HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Natural Resources

RNNR • NUMBER 112 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Tuesday, October 16, 2018

Chair

Mr. James Maloney

Standing Committee on Natural Resources

Tuesday, October 16, 2018

● (1105)

[*English*]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): Good morning, everybody. Thank you for joining us today.

We have a couple of visitors, from both sides, so thank you for being here today.

I know that Ted will be along shortly. He's anticipating the lunch we'll be having today.

We have one witness in our first hour: Bradley Young, from the National Aboriginal Forestry Association.

Mr. Young, thank you for joining us. I'm not sure if you've appeared before a committee previously, but we're a friendly lot. The process is that you are given up to 10 minutes to make a presentation, and then we'll open the table for questions.

The floor is yours.

Mr. Bradley Young (Executive Director, National Aboriginal Forestry Association): Mr. Chair, Madam Vice-Chair, MPs, committee members and staff, thank you very much for inviting us to contribute to the study that is under way.

My name is Bradley Young, and I'm the Executive Director of the National Aboriginal Forestry Association. I come from the Opaskwayak Cree Nation and Swampy Cree Tribal Council territory in northern Manitoba. I would also like to take this time to recognize the traditional territory of the Algonquin nation, Kichi Sipi Aski, otherwise referred to as Ottawa.

First, here is a little background on NAFA. We are a non-governmental, first nations-controlled organization focused on indigenous forest management, including research, advocacy, policy, and associated economic development. It is the creation of genuine wealth and health through world-class business and natural resource management that our 300-plus members and over 1,200 indigenous forest sector businesses are focused on.

In Canada, 80% of over 630 first nations communities call the forest home. Coupled with the aforementioned businesses, this is the forest stewardship potential that NAFA works hard to support. In no other natural resource sector do we find the confluence of geography, population, history, culture, experience, and increasingly the successes that we find in the forest sector.

The other natural resource sectors in Canada are important. However, let us remember that 24 Sussex, the Prime Minister of Canada's official residence, *Gorffwysfa*, was built by Joseph Merrill Currier, a forest sector businessman and member of Parliament.

No longer packers of water and mere hewers of wood, Canadiens, including a significant indigenous forest sector, now steward over 200 million cubic metres of wood supply nationally, spread over 347 million hectares of forest land.

Increasingly, the provincial and federal Crowns and numerous first nations governments are reconciling interests and rights on the land with the indigenous forest sector's economic sub-aggregate, pointing the way to an additional $2.4 billion of GDP. In the real world, this translates to significant employment growth potential: approximately 5,100 family-sustaining, nation-building jobs.

To arrive at this horizon point, it has taken a complex and uneven process in Canada's forest, with indigenous nations consistently repatriating stewardship responsibilities.

Though diverse, Canada's three orders of government—federal, provincial, and indigenous—have been running a longitudinal experiment on reconciliation, with the indigenous forest sector catalyzing many innovations. Nationally, the experiment has different approaches, with the indigenous proportion of individual provincial wood allocations ranging wildly: from as little as a 0% share of the wood basket in jurisdictions such as P.E.I. and Nova Scotia to almost 20% of the provincial tenure in Ontario, over 30% of provincial tenure in Manitoba and Saskatchewan, and a high-water mark of eight million cubic metres—forgive the forestry technicality—or about 12% of British Columbia. In the north, we now have first nations and Métis governments partnering on a corporate basis, splitting ownership rights fifty-fifty over 100% of the commercially available tenure in the Northwest Territories.

Our most recent tenure report, which I'll put up on the screen later, has more statistics, and we can go into detail in the question period.

Bringing it all together, on a national basis, 10.5% of our fibre basket is now indigenous-held, representing 19.2 million cubic metres of tenure. Coupled with the overwhelming physical presence of indigenous peoples and communities in the bush, indigenous peoples in the forest have an overwhelming interest in sustainable stewardship of the forest, being increasingly responsible both for forest management and for responsible economic development.

As a past forest-level research director, I am happy to see that witnesses for this study have included numerous experts on pests, including the Foothills Research Institute. The word “pests”, as you are all well aware, carries some pretty heavy ideological connotations. Indigenous elders don't use terms like that, instead referring to the little ones as *man îcosak*, or some other respectful indigenous nomenclature in Cree, Dene, Blackfoot, Haida, etc. These names do not translate into “pest”; rather, they place the insect family within the circle of life and readily acknowledge that in many ways they are both much more powerful and much more fearsome than humans can ever hope to be.

● (1110)

Through experience, indigenous confederacies of Turtle Island have learned to respect these little ones, developing and refining over millennia landscape-level anthropomorphic pyrotechnology that in turn was and is respected by insects everywhere. In plain English, under the guidance of knowledge keepers, indigenous peoples managed the landscape, including the little ones, from coast to coast to coast, with knowledge, fire, and respect. Interestingly, combined with the increasing amount of indigenous-Canadian partnership, we have the right team of governance, businesses, and experts ready to approach this forest sector situation.

We should recognize the dangerous spectre of imbalance that climate change represents. The interspecies responses that we are witnessing are clear signals that things are not well. The speed and scope of this challenge are chaotic, scientifically speaking, requiring the use of syncretic adaptation at very broad but also localized levels.

A fitting picture of the stakes can be summed up in our collective recollections of the pine beetle-pressured, tinder-dry forest conflagrations over the past two years out west. Ash fallout, producing pitch-black midnight at high noon on a summer day, is a pretty dramatic wake-up call.

