's been done to understand that if we slow those vessels down to certain speeds, to about 10 knots or less, then it's more likely that the whale would survive a ship strike, if it happens.

In Canada we have shipping lanes, which is a really positive thing, because it means that all of your ships are in the same space. We have requirements that when whales are found in those areas in the shipping lane, you must slow down to 10 knots, and then the rest of the gulf is at 10 knots. There's a little barrier put around where the largest congregation of whales is found, and you're supposed to avoid that area in a vessel or go at eight knots, so there's this refinement of how we're trying to protect whales.

That said, in the areas where it's mandatory, Transport Canada is reporting about a 95% compliance. In the Cabot Strait, where the measure is voluntary, we're only seeing about a 50% compliance rate, so again, when measures are mandatory, they work. We have seen this in the U.S. too. We have a U.S. campaign as well. If something is mandatory, it tends to be followed, but when it is is voluntary, there's not as much compliance, so the mandatory nature of measures if very important.

The Chair: Thank you for that, Ms. Barron. You'll owe me some time at the next meeting as well.

I want to say a big thank you to Ms. Elmslie and Dr. Fuller for their participation here today and for sharing their knowledge with the committee.

This concludes this portion of our meeting for today. I want to thank everyone who participated. Once again, I thank the interpretation team, the clerks and the analysts for keeping everything sorted out as we proceed through this particular study.

We'll hopefully see everyone safe and sound on Tuesday.

This meeting is adjourned.