



HOUSE OF COMMONS  
CHAMBRE DES COMMUNES  
CANADA

## **Standing Committee on Fisheries and Oceans**

---

FOPO • NUMBER 139 • 1st SESSION • 42nd PARLIAMENT

---

**EVIDENCE**

**Wednesday, April 3, 2019**

—  
**Chair**

**Mr. Ken McDonald**



## Standing Committee on Fisheries and Oceans

Wednesday, April 3, 2019

• (1610)

[English]

**The Chair (Mr. Ken McDonald (Avalon, Lib.)):** Good afternoon, everyone.

Pursuant to Standing Order 108(2), we are studying the migration of lobster and snow crab in Atlantic Canada and the impact of changes to lobster carapace size.

Today we have witnesses from the Department of Fisheries and Oceans. We have Mr. Hardy, manager of the fisheries and ecosystem sciences division, gulf region. We have Ms. Orok, director of fish population science and acting director general of ecosystem science, national capital region; Mr. MULLOWNEY, biologist, shellfish science, Newfoundland and Labrador region; and David Whorley from resource management operations.

Welcome to you all.

I believe, Ms. Orok, you're going to start off but you're sharing your presentation.

**Ms. Rowena Orok (Director, Fish Population Science and Acting Director General, Ecosystem Science, National Capital Region, Department of Fisheries and Oceans):** Thank you, Mr. Chair.

Members of the committee, I'd like to thank you for inviting us here today. This is an opportunity for us to provide an overview of the DFO science assessment and monitoring of snow crab and lobster fisheries in Atlantic Canada. The mandate of the DFO science organization is to provide information and advice for decision-making. In the context of fisheries, this means providing information on the status of populations, giving advice on levels of sustainable harvest, and using ecological information to make inferences about the current and future health of the population. In this way, the DFO science program supports the conservation and sustainable use of Canada's fisheries resources.

DFO science has approximately 2,000 staff, located across the country in 13 science facilities. These scientists, biologists, researchers, technicians and support staff support a variety of programs, including fisheries science. We undertake monitoring of fisheries in Canada's oceans, conduct research that addresses questions relevant to our mandate, and use this information to generate advice through the Canadian Science Advisory Secretariat. This work is often done collaboratively with industry, universities, research institutes, other federal departments, and provincial and

territorial governments. We also work with scientific counterparts internationally. Assessing the state of Canada's fish stocks is one of the most critical functions we undertake. It provides the fundamental evidence base in support of DFO fisheries and resource management policies. It helps to inform and guide decision-making.

Today, our DFO team consists of Mr. David Whorley, director of resource operations, and two of DFO's leading stock assessment experts, Dr. Darrell MULLOWNEY and Mr. Matthew Hardy. We will present snapshots of two major fisheries, snow crab and lobster, which cover really only a portion of the much broader suite of science assessment and monitoring work we undertake on hundreds of fish stocks across the country. The overview will cover how we do our snow crab and lobster stock assessment and monitoring, provide a glimpse of overall trends, and then highlight stock status results in key management areas, taking into account considerable differences in ecosystems, environmental factors, species interactions and linkages that make these areas unique, and the ways in which they are changing over time.

On this, I now turn to my colleagues Dr. MULLOWNEY and Mr. Hardy for their respective presentations. After they have completed their overview, we would be happy to answer any questions. Thank you.

• (1615)

**Mr. Darrell MULLOWNEY (Biologist, Shellfish Science, Newfoundland and Labrador Region, Department of Fisheries and Oceans):** Thank you.

My name is Darrell MULLOWNEY. Thanks for having me. I'll give you a broad-strokes overview of snow crab throughout Atlantic Canada, and then Mr. Hardy will follow suit with lobster.

Snow crab is a subarctic species. It's the colder species of the two that we're presenting here today. It's a bit of a fussy animal. It's typically found in temperatures ranging from about -1.5°C to about 4°C. That might correspond to depths of roughly 50 metres to 600 metres. It's a sexually dimorphic species, which means there are physically different attributes between the sexes. In this case, it means the males are the larger of the two sexes. It's a "male only" fishery where only the largest of males are retained. This is thought to be fairly safe in helping to safeguard the reproductive capacity of stock in the face of fisheries.

A central tenet of the biology of the species that's important to understand is that it undergoes a final, or terminal, molt. This need not occur just in the big animals; it can occur at small sizes as well, in particular the males who are of interest to the fishery. They terminally molt, or stop molting, at a carapace width that's somewhere between 40 millimetres and 160 millimetres.

This one genetic stock of animals spans four DFO regions. The stock extends from about central Labrador, in NAFO division 2H, all throughout Atlantic Canada down to kind of west of Halifax in southwest Nova Scotia, NAFO division 4X. Science tends to assess at broad spatial scales, but the management and quotas are allocated at much smaller scales, in crab management areas. With respect to removals of the species from Atlantic Canada, Atlantic Canada has been the biggest global supplier of snow crab for over two decades. The fishery really came on after the finfish collapses throughout the region in the early 1990s.

The southern Gulf of St. Lawrence, in NAFO division 4T, has the longest history of substantial fisheries. That's shown in the blue part; in the green part is the Grand Bank NAFO division 3NLO, which is off the southeast shores of Newfoundland. These are the two areas of primary consequence for removals. The stock removals have been something in the range of 80,000 tonnes to 100,000 tonnes for about two decades, with a pretty good bite out of that in 2018. Most of that was on the back of Newfoundland and Labrador and the Grand Bank. Looking forward to 2019, we're not expecting any major deviance from the 2018 situation in terms of removals.

We have a pretty robust monitoring and research program in all four regions. Looking at the bottom-right panel of the graph, we use what's called fishery-independent data to formulate biomass, essentially. These are sources of data that have nothing to do with the fisheries. We typically use surveys, either trawl or trap surveys. There are other sources of data, which are fishery-dependent. Those would be commercial logbooks—time and space, at-sea observer sampling, and those sorts of things. A big point we'd like to make is that much of the monitoring of snow crab in all regions is carried out in collaboration with industry. This includes fishery-dependent data, as well as such things as collaborative surveys with our industry and other stakeholders.