Indigenous forest managers, with provincial and federal partnership, should be increasingly supported to maintain balanced, energetic ecological flows in the various forest zones of Canada. Knowledge-holder experts from both worlds, indigenous and western, working together, will need this support to run experiments.

NAFA's advice is to prefer partnerships already in place and proven. Nationally, some of the best teams are already assembled in B.C., on the Prairies, in Ontario, in Quebec, in the Atlantic and in the north. My written submission has detailed names and a listing—and I'll also put it up on the screen in the question period—of indigenous entities and businesses that are in place right now. They have a high state of preparedness and are already in the forests now.

The partnership circle, as we all understand it, also includes the Government of Canada, through Crown-Indigenous Relations and Northern Affairs, Indigenous Services, and Natural Resources Canada's Canadian Forest Service. Responsible provincial ministries are also convening under first minister sub-councils, including the Canadian Council of Forest Ministers and the Canadian Council of Ministers of the Environment.

However, the federal plow should lead the way here. Why don't we think about a reinvigorated indigenous forest sector program at Natural Resources Canada's CFS, partnered as per last iterations with CIRNAC and ISC, with additional contributions from the provinces? We think that a modest $20-million to $30-million investment, tailored to the partnership ecosystem described above, could greatly assist us in preparing for increasingly complex and dramatic iterations of the environmental pressures that the little ones are signalling for us.

Let us not forget that indigenous groups are already investing in this type of solution structure. For example, leading indigenous forest managers, such as the Meadow Lake Tribal Council, through Mistik Management Ltd., set aside a levy in the range of 75¢ to $1.25 per cubic metre of harvest to support local indigenous family engagement with forest management planning. This is to guarantee robust internal consultations with grassroots indigenous peoples, who are constitutionally recognized rights holders of the land. They also know about the land and insects, and the things you have to do to maintain yourself over millennia in the bush.

Hundreds of thousands of indigenous individuals are still utilizing their forest lands. Resultantly, indigenous and non-indigenous forest entities sharing the landscape have pioneered innovative administrative structures and processes critical to studying and doing anything in the forest. Now we must build on these proven knowledge-creation structures and be additive nationally.

Taken as a whole, first nations have a unique opportunity to contribute to Canada's forest innovation, including insect management, in a concrete, proven and growing way, from our solid footing in the forest.

We want to remind honourable parliamentarians that we have lived in the bush in the midst of all the natural resources for millennia. Right up to today, we have contributed to the well-being of our land and resources. Now we are increasingly managing and developing them. Our population is young, expanding, and ready for constructive nation building.

● (1115)

We should not squander these resources and let them go up in smoke. We need to maximize and sustainably manage them. Furthermore, we need to tell the world about what we are doing so they can learn from our response to climate change and its corresponding forcing of insect life in the forest. From Canada to Iberia, Scandinavia and Oceania, climate change and insects are sending a clear message to human beings. Take it from indigenous peoples, from our songs, our histories, our elders: The last thing we need in Canada is to be overwhelmed and utterly humbled to the point of starvation by the little ones again.

With over 19.2 million cubic metres of wood under first nations' control nationally, now is the time to work in partnership with first nations to support the critical indigenous forest sector as never before. NAFA is playing a leading role in this discussion, and as we work in partnership with our members and supporters, this is the vision we want to pursue: knowledge creation, investment and world-class management resulting in genuine wealth and health generation for us and our partners regionally, nationally and internationally, in government, industry and society.

The Chair: Thank you very much, Mr. Young.

You made reference to some images you want to use. Are they pictures only?

Mr. Bradley Young: They are. I can put them up on the screen—

The Chair: No, the reason I ask is that if there are words with them, they need to be translated.

Mr. Bradley Young: They're English only. My apologies.

The Chair: No, there is no need to apologize. It's a common occurrence; don't worry about it. If everybody is okay with using the images, we will have them translated later, as is our custom.

Are there any objections? No.

Mr. Harvey, go ahead.

Mr. T.J. Harvey (Tobique—Mactaquac, Lib.): Thank you, Mr. Chair.

Thank you for being here today, Mr. Young.

What role do you feel indigenous-led organizations that make up part of your group could play in controlling forest pests and managing the ecosystem in a way that's perhaps unique compared to traditional management techniques utilized by the traditional industry stakeholders?

Mr. Bradley Young: I'll give you an example of some direct experience I've had with this as a land-based research director in the west out of the Foothills Research Institute.

Parks Canada noticed the first iterations of the mountain pine beetle. The overflights were just coming over the mountains. The landscape was already being turned orange in B.C. and the scientists and elders were saying that they were coming over the mountains and you couldn't stop them. They asked the indigenous elders and businesses in the region what they should do.

The indigenous leadership, businesses and elders said, “The story is in the later chapters here. You should have never prevented us from continuing to utilize fire every spring and every fall as the snows left and came. That's when we would use fire to control the insects and to increase energetic flows on the landscape. The only thing you can really hope to do is to use prescribed burning to try to save what you can at a stand level, but it's going to be very hard because the forest has been allowed to run wild.”

Parks Canada came up with a response, a summer project, and they came back to the elders and said they were going to burn some areas where there's a high likelihood that the mountain pine beetle is going to nest. They're already there and we know they're going to overwinter and then they're going to continue west. The elders said not to start a fire in July. Parks Canada said that's when they have their summer students and their firefighter crews. The elders said not to do that because the sun is at the height of its power and the insects are going to be at the height of their power. The fires are going to get away. The fires got away. This was in the late 1990s, and it almost went across into the provincial lands from Jasper.

The mechanism there of federal, provincial and business leaders asking indigenous people and coming together in a coordinating group and working through the mechanics of it—that is the answer, sir. That's already in place in provinces and regions through the forestry entities and the first nations groups that have accommodated provincial and territorial governments. Forest management groups are already doing this.

We just have to supply resources, and we have to let those groups, those partnerships, come up with the solutions.

● (1120)

Mr. T.J. Harvey: Do you have stakeholder businesses within your group that have taken advantage of the federal indigenous forestry initiative?

Mr. Bradley Young: Yes, there is—

Mr. T.J. Harvey: Also, whether you do or you don't, do you feel that this is a tool that indigenous-led organizations or chiefs and councils could use to build capacity as we try to manage different forest pests in different jurisdictions across the country?

Mr. Bradley Young: Definitely. There's a logical coordinating corporate memory—knowledge memory, I guess—in place through the indigenous forestry program. Before that, we had the first nations forestry program, and before that we had this thing called something like the interim land and range agreements from Indian and Northern Affairs back then.

The memory is there, in terms of government programming and structures and people. It needs to be invested in, in a much more direct manner, I would say. In the last part of the previous government, the indigenous forestry program went all the way down to.... It was in the millions of dollars of funding. Obviously, when you're looking at just one fire that can cause a billion dollars of damage, you can look at that and say that it's probably an underinvestment, a million dollars nationally. That's not a lot of butter to spread over a lot of toast.

We have suggested a number, $20 million to $30 million, that should go in. Obviously, you wouldn't want to just do one thing with that. You would want to let the creativity of first nations businesses and regional priorities come through, and there's an organizing mechanism in place through that already.

I think it needs to be strengthened, sir, and I think it needs to be cross-purposed as well.

Mr. T.J. Harvey: I have one last question. We've spent quite a bit of time in the indigenous and northern affairs committee talking about the indigenous fire marshal's office and the strengthening and creation of a more robust indigenous-led fire service across the country. How big of a role do you think that separate organization can play in rural and remote communities across the country? Do you think there is a synergy between fire control and pest management?

Mr. Bradley Young: I think it's fantastic that those discussions are proceeding. The fire marshalls and the firefighting units in a lot of the rural first nations communities are, to me, some of the last iterations of the older societies that were tasked with protecting the indigenous communities. It's just a modern iteration of old social structures in place.

For it to be purposed maximally to look at pests and fire and all of this, you would have to have the larger coordinating group that they would fit in with. They could fit in with the forest-based entities in the region, the provincial authorities there, the territorial authorities, and make it a cross-member, multi-entity task group. That's how you would get the best performance and the best reception and effectiveness of that group.

It needs to be supported. It needs to be strengthened because, as you know, in many rural first nations and indigenous communities, there's no local RCMP detachment and no emergency response in place outside of volunteers. With the drying landscape that we're seeing right now, they could be the core of the first responder corps that we need for some of the conflagrations, which we know are coming. We can say that now. We know that there are increasing conflagrations coming on the landscape. We don't know when and where, but they're there.

I'm happy to support that question and that idea.

● (1125)

Mr. T.J. Harvey: Thank you very much, sir.

The Chair: Mrs. Stubbs, go ahead.

Mrs. Shannon Stubbs (Lakeland, CPC): Thank you, Mr. Chair.

Bradley, thanks for being here. I just want to note your comment there about the frequent lack of front-line law enforcement and first responder resources in rural, remote and indigenous communities.

I was really grateful for the support of the Liberals and all the parties, including an amendment accepted from the NDP, to move a motion in June for the Standing Committee on Public Safety and National Security to undertake an assessment of exactly that issue in rural, remote and indigenous communities. I'm not a permanent member of that committee, but it's undertaking that study right now. I think I'll feed your comments from this committee into that one, just for its consideration as it goes forward and focuses on that issue too.

As a person from northeast Alberta, I certainly appreciate your testimony. It's always great to hear examples of very successful and long-term partnerships of indigenous communities with all kinds of responsible resource development in Canada, whether it's mining, energy or forestry.

I wonder about your comment about the increasing opportunities for fifty-fifty partnerships with private sector forestry developers. Are there any examples of partnerships that you wanted to highlight in particular or expand on in detail?

Mr. Bradley Young: If you look at a little bit of history there, the joint venture partnership model is in place and it implies that any joint venture is a partnership. In the forest sector, that's how most indigenous groups entered into the sector. Right there, at a fundamental level, it's already a collaborative effort. That has only grown into the national imagination of indigenous groups, but also international indigenous groups looking at the Canadian model.

Every region has examples of joint venture partnerships and partnerships between indigenous and non-indigenous business groups in the forest sector. What we're seeing now is the indigenous maturity, sophistication and, frankly, equity and business strength coming, so that indigenous groups are now becoming the senior partners in the partnership matrix, which is something that you would logically see over time.

This is where the increasing numbers for tenure under control are happening. In Alberta, it's not quite as advanced as some of the other regions. I'd say that the most advanced regions are Ontario, Saskatchewan and B.C., for some of the advanced indigenous forest sector manufacturing and also management business groups that are taking that leap to the next level.

Quebec and Alberta, strangely enough, seem to have the same provincial policy prescription of about 30 million cubic metres of provincial tenure each. They accommodate indigenous groups there with about one million cubic metres of volume. In the forestry world, that's very low levels of accommodation. Compare that to Ontario, where 20% of tenure is held by indigenous groups, or Manitoba and Saskatchewan, where it's over 30% of the tenure. You're getting job creation. You're getting manufacturing investment, and you're getting better forest management.

This longitudinal experiment in the provinces is where we're starting to see the different outcomes of different policy prescriptions. I'll submit our tenure report to the committee, to the clerk, so you guys can take a look at that. I don't want to get too much further into that, other than to say that in my submissions you'll see that there are some very high-profile indigenous business groups and entities that are really paving the way.

Interestingly, the world is noticing now, gentlemen and gentleladies. We have indigenous business groups and national governments from around the world on the back of our trade agreements: the renewed CPTPP and CETA. The SLA is always a little more difficult into the U.S. Where there are indigenous groups and national governments trying to figure this out in the world, they are looking at the Canadian government and asking, “How can we replicate some of this?”

Provincially, I would say that we have to get the provinces to look across their borders and ask, “How is this working? How are you getting these returns of employment, of manufacturing and of better forest management?” Part of that is the forest management groups. How do we do it better? How do we account, in our region, for the type of forests we have, the type of climate change pressure we're seeing, the kinds of insects, and the kinds of dynamics that you can only get with local, regional engagement at a deep level?

● (1130)

Mrs. Shannon Stubbs: Thank you.

I'm glad to hear that people are looking at Canada, which is a world leader on those issues and many others related to responsible resource development, particularly with regard to partnerships with indigenous communities.

I was interested in your account of the history and your attempts to continue to be able to practice controlling insects through controlled viruses at specific times of the year. I just wanted to let you know that last week a member of this committee made the suggestion that there shouldn't be any action taken. He said, “Why are we trying to manage an ecology when we don't even know what it's meant to look like...and nature will take its course? I'm trying to understand why we should not just in some sense leave well enough alone”. He questions whether or not there should be any action taken at all.

I wonder if you have any further comments on traditional practices of managing insects and forests. Also, being from northern Alberta, I know there were recently historic forest fires there that had impacts on the local communities, but also disproportionately on indigenous communities in the region. I don't know if you have any comments on that issue as well.

Mr. Bradley Young: Yes.

The Chair: I'm going to have to ask you to keep your answer pretty short, though.

Mr. Bradley Young: How long do I have, sir? Do I have a minute or two minutes?

The Chair: No. You have about half a minute.

Mr. Bradley Young: There's wisdom in that, in terms of respecting nature, but there's also the immediacy for communities that are living in big, same-age-class forests that are stressed and that are undergoing forcings from the natural world. That is not a natural dynamic, actually. That's a recent dynamic that has only emerged in the last 400 years here on Turtle Island. Our people have a longer horizon and you have to go deep into the archeological record to look at it, where you actually need to manage the landscape with a little more complexity, with fire, with water, with wind, with the different elements of nature writ large, and that's a complex answer that is best provided by the experts in that locality and in the region, and which we can learn nationally.

However, to tell a community that's basically sitting in the middle of matchsticks that are ready to go up that we shouldn't do anything, I think, sirs and madames, is a recipe for loss of human life and devastation.

The Chair: Thank you.

Go ahead, Mr. Cannings.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): Thank you, Bradley, for being here. I really enjoyed your testimony and I really liked your comments about respecting the power of insects. I'm a biologist. I have two brothers who are entomologists, so through osmosis I've learned a bit about insects, at least as much as I can.

I'm from the southern interior of British Columbia, where it's very dry, with ponderosa pine and Douglas fir. There is that real history there of indigenous firekeepers and that land management system that has unfortunately been very disrupted.

I'm just wondering if you could comment. I'm not aware in British Columbia of any indigenous forest practices that are really incorporated into the provincial forest practices. Do you have anything you could add there? Does that occur somewhere?

● (1135)

Mr. Bradley Young: Thank you for the question, Mr. Cannings.

You have some of the jagged outcomes of colonization and the current administrative structures there, but I'm not going to critique that.

What I'm going to say is that British Columbians are slowly figuring it out. You have eight million cubic metres of tenure held by indigenous groups in B.C. There are a plethora of different types of legal provincial agreements under which these indigenous groups hold the forest management rights for tenure. In each of those cases, even though there are things on paper, there are things off paper that these indigenous groups, together with the regional forest managers, do to learn from each other, because there's a human dimension to it. There's what's on paper, but then there's what is happening when you get regional forest managers and indigenous leaders and elders sitting down and negotiating over time.

That has to be strengthened, sir, and I think you point to the fact that there has to be a strengthened role for indigenous knowledges, histories and past experiences with insect forcing and climate changes that have happened in the past. That has to be brought into the management mix. Is the response going to be the same? Of course not, because the landscape has changed. People have changed. Community patterns have changed, so that's where you need that adaptive and syncretic approach, and you just need that basic respect.

I think we have that now in Canada. Even despite some of the more dramatic headlines that we have in terms of indigenous and non-indigenous relations, when you actually look at it and see what's happening in the business world and on the ground between common people, there's a reflection that no one's going anywhere here in Canada. We just have to get together, roll up our sleeves and figure this out.

You, the Parliament of Canada, have a very special role, gentlemen and gentleladies. You have to set aside some resources. You have to let that federal plow bring in the provincial energy, the business energy and the energy from our regions, and let them tackle not only this issue, but the other issues in the forest sector and the natural resource sector. That's hopefully the approach that the committee will take and that we can get the civil service and governments to move into.

Mr. Richard Cannings: Thank you for that.

In terms of central British Columbia, we have a lot of indigenous groups that were severely impacted by the mountain pine beetle infestation and the fires that followed. I'm just wondering if you have any thoughts or input—or if there is any indigenous input going on now—as to what we can do now to build the forest that will grow from there. Are we going to repeat the mistakes of the past and just plant a lot of lodgepole pine? Is there any indigenous input to build the forest resilience that we really need to make our forests healthy for centuries to come?

Mr. Bradley Young: There are the beginnings of it. There are some good indigenous organizations working with the provincial ministry of forests and natural resources, the B.C. First Nations Forestry Council and, in the interior, some of the tribal councils. Stuwix forest management and some of the Nlaka'pamux groups are forging new ways of talking about and doing things on the land.

Is it formalized? Is it settled in terms of the provincial guidebooks being changed? I would say no. That story is still being written, but the trajectory is clear. The arc of history is clear. As Martin Luther King says, it's long but it points towards justice. It points towards doing things just a bit better every day, no offence to anybody. We can improve on what our ancestors, indigenous and non-indigenous, have done. That's happening.

Is it happening enough? I know that with the change of government there have been better talks, but I think that Keith Atkinson and some of the other indigenous leaders in the region, including Terry Teegee, vice-chief of BCAFN, who is a forester from the interior, could give you a really detailed answer on what could be improved. I would say there's no doubt that the provincial B.C. forest ministry would have questions, too, and would ask how we can improve.

It's a matter of resourcing that and creating the table space where those solutions can come.

● (1140)

Mr. Richard Cannings: I guess we're going to have the B.C. people here after you, so we can ask them that.

You mentioned a number for the actual cubic metres of indigenous tenure in B.C., or maybe it was.... I'm not sure. You mentioned percentages from the other provinces. What's the percentage for B.C.?

Mr. Bradley Young: I'll put it up on the screen, and my apologies to the committee members who don't understand English.

Mr. Richard Cannings: I just need the number.

Mr. Bradley Young: Yes. The numbers are shown on the screen. Offhand, there are about 69 million cubic metres of commercial tenure in B.C. First nations have about eight million cubic metres of that, or 11%, a national best. As B.C.'s provincial forest is more or less equal to all the other provincial forests, 11% of B.C. is quite a lot. It's eight million cubic metres, which is a national high-water point.

Is the type of tenure right? Do there need to be some big changes? I would say yes, but the B.C. provincial forestry ministry and the indigenous leaders there will have the detailed information on what they need changed and where their disagreements are. It is clear that there are disagreements, but that's okay. You get that with anything you do in life. You just have to improve where you can and push forward.

That is the reality in B.C. I think there needs to be more manufacturing, indigenous manufacturing, because then you'll get regional business leaders and the regional governmental regulatory leaders on the non-indigenous side seeing the benefit of the indigenous prescriptions that these groups can come up with.

Mr. Richard Cannings: Thank you.

The Chair: Thank you.

Mr. Hehr, go ahead.

Hon. Kent Hehr (Calgary Centre, Lib.): Thank you, Mr. Chair.

I want to thank Mr. Young not only for coming, but for the tremendously detailed and interesting topic that he discusses and how he brings it out in a very relevant, easy-to-understand fashion. I find it very pleasant to hear you speak and actually be able to understand the way you communicate. That's refreshing.

You mentioned climate change six times in your presentation and how it has changed the landscape, how it has changed your area of the world. I come from a land of Treaty No. 7 people and the Métis region 3 in Calgary. I'm the member of Parliament for Calgary Centre, and we've seen how the mountain pine beetle has affected that area. We had experts who say that climate change results in the inability to have so many nights of freezing weather in the evenings to keep that *man îcosak* at the rate of change that it was previously.

You and I were talking earlier, and you were talking about even more *man îcosak* coming out and filling your neighbourhood and other areas in Canada. Can you talk about that a bit, the emerging of what we call “pests”, our word, or *man îcosak*, your word?

Mr. Bradley Young: Yes. Thank you for that, Mr. Hehr. It's *man îcosak*. I really appreciate the attempt at our language. It shows great respect for this experiment we call Canada.

So the *man îcosak* and the different forcings that we've noticed.... We have stories of different insect families overwhelming the landscape at different times. And everyone here knows, I think, the biblical stuff on that as well. It's not just here on Turtle Island; it's also in Africa and in Europe where you have the plagues of locusts. These are big, human, epic-changing events that can happen from the little ones if you don't respect the natural environment.

With climate change, we aren't facing the cold that we used to have in Canada quite as much. I'm in my early forties now. When I was a child, we had weeks of minus 40°C weather. Toronto barely had snow last year. You have these wild variations, but in general, we know it's gotten warmer in Canada. The children don't have to shovel as much, notwithstanding here in Ottawa when we get the northern Golden Horseshoe effect. But in general, Canadians aren't shovelling.

When you get a warming environment, bugs survive in the bush a bit more. That's something for people to reflect on. That's what we're noticing in the regions and in the indigenous forest. All the elders are saying that the insect life, the bug life is changing. It's unbalanced. A lot of it has to do with our winters not coming in and killing off the larval stages of insects.

● (1145)

Hon. Kent Hehr: Thank you so much.

We know that *man îcosak* do not respect civic boundaries, provincial boundaries, Treaty No. 7 boundaries and the like. They go where they need to go or want to go. How is it that the indigenous communities are able to work with provincial, federal and other bands, shall we say, or to impact the United States? Are you finding those avenues of communication open?

Mr. Bradley Young: I'd say we work very well together, and sometimes not at all. But I think there's a reflection now that people, at a minimum, have to talk at all levels of government. It doesn't matter what kind of political stripe you come from, because the insects and the ecological energetic flows don't follow human administrative boundaries. In most landscapes, the energetic flows largely follow how the wind and the water move. The physical geography contains the energetic flows.

That's what you will find historically on Turtle Island with the different riparian systems. You had the different indigenous confederacies controlling.... For example, there was the Iron Confederacy of the Cree, the Ojibway and the Nakota Sioux, with the northern Saskatchewan watershed, going from the mountains all the way up to James Bay, Hudson Bay. You had that logical political confederation there and they looked at the energetic flows within that. It was a different time, a different era, but that's how collaboration happened in the past.

I would suggest that this is actually highly scientific, and that's how our political entities.... We have some of these experiences with the Great Lakes Commission and the different cross-border commissions. It's not perfect in today's political environment, but the political environment changes, gentlemen and gentleladies, and I think we should always be bringing it back to the science and seeing how human beings actually worked with that in the past.

Hon. Kent Hehr: You were talking about businesses and the opportunities that lie out there. You also said at the start of your speech that we have sometimes been referred to as “hewers of wood and drawers of water”, and how we want to change that. Under Minister Bains, our government is putting a lot into innovation and into what we call the scaling-up of businesses to do more of that processing and packing of finished goods.

Are you finding that indigenous communities are able to connect with opportunities like this, with ways to scale up and not only use better forest management practices to ensure a healthier forest, but take advantage of all the business opportunities right here at home in Canada?

Mr. Bradley Young: I think the innovation focus is great in this government. Indigenous groups are ready for more innovation supports. I think it has to be improved regionally, because as we all know, the business environment of each indigenous region and each provincial region in Canada varies according to inputs and capital structure—in this case, what the nature of the forest is and how far it is from transportation.

In general, you see a trend for indigenous peoples to want to move into—and they are moving into—advanced manufacturing. This is where the trade agreements and the innovation funds that are set up should take a look at some indigenous set-asides. They should be reaching out through their regional arms to the indigenous business groups across Canada. There are good ideas. I know from talking with the various business leaders of first nations entities that they're interested in the innovation funds and in the planned Canadian climate action fund, but there needs to be some assistance there and some catalytic activity happening. That's what the civil service is for, both provincially and federally.

I think we have the formula right. I think there are things in there that need to be adjusted. Of course, I'm always going to say we should have more indigenous supports. In terms of capital flows, I'm just—

Yes, we're talking about pests, Mr. Hehr. We're going way deep into business.

● (1150)

The Chair: We're going to have to stop you there.

Hon. Kent Hehr: That was a good answer, Brad.

Mr. Bradley Young: Thank you.

The Chair: Thank you.

Mr. Aboultaif, you have five minutes.

Mr. Ziad Aboultaif (Edmonton Manning, CPC): Thanks for being here this morning.

Of the 347 million hectares of forest in Canada, about 5% is affected by insects, less than half a per cent by fire, and even less than that by harvest. This report is quite clear. I travel to British Columbia every year. I drive for 10 hours to Kelowna and Penticton from Edmonton. I see the problems—the mountain pine beetle and the effect on forestry—at all levels.

I have a report here from Natural Resources Canada, which came from the Library of Parliament. It's showing that forest areas affected by the MPB in Canada in 2005-2015 went from a little above eight million hectares down to below two million hectares in 2015.

Can you help me understand this chart? If I am to look at it and try to understand why the effect per hectare is going down significantly within 10 years, I would look into two areas: Either we're doing a good job in dealing with the problem, or there's migration from area to area—maybe from western Canada toward eastern Canada. That definitely presents a bigger problem.

Do you have that report? Do you believe in this observation? How can we understand it better? Having you as an expert, especially from the indigenous community.... My belief has always been that if anyone can understand our nature well, our land and landscape, it would be the indigenous community.

Mr. Bradley Young: Sir, you have me at a bit of a disadvantage because I don't have that report in front of me, but I get the point that you can read some of the statistics in different ways. You get an appreciation that what's on paper is quite different from what the situation in the forest actually is.

Let's say you pose that question to a community that hasn't had a fire in its area for 50 years. There are big, beautiful, mature lodgepole pines, and they're green. It just looks perfect. That community doesn't have to worry. Guess what: You have the big energetic increases, through temperature, into our forests. You have the insect forcings that are already there in B.C., and they're moving. To say that it's happened in the past, so we shouldn't do anything now.... I think that might work in terms of a theoretical argument. If you had talked to the people in Fort McMurray after the town burned down and asked them whether they would have changed things in the forest around them before the fire, if they could, I think the people of Alberta, the people in Fort Mac and the indigenous groups there, would all have said, "We could have done things a little differently."

It's one thing to look at high theory, to have a theoretical disagreement and to look at statistics, but it's another to know that at the end of the day there are real communities and businesses out there that are potentially at risk. I take the point, though, that there is a theoretical, academic debate. It's an interesting debate, but I don't think we have any more time for that—and we don't have any more time for that in my answer right now, sir.

The Chair: Actually, you're absolutely right. We don't have any more time for that now.

Voices: Oh, oh!

The Chair: Mr. Serré, you have about four minutes.

● (1155)

[*Translation*]

Mr. Marc Serré (Nickel Belt, Lib.): Thank you, Mr. Chair.

[*English*]

I'll be asking my questions in French.

First, Mr. Young, thank you for your presentation and the way you approach it. I don't know which riding you're from, but maybe you should consider running for politics in the next election. Good job.

[*Translation*]

Obviously, forests are under provincial jurisdiction. British Columbia, Alberta and Atlantic Canada are dealing with problems, and soon, Quebec, Ontario, Manitoba and Saskatchewan will be as well. In a way, it can be said that the methods used by the government and the private sector in the past haven't worked so well.

Mr. Young, I'd like you to answer from your personal standpoint and not that of your association.

What could the provinces do better on this front? What tangible measures could the federal government take to make a real difference in the coming decades?

[*English*]

Mr. Bradley Young: Thank you for the question, Mr. Sauvé.

[*Translation*]

Mr. Marc Serré: Serré.

[*English*]

Mr. Bradley Young: That's a good question. Thank you for the question, Mr. Serré. I'll answer it completely.

I'll start with the political. My grandfather, John Young, was a proud member of the Progressive Conservative Party in Manitoba and federally his whole life. My father, my uncles and my aunts are, to this day, diehard Liberals. My cousins and a lot of the other young people I went to university with are dippers. They're with the NDP.

Sir, I guess I'm surrounded by family. It doesn't matter what political stripe you might have on.

On forestry and provincial jurisdiction and what governments can do differently.... We have a set of tables in front of us, and you can clearly see the provincial tenure in Canada ranging from 0% all the way up to the mid-30%. There is variability in how provincial governments are working with indigenous groups to reconcile the forest tenure regime. There are differences there, but we're responsible enough now.... We actually have the Canadian Council of Forest Ministers, the first ministers' table, the forest ministers' table, and the environment ministers' table, where we have to take data like these and discuss them. What are the differences in policy here? What are the differences in outcome?

One thing we heard initially, in the early eighties, when we had indigenous groups.... Actually it was in B.C. that the first indigenous tenure was taken up. We heard from many other provinces, "Canada will end if indigenous groups have tenure. The economy will end in our regions." Clearly, this is not the case. It is the exact opposite. When you have indigenous responsibility in collaboration with the provincial government, you get advanced manufacturing investment, job stabilization and market entry into other countries that are looking at the indigenous profile of manufactured Canadian products. They want it.

We have to discuss it, and we have to look at the real differences in policy and opinion. Guess what. Not everybody is going to agree on what to do, but let's run the experiment. Let's see whose approach works. Time is an ongoing story, sir. We'll all be here in another 5,000 years. We're just really starting this story.

The Chair: Thank you.

[*Translation*]

Mr. Marc Serré: *Meegwetch*.

[*English*]

The Chair: Sadly, that's all the time we have. We greatly appreciate your taking the time to be here. Your contribution was tremendous. I think you do have a future as a politician, because I noticed you identified every member of your family's political stripe except your own. You know how to answer questions.

Some hon. members: Oh, oh!

Mr. Bradley Young: I'm indigenous, sir.

The Chair: On that note, we will suspend for two minutes and then start with our next witnesses.

● _____ (Pause) _____

●

● (1200)

The Chair: We're going to resume with our second panel of witnesses. We're doing something a little different this time. We have two witnesses in our second hour.

From the B.C. First Nations Forestry Council, we have Keith Atkinson, who's with us by video conference.

From the office of the chief forester in the B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development, we have Diane Nicholls, by audio only. The video isn't working.

Thank you, both, for joining us, in a manner of speaking.

Each of you will be given an opportunity to make opening remarks for up to 10 minutes. It doesn't have to be 10 minutes, of course. After both of you have done that, we'll open up the floor for questions from around the table.

Mr. Atkinson, since we can see and hear you, why don't we start with you, sir?

Mr. Keith Atkinson (Chief Executive Officer, BC First Nations Forestry Council): Great, thank you very much.

Good morning, members of the committee. Thank you for inviting me to contribute to your hearings regarding the study on forest pests. It's my pleasure to speak to you today on behalf of the B.C. First Nations Forestry Council. Our organization works to support first nations throughout western Canada, approximately 203 first nations, whose combined territories encompass all of British Columbia.

We are pleased to inform the committee that our organization is working with our communities on improving relationships and strengthening participation in the forest sector, both the business of forestry and the governance of forests and natural resources. As such, we're keenly interested to understand how governments are considering forest management topics such as forest pests.

The mandate that Canada has embraced on the rights of indigenous peoples has now been endorsed by the B.C. government as well. The framework for rights recognition created at the United Nations is a powerful expression and model for working relationships with aboriginal peoples. Our organization is very focused on supporting the implementation of this mandate, something that requires first nations' input and direction.

In addition, the recognition and mandates to implement the Truth and Reconciliation Commission's "Calls to Action" report are of great importance to how we move forward together.

Lastly, recent legal precedents are important for guidance within Canada and local jurisdictions on appropriate legal frameworks for the relationship and recognition of first nations peoples throughout Canada.

As a forest and land stewardship organization, we are excited to discuss forest pests and provide some advice and direction that we feel is in the best interests of the lands and resources, our communities and our businesses.

As you are likely aware, forest pest management falls under various jurisdictions. The most significant is the B.C. provincial ministry of forests, and I'm glad that the chief forester has joined us today for this discussion. Beyond that, there are private lands and, of course, federal lands, federal Indian reserve lands, where our nations deal with those issues as well.

The strong mandate to recognize and support aboriginal rights now requires that we move toward consent-based and shared decision-making at the traditional territory level. Forest management is an important element that requires engagement with first nations and quickened advancement toward collaborative decisions at the territory level. This context and mandate are a new regime that we're very excited to participate in and to support the work going forward.

The question of jurisdiction has now changed, or is in the process of changing, at least. First nations are now a component of the jurisdiction requiring strong engagement, shared decision-making, and resources to undertake the work and share in the benefits and prosperity that natural resources and industrial development offer.

First nations in our organization are very aware of forest pest issues and mitigation. In fact, our organization, the B.C. First Nations Forestry Council, was founded in 2006 as a direct response to the mountain pine beetle infestation in B.C. and the federal initiative to mitigate this infestation. At the time, we developed an agreement between the B.C. government and first nations leadership. The first nations would access 20% of the federal mountain pine beetle-committed funding. With these funds, the forestry council was created and we began working with our affected communities on priorities and strategies to mitigate the mountain pine beetle impacts.

I can summarize the work that was done by 103 of our communities in B.C. First, community safety was needed through fuel management, the reduction of forest fire risks created from dying pine trees. Second, there was wildlife and land-based restoration as a priority goal for strategic investments toward restoration of the impacted land base. Lastly, there were economic development solutions for first nations to participate in the changing economy based on the impacts of the mountain pine beetle.

Controlling the spread of the mountain pine beetle infestation was not possible. It travelled through the pine forests of British Columbia's interior and devastated the standing inventory, affecting even regenerated forests. After 15 years of pine tree losses due to the mountain pine beetle, we've now witnessed two years of severe forest fire conditions in B.C., unprecedented in their destruction of forests and lands.

● (1205)

The dialogue over the years has changed from pest management of the mountain pine beetle to how climate change has affected our natural resources and how forest management strategies and practices may require adaptation to best manage the condition of the forest.

The ongoing impacts of climate change are showing increased forest pest activity. Drought conditions of recent years have initiated much discussion and research on the impacts on the western red cedar, in particular, a highly valued commercial species and a culturally significant tree to first nations.

We are aware that forest pests are most typically an impact to the commercial timber industry, which brings so much wealth to the provinces and Canada. First nations prioritize economic benefits and healthy economies within their strategies as well. Our nations, too, wish to see and be part of the prosperity that our natural resources offer.

Unfortunately, all too often we conflict due to the strong sense of stewardship of the forest and the lack of recognition of indigenous rights. We haven't had that recognition and ability to influence forest management decisions over the years, but that seems to be changing in our political environment today.

Our communities have identified that governance of forest resources requires a balance of conserving non-timber products and other values in the forest, and they often speak to the need for restoration on the land due to the cumulative impacts of natural resource extraction. We propose that this vision of a balanced forest is one that supports resilience toward pests.

In our work, you can see strategic priorities over the years that include things such as social and cultural sustainability, economic opportunities and sustainable economies, recognition of rights, and restoration of the land base.

The current ongoing hazard created by mountain pine beetles leaves our communities at continued risk of forest fires, an unacceptable health and safety risk.

We see investments in restoration of the land, including fuel management treatments, as tremendous opportunities for the building of capacity and forestry-related business. We understand there are various levels of research that has been undertaken and continues. Now is a good time for investment in first nations research that can bring forward traditional knowledge and understanding of lands and resources, knowledge that's been carried for thousands of years by our communities.

In our early years of mountain pine beetle management with that investment, we undertook the beginnings of some research from a first nation or indigenous perspective. Unfortunately, that funding has deteriorated.

In addition, we are at a time of reconciliation with first nations in Canada. The land question and a new relationship are being discussed. There's an opportunity to build a healthy relationship between Canada, its provinces, and aboriginal people as mandated by the Government of Canada and B.C. A new narrative has emerged in society based on this perspective of reconciliation. It includes building awareness and understanding of issues such as the residential schools. It includes recognition of the beauty that can be found in an indigenous world view. It is a dramatic change from the old narrative, which might be phrased as “the government taking care of the first nations”.

Communication can be a powerful tool in regard to reconciliation. As such, consideration should be given to the committee's communication strategy and materials that assist in amplifying this new narrative.

We'd like to leave the committee with a number of recommendations.

We recommend that the committee strongly consider the purpose and goals of the United Nations Declaration on the Rights of Indigenous Peoples, the Truth and Reconciliation Commission's calls to action, and the recent Supreme Court of Canada decisions that affect lands and resources. The committee should consider how it will advance the purpose and goals of these instruments.

Second, engagement with first nations should be undertaken in the development of strategies and programs that affect lands and resources. Programs that we have supported and that should be considered include research, education and extension support relating to forest management—in this case, forest pests. There is a strong need for education and extension services on both forest management and understanding and awareness of the relationship that is envisioned through mandates such as the United Nations declaration and the calls to action.

As mentioned previously, health and safety risks for first nations communities due to forest fire hazard are a direct outcome of forest pest management. This situation should be considered and programs should be developed for the ongoing mountain pine beetle hazard and the future risks from climate change and new pest outbreaks.

● (1210)

The risk of the continued decrease in available red cedar in B.C. has a significant impact on the preservation of culture for first nations. