HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Foreign Affairs and International Development

FAAE • NUMBER 072 • 1st SESSION • 41st PARLIAMENT

EVIDENCE

Thursday, March 21, 2013

Chair

Mr. Dean Allison

Standing Committee on Foreign Affairs and International Development

Thursday, March 21, 2013

● (1110)

[*English*]

The Chair (Mr. Dean Allison (Niagara West—Glanbrook, CPC)): Welcome. Pursuant to Standing Order 108(2), we continue our study on Canada's Arctic foreign policy.

We have from the Department of Fisheries and Oceans, David Burden, who is the acting regional director general of central and Arctic region, and we have Renée Sauvé, who is the director of global marine and northern affairs, international affairs directorate. Welcome to both of you.

Renée, welcome back again.

We look forward to your opening testimony, and then we'll go from there.

Mr. Burden, we'll turn it over to you, sir.

Mr. David Burden (Acting Regional Director General, Central and Arctic Region, Department of Fisheries and Oceans): Good morning, and thank you, Mr. Chairman, for providing us the opportunity to be here and assist the committee in your discussions on Canada's Arctic foreign policy.

As the chair said, my name is David Burden, and I'm pleased to be here today as the regional director general of central and Arctic region for Fisheries and Oceans Canada.

I'd like to begin by providing you with a bit of contextual overview of central and Arctic region, Fisheries and Oceans' largest geographic region.

The region encompasses the Northwest Territories, Nunavut, the north slope of Yukon, Alberta, Saskatchewan, Manitoba, and Ontario. If central and Arctic region were its own nation, it would be the seventh largest nation in the world.

Within our region we include 71% of Canada's coastline, 67% of Canada's fresh water, 65% of Canada's marine waters, 64% of Canada's area, and 55% of the population.

The region's activities are important from the perspective of sovereignty, northern commerce, safety and security, sustainability, resource development, and understanding the protection of aquatic ecosystems and habitat.

Co-management is an integral part of how we work in the Arctic, as there are five settled and three unsettled land claims. Each agreement sets out harvesting rights for beneficiaries; provides for the establishment of resource management structures, including for fisheries; sets out the role of those structures; and imposes procedural and substantive requirements on the minister related to the management of fisheries.

Our Arctic science program is coordinated through the National Centre for Arctic Aquatic Research Excellence, which is a virtual centre of expertise that coordinates all our science activities in the north across the department and with external partners.

Most of our interactions with co-management boards are related to their mandated responsibilities, which are focused on managing the harvest of fish, marine mammals, and other wildlife. This means the stock assessment work we carry out is of great interest to them.

We carry out a variety of research activities in both the eastern and western Arctic on marine mammals and marine fish, adjacent to Baffin Island as well

In fresh water our research continues on a number of species, including Dolly Varden, Arctic char, and shortjaw cisco, among others. Our research on the potential impacts of oil and gas development in the Mackenzie Delta and Beaufort Sea is also very important.

Commercial fishing operations in the western Arctic are primarily carried out on inland and freshwater lakes. The largest and best example is the whitefish fishery on Great Slave Lake.

Recreational fisheries in parts of the western Arctic enjoy world-class quality and reputation, resource management staff from the department, and partner agencies, as well as the Government of the Northwest Territories, who are involved in the management of recreational fisheries, the most notable of which occur on the Tree River and Great Slave and Great Bear lakes.

Regional staff also work in partnership with our partner agencies on managing marine mammals. Seals and certain species of whales remain very important components to the diet of a number of Arctic communities.

Fisheries and Oceans Canada's emerging fisheries policy follows the precautionary approach and allows for exploratory fisheries to gather the information necessary to inform fisheries managers about fish stocks and whether a commercial fishery can be supported sustainably by the stock. We also consider land claim agreements and the interests of northern communities in building our knowledge base to determine whether a commercial fishery is viable.

As a result, there is a strong and vibrant emerging fishery in the coastal waters of Nunavut. While there is a solid Arctic char fishery, Greenland halibut and shrimp are the key stocks harvested commercially in Nunavut.

In January 2013 our department presented an updated Greenland halibut integrated fisheries management plan to co-management partners and stakeholders in Iqaluit. The purpose of the integrated management plan is to meet industry and domestic as well as international expectations for demonstrated conservation and sustainability.

This is big business to the Arctic folks. The value of the commercial harvest in the Arctic in 2010 was over $104 million. The largest fish processing facility in the Arctic is in Pangnirtung in Nunavut, with smaller processing capabilities in Cambridge Bay and Hay River in the Northwest Territories.

The Pangnirtung small craft harbour, which is on track to be fully functional this summer, provides the infrastructure foundation for the expanded inshore fishery, and will serve broader community marine-based interests, in particular, the annual community sea lift.

The Cumberland Sound inshore turbot fishery, based out of Pangnirtung, is poised to reach a value of $2.5 million annually, a very viable and sustainable regional economic expansion for the fishery and for the local community. Currently about 350 tonnes of turbot are processed annually in Pangnirtung from the inshore fishery.

A final aspect of the mandate relates to charting in the Arctic. The Canadian Hydrographic Service has the enormous challenge of charting Canada's last frontier. Although the volume of shipping in the Arctic is low compared with the east and west coasts and the Great Lakes, the complexity of navigation is much higher. The Canadian Hydrographic Service is focusing on the main routes into the Arctic communities to ensure effective and safe delivery of northern resupply and economic development.

As the north continues to open up for resource extraction, the need for charts in areas other than community routes becomes more amplified. The Canadian Hydrographic Service is working with a number of resource companies to assist them in assessing routes and charting requirements to enable access to resource sites.

I could go on, Mr. Chair, but this is probably a pretty good place for me to stop and turn it over to Renée. Then we'd be more than pleased to take questions from your committee.

Thank you.

● (1115)

The Chair: Thank you.

Ms. Sauvé.

Ms. Renée Sauvé (Director, Global Marine and Northern Affairs, International Affairs Directorate, Department of Fisheries and Oceans): Good morning, Chair and members of the committee. Thank you for inviting us here today.

We appreciate your interest in this region. It's central to not only Canadian interests but also, as we are seeing, increasingly of interest to the broader international community.

My colleague, Dave Burden, has provided a thorough overview of the fish resources for the Canadian north, their significance, how they are managed, and some of the special co-management considerations. I would like to provide a bit of the international context.

The unprecedented rate of loss of sea ice in the Arctic has certainly focused the world's attention on this region, including from the perspective of increased access to resources. While much attention has been paid to the prospect of access to untapped oil and gas reserves, the question has also been raised, will there will be an international fishery in the Arctic, and if so, are we prepared to manage it?

This topic was part of the agenda of the Arctic Ocean foreign ministers meeting that was held in Quebec in 2010, where coastal states considered issues of common concern. Since then, officials from Canada, Denmark, Norway, Russia, and the United States have informally continued to have a discussion of possible emerging fisheries in the international area of the central Arctic Ocean.

What has become quickly evident is the need for greater information and understanding of current resources and what future scenarios might look like. Fisheries experts have met and have highlighted the need for targeted research as it relates to Arctic fisheries.

Uncertainty remains with respect to fish species distribution and abundance, the northern colonization by fish species, and the effects on ecosystems. Furthermore, the effects of climate change and ocean acidification on the oceanography and primary productivity of the Arctic Ocean are also unknown. More understanding is also needed regarding the impacts of such other activities as shipping, marine tourism, and oil and gas activity on marine ecosystems of the Arctic.

Against this backdrop of uncertainty and accelerated change, experts have indicated that it is difficult to accurately answer the question of whether there will be international fisheries in the Arctic. Nevertheless, some recent investigations have revealed a northward movement of some fish species, notably to the marginal shelf areas as opposed to the deep, less productive central Arctic Ocean.

It is this kind of trend, and the dramatic reduction in the north Pacific pollock fishery prior to the establishment of a fisheries management arrangement, that prompted the 2008 U.S. Senate joint resolution that calls for international efforts to halt commercial fishing activities in the high seas of the Arctic Ocean until there is a fisheries management agreement and an international fisheries management organization for the region.

Canada, like the other three coastal states, has not taken a formal position yet on this specific issue. It is not clear that the central Arctic Ocean will ever sustain commercially viable fisheries, and the question has been raised about the necessity for new agreements or organizations.

In a general sense, all the coastal states agreed, as laid out in the 2008 Ilulissat Declaration, that there already exists a comprehensive legal framework for the Arctic Ocean. A large portion of the Arctic Ocean is governed by national laws and regulations. The central or international part of the Arctic Ocean is governed by an international legal framework, notably the United Nations Convention on the Law of the Sea, a number of bilateral agreements, and the UN fish stocks agreement for straddling and highly migratory fish stocks, if they occur in the future.

Arctic coastal states have specific rights and obligations pursuant to these UN instruments, and bear the responsibility for managing marine living resources in their respective economic zones, including transboundary, straddling, and highly migratory fish stocks.

There have been concerns, especially common in the media, about a perceived rush to exploit natural resources of the Arctic Ocean that may threaten marine ecosystems and cause negative impacts on those ecosystems and the traditional ways of life of northerners. The need to avoid that scenario is well recognized by officials. Canadian officials have indicated the need to be cautious, and understand the concerns of the United States about potential unregulated fishing in the central Arctic Ocean.

● (1120)

Within our own waters and the high seas, Canadian policy supports a precautionary approach to fisheries management that would ensure ecologically and economically sustainable fisheries in the Arctic Ocean.

However, a precautionary approach does not automatically equate to a ban on all fishing activity. The emerging fisheries policy, as mentioned by my colleague, allows for exploratory fisheries in previously unfished areas as a means to establish the scientific basis for assessing fish stocks.

The issue of establishing a regional fisheries management organization or arrangement for the Arctic Ocean needs further consideration. There is still no consensus on whether a regional fisheries management organization is in fact necessary. If, however, it is determined that a regional fisheries management organization is necessary, there are basically two options: to extend an existing one or create a new one.

If the latter is the preferred option, a number of fundamental questions need to be answered. International practice for establishing a regional fisheries management organization is based on historical and existing fishing activity. Considering the absence of any historical commercial fishing activity in the central Arctic Ocean due to ice coverage, whom to engage and how to negotiate such a mechanism presents a unique challenge that the international community would need to face.

As an international ocean area, this implicates, naturally, a broader community of interest beyond just coastal states. The Canadian policy is to ensure a strong and central role for coastal states in fisheries management arrangements, and for this region it will be particularly important to take account of the potential interests of northern communities.

Canadian officials will continue to engage with other Arctic coastal states to consider the range of options for international cooperation in managing potential commercial fisheries activities on the Arctic high seas in order to ensure sustainability of fish stocks and the conservation of their marine ecosystems.

Should there be a consensus among Arctic coastal states to go forward with an international agreement on managing high seas fisheries in the Arctic Ocean, we, in collaboration with Foreign Affairs and International Trade Canada, will seek direction from cabinet on a negotiating mandate, and will carry out the necessary formal consultations with northerners.

The coastal states have indicated that they recognize the unique responsibilities and challenges with respect to the future development of the Arctic Ocean. Informal discussions to date suggest that strengthening collaboration in Arctic research and governance of potential commercial fisheries in the Arctic is a shared objective.

That's it, Chair.

The Chair: Thank you very much.

We're going to start our first round with the opposition.

Mr. Dewar, for seven minutes, please.

Mr. Paul Dewar (Ottawa Centre, NDP): Thank you.

Thank you to our witnesses.

As you know, we're studying the Arctic for reasons that have to do with our taking over the chair in the next coming months.

Before I go to that, Mr. Chair, I just want to underline that I had made a request to have the minister here. Hopefully we'll hear back, if we haven't heard back yet, on whether or not she'll be coming to committee.

The Chair: We'll have an answer probably...or we can talk about it when we're in—

Mr. Paul Dewar: I'm saying that because ,as important as it is to hear from officials, the chair of the Arctic Council will be our minister, and I would hope that we'd hear from our minister.

We were also hoping to hear from some of our allies, partners, some of the countries you mentioned earlier in your report. Sadly, we're not going to hear from them formally at this table.

Let me touch on a couple of things you mentioned. When it comes to the fishery, there is a lot of change happening. You mentioned climate change as being one of the variables. I would say that probably, if you're looking at it from an analytical point of view, it's one of the most important variables in terms of the change. We heard from Iceland, in fact, when they had a delegation here on a separate meeting, with regard to the new fisheries that emerged there that they had not anticipated.

We see, because of the changes in ice, that what we normally would have configured in terms of responsibility will be changing. There are many different projections on that. In other words, what is ice right now will be free-flowing water. This will change, of course, the oversight in terms of fishery management.

You also mentioned, along with climate change, the acidification of the ocean and the need for research. Are we in conversation with, and are we working with, our partners on this issue? As you know, water flows, and this is something that is affecting other countries.

We're seized with the issues around the Arctic as it relates to foreign affairs and to the multilateral engagement we have with our partners. Can you tell me if we are engaged with our partners on joint research on acidification? If so, whom, and to what degree?

● (1125)

Ms. Renée Sauvé: I can comment a bit on that. Again, I'm not with our science group, but I do have a role with the Arctic Council marine working group, so I am a bit familiar with different activities. The short answer is yes, we're very much engaged.

As you mentioned, Mr. Dewar, the Arctic Ocean is our smallest of the five oceans on the planet. There's a lot of domestic jurisdiction in there, so there is very much a vested interest that, as we have this common resource, we work together. We see a lot of effort, particularly coming through the Arctic Council in its science-based working groups. There is the Arctic monitoring and assessment program that is just completing a study on acidification in the Arctic Ocean. Our scientists in our department have been directly engaged with the experts from the other Arctic Council countries on that report.

Mr. Paul Dewar: Who's the lead on that? Is there a country that is leading that, or is it just being held by the Arctic Council committee structure?

Ms. Renée Sauvé: No. The Arctic Council is very project driven —

Mr. Paul Dewar: Yes.

Ms. Renée Sauvé: —and typically the different countries step up to be the lead or the co-lead on different projects. If I remember correctly, on that project Norway is a co-lead, so they definitely are taking a strong—

Mr. Paul Dewar: So we're involved, but we're not one of the co-leaders at this point.

Ms. Renée Sauvé: Not to my recollection.

Mr. Paul Dewar: If you could provide that information to the committee, that would be great.

Mr. Burden, on mapping, we've heard time and time again that it's urgent, when you take a look at the things that are happening in the north and the changes that are happening. We see what other countries are doing, and certainly Russia is an example, where they are charting their course, literally. They're moving ahead with the northern route. Obviously, their mapping is further advanced than ours.

Can you tell me from your perspective what you know and what the plans are in terms of ramping that up? At the last committee meeting and at other committee meetings we've heard that it's something we need to game up on. Can you give us some suggestions? We're looking for recommendations as to how we can speed up the mapping.

Mr. David Burden: Thank you for that question.

It's an area that is of great concern to us in the department. I think you've had folks from Transport and our coast guard colleagues here earlier speaking about that.

We've done great partnership in that, as Renée said, in some of our other scientific activities. We've done an awful lot of work with the Americans and with our Icelandic neighbours to do joint surveying and mapping work. Using their assets and using our assets, we can cover a lot more area.

We're not the only ones who are not as well charted in the northern reaches as we find and are used to in the southern reaches, but we are making really good progress on this. In the past, we've used vessels of opportunity. We've been using the coast guard and DND. Now we have assets from the Nunavut government that we're using, and that's allowing us to get into communities in reaches that we can't get into with our heavy icebreakers. We're getting information that's going to be more useful on a day-to-day basis for the locals.

One of the things that we're doing a lot of work on with the Canadian Space Agency and others is we're using other technologies rather than shipboard platforms. That's paying huge dividends for us, because we don't really need to try to map the Arctic the way we're used to mapping things in the southern reaches. As long as you know that you have a lot of water beneath you, it doesn't really matter. After you're over 300 metres, does it matter, from a ship's perspective, that it goes to 600? We can use technologies like lidar and other emerging techniques that are much more efficient and allow us to cover a much broader area in considerably less time—

● (1130)

Mr. Paul Dewar: I'm sorry to interrupt you, but when you look at the mapping, there are the concerns that Ms. Sauvé had about oil and gas, about that balance, right? There's a lot of interest, obviously, in what's underneath and the energy prospects there.

Others are there, as we know. You can see maps of where the oil and gas are. Is that being folded into the configurations that you're doing? I'm assuming yes.

Mr. David Burden: Yes.

Mr. Paul Dewar: Do you have access to that?

Mr. David Burden: I can give you an example. Maybe that's the better way.

We have the work that's going on in Mary River for the Baffinland project. We're looking at iron ore coming out of there on shipments throughout the year. These are in waters in which to this point there hasn't been a lot of marine traffic. In partnership with the proponent, we've mapped out areas where they would want preferred routes, where they will provide data and we will use our capabilities, because we have to sign off on the charts.

We are looking at it. There's a lot of work to do. Clearly, if a proponent is looking at going in there and exploiting our natural resources, there's an expectation that they can contribute to some of the costs to offset this. It has been done in the south. Voisey's Bay is an example that comes to my mind. It's something that I've been talking to my folks about doing in the north. That's one example where we've actually done it.

Mr. Paul Dewar: I know Google Maps is up there now, too.

Mr. David Burden: Yes, they were up in Iqaluit this week.

The Chair: Excellent. Thank you very much.

Mr. Dechert, go ahead for seven minutes, please.

Mr. Bob Dechert (Mississauga—Erindale, CPC): Thank you, Mr. Chair.

Thank you to our guests for being here this morning.

I'd like to ask Ms. Sauvé some questions about the Arctic fishing industry, nascent as it may be.

You mentioned that you didn't think there would be a commercially viable, or it was doubtful there'd soon be a commercially viable fishing industry in the Arctic Ocean. Can you tell us why that is? If I have that wrong, could you let me know when you think that might develop?

Ms. Renée Sauvé: It remains to be seen. It's not a yes or no question, but the question has been raised as to whether there will be a commercially viable fishery in the central Arctic Ocean. Part of that questioning is, of course, related to ice cover. Even with the reduction in multi-year ice, annual ice can be very dangerous, so it's not necessarily a particularly attractive place for fishers to go. As well there are the issues of safety and insurance, which can be economic disincentives.

From an ecological perspective, the central basin is very deep. It doesn't have some of the habitat features that tend to be attractive to some of the subarctic species that might be moving into the area. The experts think that some of the areas that will probably be attractive earlier are the shelf areas, in other words, areas within national jurisdictions.

Mr. Bob Dechert: That is what you would describe as the inshore fishery.

Ms. Renée Sauvé: Right.

Mr. Bob Dechert: You mentioned there is evidence of some northward movement of some species, and I think you mentioned pollock in that regard. What other species have you seen northward movement with?

Ms. Renée Sauvé: We're getting a little bit of data related to Greenland halibut. Not all fish species are sensitive to temperature changes, but some are, and Greenland halibut is one of those. They have, in fact, been detecting a northward movement of Greenland halibut up into some of those shelf areas, where they haven't historically been.

Mr. Bob Dechert: I would imagine that would be a commercially valuable fishery. Is that correct?

Ms. Renée Sauvé: It's a commercial species now, so yes.

These shelf areas in the Arctic, of course, would have to be conducive to good productivity. The Arctic Ocean in general is not considered a necessarily highly productive area compared with some other ocean areas on the globe.

Mr. Bob Dechert: Is that because of water temperature?

Ms. Renée Sauvé: It's colder. You tend to have species that are slower growing, with lower reproductive rates and that sort of thing.

● (1135)

Mr. Bob Dechert: Mr. Burden mentioned Arctic char. It is a species that's currently in the region and has always been in the region. It's a very popular fish served in restaurants in southern Ontario. Some of it is farmed fish, I believe. Is that where most of it comes from? Are those fish-farming operations in the Arctic region?

Mr. David Burden: We're actually not seeing aquaculture in the north from a Canadian perspective. There are probably going to be some people who will want to look at that.

Clearly, from our perspective, the marketing of the northern product as truly wild and truly Canadian is the approach that has done quite well for their market. It's a good solid fishery for them.

Mr. Bob Dechert: Does wild Arctic char reach our markets here in southern Ontario?

Mr. David Burden: Yes. I mentioned the Pangnirtung fishery. They're doing an awful lot of char.

Mr. Bob Dechert: I think you said $2.5 million a year as a—

Mr. David Burden: The number I gave was related to turbot, but that plant also does a considerable amount of char.

I was up there in October. They have some of the best char of excellent quality and just beautiful colour. It is world renowned.

Mr. Bob Dechert: Very good.

Is that supplying significant economic benefit to the people of the region?

Mr. David Burden: Yes. The last two years have probably been among the best for some of the fishermen. One person had an income of almost $60,000, not in char but for a combined fishery. A lot of it was related to turbot, but $60,000 in those communities—

Mr. Bob Dechert: It goes a long way.

Mr. David Burden: —goes a long, long way.

Mr. Bob Dechert: Very good.

Ms. Sauvé, you mentioned the international Convention on the Law of the Sea and fishing regulation generally. Do you think there's a role for the Arctic Council to play in the negotiation of regional Arctic fisheries rules and regulations?

Ms. Renée Sauvé: Yes. I think I was commenting on the lay of the land regarding what exists now in terms of a legal framework. Contrary to some of the stories in the media and the suggestion that it's like the wild west, I think that's far from the truth.

That being said, in general there can be a demand for more specific agreements, depending on the area. This is something that does fall out of that framework on the UN Convention on the Law of Sea, which I mentioned, and its subsequent fish stocks agreement. That is the route through which fisheries are managed.

The Arctic Council, again, is a collaborative body for the Arctic states to have dialogue and to talk about sustainable development. It has increasingly tried to influence policy, but it is definitely not a management body. It doesn't have the legal mandate or the policy mandate or the expertise you would have. There is an established system that falls out of these UN instruments for fisheries management, so that would be the route a new fisheries management organization for the Arctic would take.

Mr. Bob Dechert: I see.

I've seen mention in the media that some of the Asian nations which have big commercial fishing fleets may have some interest in Arctic fishing. I guess they would include Korea and Japan. If Canada were to invite non-Arctic nations to play a central role in the Arctic Council, do you believe they would have an impact on Canada's fishing industry? If so, what role do you think the non-Arctic states could play in that? What concerns would we have in terms of bringing in those non-Arctic nations to participate in the Arctic Council with respect to the fishing industry issues?

The Chair: Ms. Sauvé, that's all the time we have, but I'm going to ask you to give us a quick response.

Ms. Renée Sauvé: With respect to fishing, I don't think there will be a strong link there simply because, again, the Arctic Council doesn't have a mandate to manage fisheries, so I don't think there's a big concern in terms of them having an influence on fisheries management. In the same way that the Arctic Council doesn't deal with security issues, it is not a fisheries management organization.

The Chair: Thank you very much.

We're going to turn it over to Mr. Eyking. Go ahead, sir, for seven minutes, please.

Hon. Mark Eyking (Sydney—Victoria, Lib.): Thank you, Chair.

I thank the guests for coming here.

I'd like to follow up on where Mr. Dechert was going on the whole fisheries management.

My riding is on the east coast, in Cape Breton, and we've noticed in the last few years that mackerel have moved away from us just because of a couple degrees' difference. Whether it's because of predators, the temperature or currents, who knows, but it tells you how fast the habitat moves.

Recently I read an article that said fish are going to be moving, and the mammals will be following. The problem we have is that our water is so deep that many of our species might be veering to the right a bit towards Greenland, Norway, and the Arctic areas. I think it was a very historic agreement we had with the 200-mile limit way back. That was about 30-some years ago. It really did a lot for our fishery, especially in Canada.

When you look at all the problems we're having with fisheries around the world, whether it's tuna or whale, with these species moving around, it seems to me that we have to have more international agreements for an area. I think you're alluding to that. We've talked about the acidification and what has been done with the agreements, but shouldn't we be sitting down with countries? Right now we have the 200-mile limit, so we know what we fish in our region, and we have quotas. If we, as northern countries, Arctic countries, had an agreement on quotas.... You have to base how much you're going to fish on quota and science. The Russians might say it's looking better for them in the next 20 or 30 years, but overall do we see that as something we could look at: sitting down and having a quota system among the Arctic countries for how much we catch?

● (1140)

Ms. Renée Sauvé: It's certainly a bit of conjecture given where we are in terms of our lack of scientific knowledge. You mentioned that. You need that basis. That's really where we are at that stage of leveraging to try to get an understanding of what we're actually dealing with here.

It's very early days, but in a general sense, I think, as you indicated, these organizations generally help with predictability, and they have been acting more as good cooperative tools. But, as I said, we're many steps before that right now in terms of trying to understand the resource we're dealing with here.

Hon. Mark Eyking: Right now with DFO, a lot of the research is done within our borders, within a 200-mile limit within the Arctic, right? We do our own research, so maybe the first big step is for us to have an agreement for international research, where we can share resources. We could have ships off Greenland and Norway that collect data for everyone to get a sense.... Would you say that would be a first big step?

Ms. Renée Sauvé: Yes, and I'll turn it over to my colleague here, but as mentioned, it's a very expensive region to operate in, and leveraging is the key word in doing work, including scientific research in the Arctic. I totally agree that we have to be creative and look at partnering for some of these major knowledge gaps.

Mr. David Burden: To add to what Renée said, I don't want to leave the impression with the committee that we're not doing joint international research. We're actually doing an awful lot of it.

In the eastern Arctic we do multi-species surveys on a cyclical basis. We do that with Greenland. We share the stocks with them, so under the NAFO arrangements for shrimp, turbot, and everything else that's up there, we share the costs and we share the platform. That's been going on for quite some time. I don't see any reason to change that.

In the western Arctic, in the Beaufort and that kind of area, there's collaboration with the Alaskans and with NOAA and others to use common assets, share the data, and share the costs. We are doing that. The issue is, what do you do with someone who parks on mile one outside the boundary? That's where you really have to establish a coalition of the willing.

At this point, as Renée said, there's not really seen to be a viable market. We're looking at small and not quickly reproducing fish, so up to this point in time it has not been a big concern, but we continue to do the analysis and to do the research to see what's out there. Obviously, if oil and gas are going to come before fisheries, we want to know what the potential impacts on that would be.

Hon. Mark Eyking: You mentioned how you're working well with the United States and Greenland, but how much work are you doing with Norway and Russia and those countries?

Mr. David Burden: We belong to various organizations, to forums at the international level that we work with. There's work going on in which our scientists work with the Russians, the Norwegians, and all of the Icelandic nations. It depends on what the work is. There's a lot of work being done jointly on marine mammals. We know that they're travelling back and forth doing beluga, narwhal, walrus, and that kind of stuff, so a lot of that work is shared on a multinational basis.

● (1145)

Hon. Mark Eyking: Do I have much more time, Mr. Chair?

The Chair: You have a minute.

Hon. Mark Eyking: If you people were, and I imagine you are, giving some advice as we go into these Arctic Council meetings, on the DFO side, let's assume that you were getting enough research money—because we're talking about big industry, a $104-million industry—what would be your wish list, dealing with the fisheries alone, for the key minister who was going in there? Would it be for more research? Would it be for more agreements? I'm sure there are going to be a lot of things on the table, but from your side, what would be your priority?

Mr. David Burden: I don't think it matters related directly to the Arctic Council chair or not. I think our number one priority is to develop these fisheries for the benefit of northerners, particularly—

Hon. Mark Eyking: Within our own country.

Mr. David Burden: —within our own country. Clearly, we want to work with our international partners to make sure that we're doing this in a cooperative and responsible fashion. Let's face it: we have an emerging fishery in the north.

Hon. Mark Eyking: Just on that, because I probably only have a few seconds, would you—there's a budget coming down today, of course—like to see more research, scientific or whatever, done right here in Canada, with data collected, so that we can protect and take care of the industries we have right here in Canada?

Mr. David Burden: I don't think anybody would ever come before a committee and ask for less money to do research.

Hon. Mark Eyking: That's fine, Chair.

The Chair: Thank you very much.

We're going to start our second round, which is five minutes for questions and answers.

We'll start with Ms. Brown, please.

Ms. Lois Brown (Newmarket—Aurora, CPC): Thank you, Mr. Chair.

I'm going to share my time with Mr. Van Kesteren.

I know there's always room for more research, but it sounds like the space is getting a little crowded up there. Do we have a sufficient number of scientists? I'm pleased to hear that you're sharing data with other countries. It's really important that we build those alliances. Are we finding that there are private sector actors in the research area as well?

I would presume that a number of them are doing research for resources. Are they sharing any of that data with us? Is this something we can incorporate into the amount of data that we're putting together?

Mr. David Burden: There obviously are a lot of untapped resources in the north. We're going to continue to be inundated by folks who want to go in there.

The good news in this is that we do in fact have Canadian resources being put into this, not just government resources. You mentioned private resources. There is a consortium of philanthropic groups under the name of the Arctic Research Foundation. You may have seen the work they did over the past year or two in cooperation with government partners, but with private sector money in it as well, to find the lost Franklin vessels. Their mandate is they want to look at that as part of the history of the nation, but there is a much broader interest in ocean acidification, the whole issue around the impacts of climate change, and the changes of the ocean and the land in the Arctic.

This is a group that has a keen interest, and fortunately for us, they also have some financial resources that they can put into it. It's making a made-in-Canada private sector research capacity. That's coupled with what we have. Our co-management partners are also putting their resources into this, as well as our territorial government. We bridge all of that funding together. Where it's possible, we use one platform and we may have a multitude....

The season is short, but the days are long when we're there. When you're on board one of those vessels, it's a 24-hour operation. I remember the first time I was on one of them, I just didn't sleep. It's amazing how much work you can get done in a 24-hour period if you sort of park the sleeping for a while.

It is something we're getting a lot of progress on.

● (1150)

Ms. Lois Brown: Mr. Van Kesteren, go ahead.

Mr. Dave Van Kesteren (Chatham-Kent—Essex, CPC): How much time do I have, Chair?

The Chair: You have three minutes.

Mr. Dave Van Kesteren: Welcome to the witnesses.

Mr. Burden, we know each other, of course. Not only are you the director for the Arctic area which encompasses the north, but you're also responsible for the most southern and largest freshwater fishing port in the world. That is in the riding of Chatham-Kent—Essex, in case any of you didn't know that.

It's good to see you, and it's good to see that you have a good handle on what's happening here.

My question can go to either one of you, I guess, but it's possibly more for Ms. Sauvé.

This issue of ocean acidification, I've got to tell you, is a new one to me. Could you explain to the committee what that is and where it's coming from?

Mr. David Burden: While my colleague thinks about it, I'll give you the real layman's non-scientific approach to it.

If you have increased ocean acidification, what it does to shellfish, say, is that it deteriorates the quality and the structure of the shell. The higher the acidification, the harder it is on the ecosystem and marine life, and clearly things like shrimp, crab, or whatever would be impacted. It impacts the fishery.

Mr. Dave Van Kesteren: Where is it coming from and how do we monitor it? How do we know this is happening and that it's intensifying?

Mr. David Burden: Now you're into the science side of it, and that's beyond my pay grade.

I can tell you, however, that we have had a number of joint projects looking into this with Canadian and other national resources. Clearly it is an issue. I don't think we fully understand the cause and effect, and until you have that, how do you best deal with it?

It is an emerging issue that's being looked at.

Mr. Dave Van Kesteren: Where is it coming from? If there is a rise in acid in the ocean, where is it coming from?

Mr. David Burden: You're the scientist, Renée.

Ms. Renée Sauvé: Well, I haven't done science for a very long time.

I know just the basics, that it's the excess of carbon dioxide in the atmosphere, and this excess of carbon dioxide will affect the pH balance of aqueous environments, bringing a more acidic—

Mr. Dave Van Kesteren: How new a study is this? When did this first start coming into the mainstream?

Ms. Renée Sauvé: Oh, gee, I think that concept has been around in the scientific community in excess of 30 years.

We, Canada, have been fairly active. Our experts, for example, on the Pacific coast were part of some of the earlier monitoring systems of detecting these rises in acidification.

Mr. Dave Van Kesteren: If we have been doing it for 30 years, what have we found? Is it 1%, 2%, 3%?

Ms. Renée Sauvé: I don't know the levels in terms of how it has increased, or the acidity, but it would vary depending on the water body. It would depend on what the baseline pH level would be, so there would be some slight differences.

It wouldn't be the same all over the globe, but the trend is noticed; it's recognized globally that there is this trend that's happening. There will be a meeting at the UN, actually, this summer on specifically that issue.

The Chair: That's all the time we have, Mr. Van Kesteren. Maybe we'll get to you again.

Mr. Bevington, sir, you have five minutes.

Mr. Dennis Bevington (Western Arctic, NDP): Thanks, Mr. Chair.

Welcome, witnesses.

A number of points are quite interesting in this. I don't know if you're familiar with the Canadian Healthy Oceans Network, CHONe, and the work they're doing on invertebrates in the Arctic. I attended a presentation this week on Tuesday morning. They presented some of their findings. They're saying that in the case of invertebrates in the seabed and in the water column that the presence of these little animals is actually higher than in the Atlantic and Pacific oceans so that there is significant feedstock available for fish within the Arctic waters.

Is that not the case? That's the work they presented to us, that this ocean was not short of those basic feedstocks.

Mr. David Burden: I think the way I'd respond to that is to say when we're talking about the Arctic, it's a really big area. There are some places where there are incredible.... All we have to do is watch where beluga and narwhal and other marine mammals go. There is this sort of train that goes along. As those small invertebrates and so on move into areas, the other larger species will follow. We're obviously seeing that. We're seeing killer whales in areas where we wouldn't have seen them in the past.

● (1155)

Mr. Dennis Bevington: Basically we're talking about foreign affairs here. Is it important to understand the relationship on a regional basis of these types of hot spots in areas within the Arctic? They're not tied to national boundaries. The opportunities are going to be international in scope. Is that not the case between Greenland and Canada, or between the U.S. and Canada in other parts of the Arctic? Wouldn't you agree?

Mr. David Burden: That's why we're doing our multi-species survey and working cooperatively with the nations that have the same interests we do with those stocks in the Arctic.

Mr. Dennis Bevington: The one fishing dispute I know about in the Arctic involved a letter that was sent by the Canadian government to the U.S. complaining about the overlapping boundary issue and the fact that the U.S. had set up a moratorium on fishing within Canadian waters. Are you familiar with that?

Mr. David Burden: I am.

Mr. Dennis Bevington: Perhaps you'd like to elucidate for us.

Mr. David Burden: I think the American view on what the approach should be may be different from our view of it. As I said in my remarks and Renée addressed as well, our view is that you have to have really good solid research before you go in. We don't have a fishery in that part of the Arctic at this point in time, so why would we have a moratorium against something we don't have?

Mr. Dennis Bevington: That was one of the areas that was pointed out by CHONe on Tuesday morning as a hot spot for invertebrate activity.

Mr. David Burden: Yes, but again, at this point in time, Mr. Chair, there are no commercial operations in that part of the Arctic. We are doing our research to assess. We are seeing some of the things that you have identified. There is research in that capacity, but we're talking about fish that would not be commercially viable in the sense that we're traditionally used to seeing. If you can fish and get fish of a significant size versus smaller fish, I think you'd go for the larger fish.

Mr. Dennis Bevington: I have a little bit of time here, so I just wanted to add that when I was in municipal government, I sponsored a study on the Arctic char fishery and fish farming. It turned out that Arctic char is actually an excellent fish to farm because of all species, it has the highest density capacity for growing in water. Is that correct?

Mr. David Burden: Well again....

Mr. Dennis Bevington: The problem with it is that you need very cold water. We got beat out where I live because we couldn't provide a source of cold enough water to actually run a fish farm with Arctic char. Are there any plans afoot to utilize the Arctic char as a farm fish in the Arctic?

Mr. David Burden: I'm not aware of any plans. I know there's been talk of it. I suspect there are enterprising people out there who are looking at it from our perspective and our dealings with the co-management partners and with the territorial governments. The focus has been to continue the truly wild in the Canadian north brand. That's been the focus of their industry thus far.

Mr. Dennis Bevington: There was an Arctic char farm in Whitehorse, though.

Mr. David Burden: Yes. Unfortunately—or fortunately—that's outside of my area of responsibility.

Voices: Oh, oh!

The Chair: Thank you very much.

Ms. Grewal, for five minutes

Mrs. Nina Grewal (Fleetwood—Port Kells, CPC): Thank you, Chair.

The far north is a significant area of focus for our government's policies. Part of the difficulty is that it encompasses so many distinct departments, all of which have their own jurisdiction.

How are government departments working together to best implement policy? Could you say a little bit about that?

Mr. David Burden: Well, there is a Government of Canada approach to everything we do. The response we gave on research, that we marshal and pool our resources, would go the same way to how the Government of Canada works in the north.

When we look at our programs and services, it is whole of Canada, but it's not just the government. One of the most impressive areas I've seen in the western Arctic is what's called BREA, the Beaufort Sea partnership initiative which involves industries, NGOs, governments, all of the federal family, the territorial governments, and all of the land claim beneficiaries. This group comes together on topics of mutual interest. It really helps make the dollar go much further than it would in as expensive an environment as we're looking at.

● (1200)

Mrs. Nina Grewal: The Department of Fisheries and Oceans has a very large mandate due to Canada's extensive coastlines. What are some of the unique challenges DFO must address in dealing with the Arctic policy that it didn't have to deal with before?

Mr. David Burden: I don't think anything has really changed.

You know, people talk about climate change, and the Arctic opening up, and how we're going to have ice-free waters. I think that's a bit of a misconception. The reality is that reduced ice doesn't mean no ice. There are a number of vessels transiting those waters for.... They're there earlier and they're there later. We're going to have to look at how we can provide services to that.

Clearly, as more folks are plying those waters, we'll want better charting. We'll want better coast guard coverage. We'll want more informed science on what the ramifications of those interactions will be. We have a plan in place to address this, and it's just one of those things where you never have enough money to do everything you want to do. No organization does.

It comes back to what we talked about earlier: partnerships. If we can continue to find the synergies in those linkages, I think we'll be well served going forward.

Mrs. Nina Grewal: In the past, Canada has had problems with foreigners coming to fish in our fertile waters. With more access to the Arctic Ocean, what is the risk that this will happen again, and what can be done to pre-emptively address this?

Mr. David Burden: Again, on the partnership side we have Transport Canada aerial surveillance, where we look for pollution. We have sovereignty patrols from the coast guard as well as the Department of National Defence.

What I do is that I have some of my conservation officers on board those assets when they're going out. There is very good cooperation. If there is a spare seat, we usually try to fill it. That allows us to have a core program that's going out, but we have add-ons to them.

We've done a considerable amount of work on surveillance programs to enforce our fisheries mandate and ensure that those who are fishing in our waters are complying with our rules and regulations. When they don't, then because of this capacity we're able to take appropriate action and deal with it.

Mrs. Nina Grewal: Okay.

I'll pass the rest of my time to Mr. Dechert.

The Chair: You'll pass all 30 seconds to him.

We're supposed to finish up at 12, so let's just finish up with what you have, Bob.

Mr. Bob Dechert: That's very generous of you.

Thank you, Ms. Grewal.

I have one quick question for Mr. Burden about the importance of icebreaking operations to the fishing industry.

I know there are currently icebreaking operations starting in some of the southern waters that you're responsible for. I wonder if you could tell us about the significance of that to the fishing industry and about the plans for the Arctic region in that regard.

Mr. David Burden: I don't profess to speak for the coast guard. I spent many years in the agency, and it was some of the proudest service I had, but I think the commissioner would rather speak to the coast guard issues.

That said, as I said in my remarks, as you have more traffic, there will be more requirement for more of a coast guard presence in the Arctic. The government has unveiled plans for a replacement of the *Louis S. St-Laurent*, and the *John G. Diefenbaker* is something we're all looking forward to having in our tool kit. Clearly, we have assets available to us as we look at advancing the programs and services. Those assets are tasked over a broad area.

● (1205)

Mr. Bob Dechert: Okay. Thank you.

The Chair: Lois, do you have a quick question?

Ms. Lois Brown: I would like to ask one small question.

As we see the north open and we know that ecotourism is going to become more interesting, has DFO done some research, or do you have any baseline for research on what impact that will have on the fish stocks in certain areas?

Are there any agreements on where ecotourism could go? Are we starting to build those alliances with our circumpolar neighbours? Do you have any thoughts on that?

Mr. David Burden: It's a very good question, but I don't have any knowledge—

Ms. Lois Brown: DFO doesn't have any—

Mr. David Burden: Well, the ecotourism side would be outside of our mandate, but I understand where you're coming from on what the ramifications of it would be. I guess I could hide behind the comfort of knowing that it's emerging but it's not emerging that much, and it's in areas where clearly we're not having a lot of fishery. It is in areas where people want to go to see polar bears, and they want to go to see ice, and those are not really conducive to fishing.

Ms. Lois Brown: The backtrack would be whether we have acquired any research data on where cruise lines go now in fishing areas and whether we expect that any of that information will be applicable in the north or whether we are dealing with something that is so totally different that we just don't know yet.

Mr. David Burden: I think it's more the latter.

To answer the first part of your question, if there's a vessel transiting in the Arctic, particularly a cruise ship, we know where it is and there's reporting. I imagine Jody Thomas and others have spoken about NORDREG and that kind of stuff. That's one part of it. The other part of the response would be that we're just not seeing them in the same areas where we're prosecuting the fishery.

Ms. Lois Brown: Certainly, there is unlikely to be the same volume as we would have, say, in the Caribbean or along the east coast of North America.

Mr. David Burden: No. There are a few vessels. I'm familiar with one, the *Hanseatic*. It basically makes a circuit and just keeps going through. I've run into it pretty much every time I've been in the Arctic in the summer. That's usually as it's going up through there.

Ms. Lois Brown: Ms. Sauvé.

Ms. Renée Sauvé: I will just comment from an Arctic Council perspective.

This idea of increased marine tourism and potential implications to environments and communities of the north is something that's been recognized. Certainly, Minister Aglukkaq has recognized that as a priority initiative that she would like the council to put some effort into developing best practices or guidelines for, because I think this is something she's heard a lot from her constituents about regarding their concerns about the potential implications of increased marine tourism on their environment and their communities. It is something that is top of mind—let's put it that way—in an Arctic Council context.

Ms. Lois Brown: Thank you.

The Chair: Thank you very much to our witnesses, Mr. Burden and Ms. Sauvé, for being here today.

We're going to suspend so we can go in camera to deal with a budget. It's going to be very quick, and then we'll be done for today.

Thank you very much.

[*Proceedings continue in camera*]