This graph looks at the exploitable biomass—the portion that I spoke of earlier, the big males in the population that we are able to fish on. Newfoundland and Labrador has been at its lowest level of biomass for the past four years. The terminal point on the graph is what the fishery has to look forward to in the forthcoming season. The southern Gulf of St. Lawrence is a bit of an opposite story. Their stock is fairly high in that region. The Maritimes and Quebec are the lesser two regions in terms of the importance of removals. Their stock is somewhere near its lowest observed level. So Newfoundland and Labrador is at its lowest observed level, the other two near it, and the southern gulf a little more promising at present.

I'll pass it over to Mr. Hardy to talk about lobster.

**Mr. Matthew Hardy (Manager, Fisheries and Ecosystem Sciences Division, Gulf Region, Department of Fisheries and Oceans):** I'm going to keep essentially the same format as Dr. Mullowney. I'll give just a brief overview of lobster and compare and contrast what we've just heard with respect to snow crab.

Different from snow crab, lobster is a temperate species. Its preference is for warmer and shallower waters, with the exception of the Scotian Shelf. In this fishery, we exploit both males and females, usually using a set minimum carapace size. The legal carapace size is really important to ensuring that reproductive females and reproductive males are able to reach maturity and keep productivity high for this species. Unlike snow crab, lobster will continue to grow well past the fishing period. Large lobster will continue to grow and continue to produce. A large female lobster can produce many thousands of eggs, compared to a younger, smaller female lobster. It's important we conserve these.

As with snow crab, the fishing areas are not really defined by biology. What's very different from snow crab is that it's much more of an effort-controlled fishery. With the exception of LFA 41, these are all effort-controlled fisheries. Effort-controlled fishery means that we're looking at trap limits and limited access, and the season is well defined. There are trap configuration aspects that limit the size of lobster that will be retained, ensuring that a portion of lobster are left in the water to continue their reproduction.

With respect to lobster, we're seeing a very clear trend across Atlantic Canada with increasing lobster landings. In the last 30 years, we've seen an approximate doubling of the lobster landings in Atlantic Canada. Clearly, it's a highly valuable species. There is no indication that this broad trend in landings is going to change in the near future.

In terms of the colour, the brown colour is MAR or Maritimes region, and red is Gulf, which is the southern Gulf of Saint Lawrence. These are the two largest fishing areas for lobster, followed by Quebec and Newfoundland, in orange and blue respectively.

As with snow crab, we use a variety of different data sources from fishery-independent surveys and studies in some places. In terms of what goes into our assessment, there's a heavier reliance in the lobster fishery on fishery-dependent data, like logbooks, trap indices and landing reports. Because the lobster fishery is an effort-based fishery, rather than a quota-based fishery, we're looking largely at the trends of the fishery over time and how the fishery is performing in the various regions. This varies a lot between different regions, and the methodologies vary, but the idea is to get at the trend of how the population is doing in these respective areas. In each of the regions that I mentioned before, we have teams of scientists working on lobster, collecting information and providing science advice on these stocks.

I would also add that, with respect to ongoing science in terms of what we're trying to accomplish with lobster, there is an emphasis on understanding what recruitment indices are like in different areas and understanding the young lobsters that are coming into the fishery that are not caught in commercial lobster traps. We do scuba surveys and use bio-collectors. We have different types of mechanisms through which we collect that information. As with snow crab, a lot of that information is collected in collaboration with our fishing industry partners.

With respect to the trends in each of the regions, you can see a little more variability with respect to Newfoundland and Labrador, but in all regions we see a broad tendency for an increase in landings and we see that the stocks are doing well. The recruitment indices that we have also support the landing trends that we see in the commercial fishery.

• (1620)

I think that's it in terms of our presentation. We're open to questions.

**The Chair:** Okay. We'll get to our questioning very shortly.

Before we get to the questioning, I would like to welcome Mr. Dean Allison, the member for Niagara West, who is representing the Conservative side today as an additional replacement, I guess, for lack of a better word.

Welcome to the committee, sir.

• (1625)

**Mr. Dean Allison (Niagara West, CPC):** Thank you.

**The Chair:** We'll start with seven minutes on the government side for Mr. Fraser.

**Mr. Colin Fraser (West Nova, Lib.):** Thanks very much, Mr. Chair.

Thank you for being here today, everybody. I appreciate your presentations. I think this is a very important study that we're undertaking, and it's timely, given the information that we're learning from the industry about the migration of shellfish, including lobster and snow crab.

Being the member of Parliament for West Nova, I have the pleasure of representing both the LFA 34 and LFA 35 lobster fishing areas, which are extremely important to the overall fishery of our country. It's a billion-dollar-a-year industry and more, so ensuring we understand what's going on with the migration patterns of lobsters and the health of the stock is extremely important to the people I represent and to the overall economy of Atlantic Canada.

When you look at the spinoffs that happen as a result of the fishery—and the lobster fishery in particular in my area, which has done so well over the last number of years—you see how it impacts communities. The number of people employed in the industry, and how well they're doing, is directly related not only to the catch but also to the expanding world trade markets for our seafood, given its top quality.

I really want to focus on the long-term sustainability of the resource itself. When we talk about data collection and the science, I want to be assured that we're doing enough to understand what's actually going on with the migration pattern of lobsters. I know that we've seen the number of lobsters being caught in my area grow quite a bit over the last 10, 15 or 20 years. The data bears that out.

I'm wondering, Mr. Hardy, if you can explain your thoughts on those increases, and if they're related to the migration patterns northward of lobster stocks because of changing water temperatures.

**Mr. Matthew Hardy:** I interpret your question in the context of climate change or ongoing changes in population distribution.

**Mr. Colin Fraser:** Yes.

**Mr. Matthew Hardy:** That's a really important question, and it's something the department takes very seriously. I'll just mention quickly that we have an extensive program on understanding climate change and the different ocean parameters that are changing over time.

With respect to our work specifically on lobster, we are monitoring the adult population, largely through the fishery, but one of the key aspects we're interested in is monitoring recruitment: those younger lobsters that are not seen in commercial traps. We have experience and we collaborate with our American counterparts, who have seen some decline in certain areas in the southern part of the range of lobster.

What we saw there, over periods of time, was that the fishing landings maintained themselves during a period when recruitment was going down in terms of young lobster. We hope to have a complete understanding of the population by monitoring both adult and recruitment indices to have a sense of early detection if we start to see populations changing and whatnot.

Broadly speaking, the outlook is still very positive for lobster in Atlantic Canada. The habitats we have are very favourable to lobster, and we may see some expansion of the range of lobster in many parts of Atlantic Canada.

**Mr. Colin Fraser:** What scientific research and data collection measures have been implemented over the last few years to ensure we understand what's going on with the patterns of lobster movements?

**Mr. Matthew Hardy:** We have extensive programs in each of the four regions, using fisheries data and independent data as well. I can point to one example. I can speak to my region, the gulf region. We have scuba-diving indices where we have been following up on various sites over the past decades. There's one site in particular that we began monitoring in 2003 or 2004, I believe, in northern New Brunswick, in Caraquet.

Initially, in going through those transects, we send a diver down and they swim along the bottom, counting and measuring lobster covering a 100-metre transect. The first time we did that, in 2003, I believe, we saw about three lobsters. In 2018, we saw 276 lobsters over that same surface area at that same site. That's an example of the type of research that provides a sense of what's going on in terms of recruitment, in addition to the commercial aspects of the fishery.

• (1630)

**Mr. Colin Fraser:** Obviously, working with industry is important. There are rules around collecting data from logbooks, data entry and that sort of thing.

**Mr. Matthew Hardy:** Absolutely.

**Mr. Colin Fraser:** Is there anything more that's being explored with regard to working with industry to ensure that they are partners in understanding what's going on with the lobster stock?

**Mr. Matthew Hardy:** Yes.

Again, I'll give an example from my region, the gulf region, but there are other examples in different areas. We have an ongoing project with Prince Edward Island Fishermen's Association, with the Province of P.E.I. and with the Gulf Nova Scotia Bonafide Fishermen's Association, where we deploy bio-collectors. These are essentially large boxes that various species land on—lobster juveniles, rock crab juveniles, various other species—and we can measure those changes over time. That kind of project would be impossible without the collaboration of industry.

**Mr. Colin Fraser:** I know that the Atlantic fisheries fund has been useful in funding organizations from industry that are working collaboratively to come up with scientific research and data collection. I know of groups in my area that have been successful in receiving some of that funding.

Do you anticipate the information they're able to gather to be helpful to the department's understanding of what's going on with the lobster stock?

**Mr. Matthew Hardy:** Yes, absolutely. Both lobster and snow crab projects that are being developed under the Atlantic fisheries fund are of scientific interest. Our staff are involved in many of these projects in terms of providing science advice, and those projects will be absolutely useful.

**Mr. Colin Fraser:** I noticed the graph in your presentation, "Atlantic Canada Lobster Stock Status"; I think it's the second-to-last page. With regard to the Maritimes region, how come LFA 34 and LFA 35, which are of some interest to me in particular, are not there? Is there a different area where those are captured?

**Mr. Matthew Hardy:** I apologize. I believe that the legend was cut off when we resized these graphics. The information is represented in the graphic, but the label is missing.

**Mr. Colin Fraser:** Okay. I assume the purple one is probably LFA 34, since that is the largest lobster fishing area.

**Mr. Matthew Hardy:** Yes. We can provide you with a proper graphic.

**Mr. Colin Fraser:** That would be great. Thanks a lot.

**The Chair:** Thank you, Mr. Fraser. Your time is up.

We will now go to the Conservative side.

Mr. Arnold, you have seven minutes or less, please.

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

Thank you all for being here today.

One of you mentioned—Mr. Mullowney, I believe that was you—that you have a very robust assessment process. Can you describe how it is robust? I'm looking at increasing stocks. From what we're seeing here, it looks like a very strong fishery.

With regard to the west coast fishery, we continually hear how the stock assessments are lacking. They are insufficient. The data isn't there. It's slow coming in.

What is different with this type of assessment that you claim is so robust? Can you indicate what the difference might be between these assessments and the west coast assessments?

**Mr. Darrell Mullowney:** I can try. I can't speak to specifics about the west coast situation. I assume it's mostly salmonid species that you're speaking to.

The crab is a big offshore stock that is probably, in many respects, easier to assess than rivers where salmonids may occur. We have, in crab in particular, several suites of surveys that are designed to monitor the stock.

We have what are called multi-species trawl surveys that are done in each NAFO division each year. Some regions get them twice a year. We have trap surveys done with industry, which cover our whole area as well. Along with that, we have, as I mentioned, a pretty in-depth suite of fishery-dependent data, observer coverage on commercial vessels as they go offshore, along with logbooks.

The consultation process is robust, in that it's inclusive and fairly open. Our stock assessments are attended by industry and academia, indigenous groups, etc., in a peer-reviewed fashion with a scientific panel. We seek consensus views on the status of the stock, and following that, consultations are fairly broad too, at least in my region. We go out to the communities and then spread the messages.

With respect to the salmonids, I would suspect it's harder to get such a robust monitoring program in place in a river-by-river type of system.

• (1635)

**Mr. Mel Arnold:** Thank you.

I've noted that snow crab and lobster are basically effort-limited in their catch and what's brought in. What is being done to manage the effort? Is that something that is simply a fact of weather, conditions and economic situations? If you're simply relying on effort to manage the amount of the species that is harvested, what other measures do you have in place to adjust that, should there be a need?

**Mr. Matthew Hardy:** I'll start with lobster. With respect to managing the effort, over time effort is stable where we have a limited number of fishermen and a limited number of traps that are allocated. We have seasonal controls. We have trap designs to limit the amount of effort that is exerted on the population. The idea there is that you want to have a good fishing period, allow for the fishing activity to take place, but ensure that you're not having an excessively high removal and that you're leaving stock in the water to continue to reproduce—

**Mr. Mel Arnold:** If I could interject here, we've seen in our tours of the east coast an incredible increase in the size of the vessels, indicating to me an incredible increase in effort. What is the department doing to monitor that increased effort and be prepared should it reach a breaking point?

**Mr. Matthew Hardy:** Go ahead.

**Mr. David Whorley (Director, Resource Management Operations, Department of Fisheries and Oceans):** I'm happy to try to speak to that.

Certainly, you're right. We've seen increased sizes in vessels, and it does create real congestion problems in some harbours. In some of the places where we used to be able to berth three vessels, we're berthing two. I know the small craft harbours are trying to work with harbour authorities to work that out.

It's true that vessels have gotten larger, but they're still within the traditional sizes, though certainly they've gotten broader with these larger beams. The input controls remain the same. You still have the same limitations on the number of traps, the trap designs and everything else. It's true that the vessels are probably more robust and can probably stay out at sea a lot longer, but you still have the basic input controls. I think where you see the most challenges there is around the berthing and the maintenance of the harbours around the larger vessels.

**Mr. Mel Arnold:** What is being done to allow for new entrance into the fishery, either snow crab or lobster fisheries? Is it simply an upsizing of current capacity or basically passing current licences on to family members or others who are willing to purchase? Is there a new entrant program for either the lobster or the snow crab fishery?

**Mr. David Whorley:** Effort-based fisheries have limited entry. They set a limit on the number of licences. Licences can be transferred or sold, but in terms of expanding that, there's no real work under way to substantially increase the number of entrants into the program.

**Mr. Mel Arnold:** So it's basically by expansion of what's there right now. You mentioned you didn't see too much of a problem, other than with the berthing, but we've seen vessels out there that are as wide as the former vessels were long.

**Mr. David Whorley:** Yes.

**Mr. Mel Arnold:** They were basically floating platforms capable of carrying exponentially more traps than they were originally able to. If that continues to expand, is there a tipping point you're going to reach?

**Mr. David Whorley:** It's true that the vessels have gotten larger. Some of the beams on those boats are pretty big. However, the control function.... It's true that they can carry more traps, but given the limited entry by the number of licences and the limitations on the number of traps.... It's true that you could load more traps onto a boat, but you'd have to enter into partnership arrangements to do that. You still have the basic input controls that have been described. You have larger vessels fishing more traps, but they would have to be in partnership with existing licences.

• (1640)

**The Chair:** I'm sorry. Your time is up.

We'll now go to the NDP.

Mr. Johns, you have seven minutes, please.

**Mr. Gord Johns (Courtenay—Alberni, NDP):** Thank you, all, for your testimony today and for being here.

I'm just wondering if we could talk about local knowledge and how you incorporate that into establishing the total allowable catch. Maybe we can start with the snow crab and move toward the lobster. How are you consulting with indigenous communities? Obviously, that's quite a big area, so it's going to be quite a range, from northern Labrador all the way down to southern Newfoundland.

Also, could you talk about the Fish, Food and Allied Workers Union and how you're working with them? Maybe you can speak a little bit about that in regard to consultation.

**Mr. Darrell Mullooney:** In the Newfoundland and Labrador region, we collaborate predominantly with industry. There is indigenous collaboration, but that's probably more relevant to the lobster. I may ask Mr. Hardy to speak to that.

One major thing that we do in collaboration with FFAW is a trap survey that spans the whole area of Newfoundland and Labrador. It's a massive survey of some 1,200 to 1,250 stations, and it's done every year. We work collaboratively, in that the science branch of DFO will design the survey and give the instructions on how it is to be carried out, but it's actually carried out by fishermen on fishing boats on the water, and the data is collectively owned by both sides. It's a really good example of a collaborative initiative.

As well, at our stock assessments, they provide a suite of fishermen who will attend and provide their input and knowledge into the graphics they're seeing and maybe some discrepancies or their own interpretations of things. We do strive to arrive at a consensus on the final take on the resource in any given year, so it's quite inclusive with them.

Do you have any examples on lobster?

**Mr. Matthew Hardy:** You've covered it fairly well. The only thing I would say is that across the board, throughout our different scientific assessment processes, we have both fishing industry members and indigenous members, as well as different environmental groups that participate in those advisory processes. They are able to ask questions and share their experiences and their views with respect to how they think the stock is doing, things that they have observed on the water and all that information. Particularly, when there is specific information that can be shared, it can be incorporated into our assessment processes and also our fisheries management processes.

**Mr. Gord Johns:** In terms of the indigenous fishery, is it a rights-based fishery that is determined through a set quota breakdown, or has it been established through the courts or treaty? I'm sure each nation along the coast is quite different.

**Mr. David Whorley:** The rights-based fishery is the food, social and ceremonial fishery. It varies with different indigenous communities and it's negotiated through the indigenous fisheries leads in the regions, typically. It depends on actual need for individual communities. It sets limits or as-needed requirements for different species for those kinds of uses—food, social and ceremonial, or FSC. That comes out of the Sparrow decision. The individual agreements don't set out the right for it because the rights existed prior to European contact, but they are negotiated with fisheries management in the regions. They tend to be fairly small, artisanal-level fisheries.

**Mr. Gord Johns:** Is there a lot of contention right now in the region in terms of unresolved issues related to the commercial side of the fishery?

**Mr. David Whorley:** FSC isn't commercial, of course. Coming out of the Marshall decision, there are commercial communal licences for first nations communities. Those are subject to rules that are pretty much analogous to those in the commercial fishery. There are two different lines along indigenous fisheries, one rights-based and one that is more like a commercial licence, though it's held by the community.

We had seen conflict some years ago surrounding poaching and illegal purchasing and sale around FSC, but I'd say that for the most part harvesters are like any other kind of harvester; they just want to go out and go fishing.

• (1645)

**Mr. Gord Johns:** In terms of the assessments, how often are stock assessments conducted? I'll start with the snow crab and stay on that for a minute.

**Mr. Darrell Mullowney:** In all four regions, they are conducted annually. In the general seasonal cycle, the assessment would be in February. Then consultations would occur in February and March, and the fishery would generally get going in April. That's generally true across all four regions.

**Mr. Matthew Hardy:** For lobster, I would say it's a very similar process. Either we're producing a full stock assessment or we're producing an abundance indicator update, so that each year we're communicating out the results of our assessments and any changes to the population.

**Mr. Gord Johns:** In terms of the lobster industry, what programs is DFO planning or implementing to help diversify the fishery? Can you speak to that at all?

**Mr. David Whorley:** I think the AFF, which been mentioned, has been a real source for industry to come in this year, and it has enjoyed a good uptake.

With respect to diversification of the lobster industry in particular, I'm not sure, off the top of my head, that there's a particular program for it, given that the stock has been in good shape and the harvest has been good. I think the AFF is probably the flagship piece for innovation around fisheries.

**Mr. Gord Johns:** How are you balancing the high demand for snow crab in the Asian market with conservation measures to protect the stock?

**Mr. David Whorley:** I think the high demand is something that harvesters enjoy, and it's a nice problem to have.

Basically, the controls are at the level of the allocation of quotas, which plays out within supply and demand globally, with fixed quotas or fixed deliveries. I think we've seen good prices for lobster and snow crab, internationally. I think it plays out naturally—with increasing demand come higher year-by-year prices. As I said, that's not a bad problem to have.

**The Chair:** Thank you, Mr. Johns.

Now we'll go back to the government side. Mr. Morrissey, you have seven minutes.

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

Mr. Hardy, my first question is for you. It's a follow-up on an answer you gave. You indicated that large female lobsters are more

productive than smaller lobsters for egg count and generating stock. Would you agree that it would be counterproductive to backtrack on measures where the industry has determined they would leave more large females in the water? That would be supportive of growing the industry, would it not?

**Mr. Matthew Hardy:** Yes. My sense, my interpretation, is that the changes in carapace size lead to larger lobsters that are able to produce within the gulf region, P.E.I. in particular. Raising the minimum legal size allows for those lobsters to reproduce.

**Mr. Robert Morrissey:** Beyond that, there was a step made of leaving really large female lobsters in the water. Are they still productive at that stage?

**Mr. Matthew Hardy:** Yes. Just off the top of my head, I think a canner-size lobster can produce in the order of 8,000 eggs, whereas a jumbo-size female can produce in the order of 40,000 eggs.

**Mr. Robert Morrissey:** Are those still productive?

**Mr. Matthew Hardy:** They're still productive. They can continue to produce. After that period, when they're out of the fishery and they're too big to be caught in a trap, they can continue to produce for decades.

**Mr. Robert Morrissey:** They should be left in the water.

**Mr. Matthew Hardy:** Yes, I would encourage that.

**Mr. Robert Morrissey:** Turning to my colleague's question on migration patterns in general, when the larvae settle on the bottom and they become mature lobsters, what science do you have to show the mobility of those lobsters? Often fishermen will argue. For instance, they will leave area 25 and decide to go on a journey and end up maybe in 24, 23 or 22. What evidence do you have on the pattern of a lobster when it matures on the bottom?

**Mr. Matthew Hardy:** I'm just going by memory. There isn't a large migratory movement of lobster that we're aware of. There's a seasonal migration into deeper waters and then into shallower waters. There have been some tagging studies using different types of tags to try to assess how far the lobsters move. It has been very similar for crab; there have been different types of tagging studies to assess broader movement. I believe we're into the tens of kilometres and not hundreds of kilometres.

• (1650)

**Mr. Robert Morrissey:** That's what I understand.

Can you submit to the committee any information or empirical data that you have on that? For instance, if a lobster was on the bottom of 26B off Cape Breton, it's not going to suddenly move on a journey to 24 in the Gulf of St. Lawrence?

**Mr. Matthew Hardy:** That's right.

**Mr. Robert Morrissey:** Is there science to back that up?

**Mr. Matthew Hardy:** I've seen no evidence that would support that statement, to expect that the lobster will move long distances like that.

**Mr. Robert Morrissey:** So, in an area where it has a different carapace size, there's no science to back up the theory that those lobsters move into another area where they can be fished.



**Mr. Matthew Hardy:** No, not that I'm aware of. I'm aware of some local movement and moving around, but not any broad patterns like that.

**Mr. Robert Morrissey:** Could you provide to the committee what you define as local movement?

**Mr. Matthew Hardy:** I can dig up the articles that refer to that.

**Mr. Robert Morrissey:** That would be extremely helpful.

**Mr. Matthew Hardy:** Much of this is in published science.

**Mr. Robert Morrissey:** That's what I assumed you would have. I agree with the science, the value of the large female lobster in protecting this valuable resource on the east coast and growing it. There was a move by some fishermen in the area to undo the measure of returning the large females to the water, which I totally oppose. The evidence you're giving supports leaving them there.

I'd like anything that you, Mr. Hardy, or the department would have on normal lobster movement, because it's not like a pelagic species that swims all over the place. My understanding is that, when the juvenile settles to the bottom, it will stay within a particular area. Anything you would have on that would be appreciated.

I don't know if you could speak to this, but there is an item that concerns me. If the carapace is too large, what impact might that have on our processing industry, which supports a lot of coastal communities, and what would be the impact of sending a similar product into a market, moving a very large lobster into a live market? The market in Nova Scotia is primarily a live market. If all the gulf region or Atlantic Canada moved into that particular category, I suspect it would have an impact on the market.

If the department has any information on that issue, I would like you to submit it to the committee, or you may speak on it. We send a lot of lobster to the marketplace. I do agree with raising the carapace size to grow the stock. In fact, all the data will prove that it is the way to go, but my issue would be with the glass ceiling that we may hit that would disrupt the equilibrium between the processing side and the live side.

Who can speak to that?

**Mr. David Whorley:** I'm prepared to speculate irresponsibly on that.

Thinking of the whole lobster market, I think the target size that harvesters generally aim for is somewhere around two pounds. That's a plate lobster.

**Mr. Robert Morrissey:** You're referring to the fresh market.

**Mr. David Whorley:** Yes. I think the demand for that has been extremely high, so I don't know that there's necessarily much risk in that. They just enjoy great international markets. Having said that, there is a range of other products, such as canning and the Popsicle packs, but I think you get the variation that comes out with each trap haul. You get a mix within each pull that's going to have those ideal plate-sized lobsters, but you'll have other ones that are valuable that you would target for these other processes. I'm not aware that there's a risk at this point along those various processing and product chains.

**The Chair:** I'm sorry, Mr. Morrissey. You're right at your time limit.

Now we'll go to the Conservative side, with Mr. Calkins for five minutes or less, please.

**Mr. Blaine Calkins (Red Deer—Lacombe, CPC):** My goodness, Mr. Chair, thank you so much.

Thank you very much to the officials who are here. I'm from Alberta, so I have all kinds of coastal experience. I do enjoy the fisheries. I spend a lot of time on the west coast. My experience with the east coast is that recreational fishing isn't nearly as pervasive as it is on the west coast. Do people go out and recreationally put in lobster or crab traps?

• (1655)

**Mr. David Whorley:** No.

**Mr. Blaine Calkins:** Is it that it doesn't happen at all, or that it doesn't happen...?

**Mr. Pat Finnigan (Miramichi—Grand Lake, Lib.):** It's not legal.

**Mr. David Whorley:** There is no recreational lobster fishery. I think that's probably the best way to say that.

**Mr. Blaine Calkins:** Understood.

Can you tell me a little bit about whether the department has any information on the changes, if there are any, of the ocean currents and what effect that has on larval drift?

**Mr. Darrell Mullooney:** Yes. I'll speak from my own experience and knowledge. There have been studies on things like particle drift. You have a simulation where you put some particles in the ocean off Labrador and see where they end up. There have been recruitment studies for various fish species, and what they generally show is the pattern of the Labrador current, where things tend to go from north to south. Something that starts off Labrador could end up on what's called the tail of the bank, for example. There are simulation studies on it.

Our oceanographic surveys monitor the strength of the current and the transport flow of the current in any given year. Those sorts of things are monitored and changes are reported, but I'm not an expert on the exact changes that are occurring.

**Mr. Blaine Calkins:** That's fair enough. You said that it's north to south. Is that right?

**Mr. Darrell Mullooney:** Generally, the dominant Labrador current goes from the north toward the south.

**Mr. Blaine Calkins:** Do I understand correctly that the range of crab is actually expanding north?

**Mr. Darrell Mullooney:** No, I wouldn't conclude that the range of the snow crab is expanding north. The snow crab is more dominant on the eastern part of this map—in Newfoundland and Labrador. That's the biggest part of the range.

**Mr. Blaine Calkins:** Is the lobster showing any signs of greater numbers moving north?

**Mr. Matthew Hardy:** We do see the potential for an expansion of lobster habitat, not so much with currents, but with bottom temperature, as the bottom temperatures are more favourable to lobster.

**Mr. Blaine Calkins:** If the ocean currents are moving generally north to south, that would require a migratory movement of the animals as adults, would it not?

**Mr. Matthew Hardy:** I think the currents that Darrell is referring to are the predominant ocean flow, which is different from the actual overall temperature regime and thermal habitat that's available to these animals.

**Mr. Darrell Mullooney:** I'm sorry. We should clarify that the Labrador current is most applicable to the Newfoundland and Labrador region. The Gulf Stream current is fairly applicable to the Gulf of St. Lawrence region. It kind of takes a sharp left turn between Newfoundland and Nova Scotia and branches into the Gulf of St. Lawrence.

**Mr. Blaine Calkins:** Very good.

I know that this year we had a relatively successful year with the North Atlantic right whale not getting tangled up in anything, and I don't think any whales were lost. I know that in the previous years there had been some issues. We heard from fishermen here at the committee about the department's approach to closing down whole zones when a small area around the whales might actually suffice, as far as whale safety is concerned. What's the department doing in exploring those issues?

**Mr. David Whorley:** I'm happy to speak to that. There were changes recently in what we call the static and dynamic closure regime, which I think folks are aware of, that went into place last year. We were very fortunate there. There were no mortalities, as far as we know.

There have been some changes this year. I think with reductions in the size of the static closures—the permanent closures have been reduced—they would still cover something like 90% of where the sightings were last year. As well, there's been some flexibility on very near-shore closures. Last year, closures ran right up to the shoreline. The view is that North Atlantic right whales in very shallow water are typically rare, and so that closed area moved off the shore. The view is that this would remain open, unless an actual whale showed up and then you would probably extend into shallow water. There's a little bit of flexibility compared to last year.

Certainly, all this gets to important concerns about preserving access to international markets, and stemming from concerns about marine mammal interaction.

• (1700)

**Mr. Blaine Calkins:** Especially in an effort-based fishery, where the presence of a whale might close the fishery in an entire zone for a while....

The last question I have—

**The Chair:** Thank you, Mr. Calkins. You're actually a minute over.

**Mr. Blaine Calkins:** That's simply not true.

**The Chair:** Yes, you're actually over by 47 seconds. Five minutes don't be long going.

That concludes this portion of our committee meeting. I want to thank our witnesses for appearing today.

Do you want to extend beyond 5:30? Is that the wish of the committee?

**Mr. Blaine Calkins:** I haven't had this much fun in a long time, Mr. Chair.

**The Chair:** That's not what I'm asking.

**Mr. Blaine Calkins:** I'm willing to stay.

**The Chair:** I'm asking if it's the will of the committee to extend beyond 5:30.

**Some hon. members:** Agreed.

**The Chair:** Okay. We'll go back to the Liberal side, for five minutes or less.

Mr. Rogers.

**Mr. Churence Rogers (Bonavista—Burin—Trinity, Lib.):** Thank you, Mr. Chair.

Thank you, guests, for being here.

I just want to focus a little bit on the very comprehensive science program that you have in terms of assessing stocks, as you've outlined in your slides. It looks like a very comprehensive approach and methodology.

Mr. Mullooney, in terms of snow crab, I know you've done a lot of work in the Newfoundland and Labrador region. I hear from residents, fishers and harvesters in my riding that there's a conflict between what they perceive as the state of the stock versus what science is portraying as the state of the stock. For instance, I met with a large group of fisher-people last week, who said that in the Bonavista Bay region there was a 50% increase last year in CPUE ratios or rates in their harvesting period, and they had no issue with being able to meet their quota and catch the resources they were allocated.

What I'm trying to figure out is why there is such a conflict between what harvesters believe the state of the stock is versus what science is telling us.

**Mr. Darrell Mullooney:** That's a really good question. I hear that quite frequently too.

There are a couple of points that need to be made. These 50% increases are basically coming from, to generalize, historic lows. They are increases to the second- or third-lowest level that has been seen, that type of idea. These are increases of small numbers, which in absolute terms are not big increases in catch rates.

Another point to make is about the timing of when things happen. The fishery happens at this point in time; a survey happens post-season, and that's the leading information that typically goes into the stock assessment. What we find is that the survey that happens post-season predicts the forthcoming fishery accurately. The fishery that has just happened doesn't really predict the biomass index. There's a lag of the next one coming. We find that our biomass index is quite accurate, pretty much right across the board, at predicting the forthcoming fishery, not so much looking at the hindsight of the one that just happened.

I reiterate that these increases that are being talked about, in these regions in particular, are at very small levels of catch rates, and they are fully consistent with the biomass signals of the low stock.

**Mr. Churence Rogers:** I keep hearing from harvesters who have been on the water for decades that the state of their stock last year was much better than the previous year. What are some of the factors that lead to the results you're getting? What are some of the factors that might be leading to the decline in the biomass?

**Mr. Darrell Muldowney:** There has been a long decline in the stock as a whole. Up until a few years ago, the leading information was suggesting that it was a climate-driven process, that warming from about the mid-1990s to the 2000s was dampening the stock productivity. On the stock level as a whole, that was under a regime of light exploitation by the fishery and low top-down control by finfish predation.

Since then, the newest decline you see in the stock reflects that productivity from the climate has actually improved. The waters on the bottom have gotten colder in Newfoundland and Labrador. The productivity potential has actually increased, but the fishery has taken more control. The exploitation rates have increased.

• (1705)

**Mr. Churence Rogers:** Can I ask one more short question? I know time is short.

What credence do people such as yourself, Darrell, and others in the science community give to the advice they receive from harvesters?

**Mr. Darrell Muldowney:** On the consultations, the way it goes is that essentially we will give the science update. That's my role as a scientist. The manager asks for the input of the harvesters, what their perspective is. Then it's their job to take the two pieces of information and make management decisions thereafter.

**Mr. Churence Rogers:** Am I done?

**The Chair:** You have 30 seconds.

You'll be done if you sit still like that.

**Mr. Churence Rogers:** I just want to ask about environmental factors.

Are warming oceans having some impact on stocks?

**Mr. Darrell Muldowney:** On the broad scale, yes, but the Newfoundland and Labrador region is a bit backwards in the broad scale of Atlantic Canada. As I said, the bottom conditions have actually cooled since 2012 and the productivity potential has actually increased for the stock.

**The Chair:** Thank you, Mr. Rogers.

We'll go back to Mr. Calkins, for five minutes or less, please.

**Mr. Blaine Calkins:** If I have any unused time, I'll share it with one of my colleagues, probably Mr. Arnold.

I want to talk a little about the market exposure to China. The information package I have from the Library of Parliament suggests that the Atlantic fishery is exposed to the point of somewhere between 20% and 30% on its products.

Does the department have any information on the current percentage of the market? Can you give us specific details on the exposure of the snow crab and lobster fisheries to the Chinese marketplace?

**Mr. David Whorley:** I'd only be speculating. We'll have to undertake to follow up from our trade office on that.

Certainly the largest market for us is still the United States. However, you're absolutely right; we've seen very strong growth in the Chinese market. We've seen some growth in the European market as well. We'd have to undertake to get back to you with details on that.

**Mr. Blaine Calkins:** That would be great.

By any chance, do you know of any recipes where crab or lobster are cooked in canola oil?

All kidding aside, I want to ask you a question that is a bit about genetics. Given the fact that the snow crab actually does maximize out on its size, and of course that's the size at which it's harvested, my assumption would be that the genetics of the population wouldn't be affected by harvest size restriction decisions. Could the same be said for lobster?

**Mr. Darrell Muldowney:** The truthful answer is that this is an unknown outcome. Both of these animals have a pretty simple genome. They're not terribly complex in the genetics world. The effect of subtle changes would be very hard to detect, probably.

**Mr. Blaine Calkins:** Based on the fact that the traps themselves prevent larger animals from getting into the trap or the pot, there would be sufficient genetics of lobsters that can grow to a larger size. Would that be a fair assumption?

**Mr. Matthew Hardy:** Yes, that would apply for lobsters, where only a portion of the population is actually harvested. Many of the animals actually make it to a greater size than the size that will enter a trap. As Darrell points out, I'm not aware of any information that would suggest—

**Mr. Blaine Calkins:** How many big lobsters are there? You see it reported once in a while where somebody's holding up a picture of a lobster the size of a small blue tuna. How frequent are those?

**Mr. Matthew Hardy:** I couldn't guess at how frequent they are, but there are certainly a lot of them, I would expect.

**Mr. Darrell Muldowney:** For the crab, there aren't that many. It's an Arctic type of species, and there are more small animals than big animals.

**Mr. Blaine Calkins:** Yes, that would be my expectation.

Mel, go ahead.

**Mr. Mel Arnold:** Thank you.

My question will be fairly short, but the answer could be longer or rather hard to find.

The study is on the migration of crab and lobster. How much they migrate is debatable, whether it's migration or a movement in their preferred habitat that they are following. We're looking at the migration of the species. How is that being looked at in how that might relate to a migration of the fishers and the communities they support? Has the department considered any of that? If the species move, the fishers may have to move as well to follow them.

• (1710)

**Mr. David Whorley:** I'm not sure there's any specific work on potential labour market migration that would be driven by movement of stock. You'd start to speculate on that, but I have to say I'm not aware of work that's going on specifically around that kind of labour market movement question.

**Mr. Mel Arnold:** How many miles do you think the typical habitat has moved? Has it just expanded, or left for another area?

**Mr. David Whorley:** I think that might be a question for science.

**Mr. Darrell Mullowney:** The snow crab distribution really has not changed. In fact, if anything, it's probably going slightly south. The northern tip is off Labrador on something called the Makkovik Bank, along 2H and 2J. The fishery has not migrated north. In fact, it has migrated south. The 2H fishery has come down to be predominantly in what's called 2J now. As the stock has shrunk in this area, it's contracted back to the heart of its range, which is south. The biggest part of the stock is in 3LNO, on the Grand Banks, so the biggest biomass is in the south, along with 4T.

As someone who studies this, I wouldn't conclude in any way that the snow crab is moving north.

**The Chair:** Mr. Arnold, you've gone over your time.

We'll now go back to the government side.

Mr. Finnigan, you have five minutes or less, please.

**Mr. Pat Finnigan:** Thank you, Mr. Chair.

Welcome to all of you.

Your graphs were showing a steady increase of the catches and the landing of lobster. In your opinion, among the warming of the waters or the climate, the larger carapace that we've imposed, the enhancement or seeding of lobster larvae and the refuge of artificial protection or reefs—I think we just had a project last fall—what would be the biggest reason why we're seeing this increase?

**Mr. Matthew Hardy:** I'm not sure if I'm able to answer your question properly and gauge the relative contribution of those different factors. Certainly, habitat has been favourable for lobster. We happen to be in the sweet spot for lobster in Atlantic Canada, and that's why it does so well.

I would say that the changes in carapace size must contribute significantly to the overall abundance that we've seen. Just for a relative comparison, in 1987, the minimum carapace size was 63.5 millimetres. That produced about 5% of females of age and ability to reproduce. At 72 millimetres, that produced 50% mature females. At 76 millimetres, that produced 75% mature females. At 80 millimetres, we're looking at nearly 100% of mature females that

are able to reach the fishery and contribute to the fishery and produce eggs.

**Mr. Pat Finnigan:** Thank you.

My other question would be this. As far as managing the resource is concerned, with the owner-operator system that we have on the east coast—and I know there's no lobster on the west coast—would you say that this system is easier because you have a more equal kind of fishing, rather than the quota system on the west coast? As far as management goes, would you say that the east coast system would be easier or harder? Do you have any opinion on that?

**Mr. David Whorley:** I think it's simply different. It's just the different economics of the fishery. I'm not sure that from a management point of view one is harder or easier than the other; they're just different characteristics. I think there's probably a certain amount of economic history there, too, around different kinds of attachment to the fishery.

**Mr. Pat Finnigan:** As far as managing goes, no new licences have been introduced in the system for some time. If we keep seeing that increase, is there a possibility that new licensees would come in, or would you just increase the amount of allowable catch or the number of season days? What would be the proper management in working with first nations, knowing that they are also a part of the whole?

• (1715)

**Mr. David Whorley:** Again, I would be speculating. That would be one of those challenges that would be nice to have—to be in that kind of a position. In terms of an effort-based fishery, there's no quota to increase; it's just that you'd probably have more productive individual fishing days. In terms of expanding it to new entrants, I don't know, at least at this point. I wouldn't close the door to it for the future, though.

**Mr. Pat Finnigan:** I remember that back in the day you could buy lobster almost anywhere that you knew had been caught outside the licence. I think the amount of poaching is a lot smaller. Would you say that this also had an influence on the abundance and that we have a better management of that?

**Mr. David Whorley:** Certainly, better enforcement to try to limit the black market exchange has had an effect. We don't have anyone from conservation and protection with us, but I would say there are certainly efforts around that.

**Mr. Pat Finnigan:** Would you say that your relationship with organizations such as MFU and others, and maybe also with first nations, has improved on that front? They're also looking after the resource.

**Mr. David Whorley:** You have a good point there. I think some of the best stewards of the fishery are the people who actually fish it. I think that's a very strong point. Between that and efforts around enforcement, I think the efforts to try to keep black market exchanges down are useful. Certainly having industry as a steward... People who actually have eyes on the water are a really valuable resource.

**The Chair:** Thank you, Mr. Finnigan.

We'll finish up with the NDP. We have Mr. Johns for three minutes or less, please.

**Mr. Gord Johns:** Obviously, down in areas 41, 38 and 37, you're out doing a lot with the Americans. Maybe you can talk a bit about shared research, shared assessments, and shared monitoring and enforcement. I would like to learn a bit about that.

I also wanted to learn about area 1 and the share of indigenous licence holders. Obviously it's Maine, and the north; it's a predominantly indigenous area. Is the share of licensing predominantly indigenous when it comes to the species that are being fished there?

**Mr. Matthew Hardy:** Do you want to deal with the indigenous...?

**Mr. David Whorley:** I'm not sure, off the top of my head, what the licence split-out was there. Maybe the quick thing to do here is to just follow up with the committee, and I can provide you with that.

**Mr. Gord Johns:** That would be great. It would be good to learn about that. Thanks.

Sorry, Mr. Hardy, I'll let you go back to the part about the U.S.

**Mr. Matthew Hardy:** You'll excuse me. I'm less familiar with the Maritimes region and all the different projects, but there are transboundary committees; there are a series of different collaborations that go on. We exchange information with our Newark counterparts on recruitment indices, landing indices. There are informal discussions and formal discussions through different committees and exchanges. Many of our scientists publish jointly with our American counterparts, so I would qualify the level of scientific exchange between the Canadian scientists and the American scientists as quite good.

**Mr. Gord Johns:** When we need to apply the precautionary approach in times when there are low stocks, how does that work? Are the Americans working collectively in that approach?

**Mr. Matthew Hardy:** I'm not familiar enough to know how that dovetails with our Canadian regimes. Perhaps David would speak to that.

**Mr. David Whorley:** Sure. We have a number of international agreements with the Americans on different fisheries to try to manage transboundary stocks. A large part of that, I think, is scientific co-operation around the state of the fishery, and then, essentially, negotiations with the U.S. There are a number of different instruments for that. I think that, by and large, that goes fairly well for us.

**Mr. Gord Johns:** Thanks so much.

**The Chair:** Thank you, Mr. Johns.

Mr. Calkins.

**Mr. Blaine Calkins:** Just quickly, Mr. Chair, I did specifically ask a question about market exposure in China. I would like to request, if possible, that the department get back to the committee with any information it has on that. I would much appreciate it.

Thank you, Mr. Chair.

**The Chair:** Thank you for that.

That concludes this portion of our committee meeting. We'll say thank you, again, to our witnesses for the time and knowledge they gave to the committee on this particular study.

We'll suspend now for two minutes so that we can change out and get ready to go with version two, the west coast fisheries.

*[Proceedings continue in camera]*

---





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

---

### SPEAKER'S PERMISSION

---

The proceedings of the House of Commons and its Committees are hereby made available to provide greater public access. The parliamentary privilege of the House of Commons to control the publication and broadcast of the proceedings of the House of Commons and its Committees is nonetheless reserved. All copyrights therein are also reserved.

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

---

Also available on the House of Commons website at the following address: <http://www.ourcommons.ca>

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

---

### PERMISSION DU PRÉSIDENT

---

Les délibérations de la Chambre des communes et de ses comités sont mises à la disposition du public pour mieux le renseigner. La Chambre conserve néanmoins son privilège parlementaire de contrôler la publication et la diffusion des délibérations et elle possède tous les droits d'auteur sur celles-ci.

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la *Loi sur le droit d'auteur*.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

---

Aussi disponible sur le site Web de la Chambre des communes à l'adresse suivante : <http://www.noscommunes.ca>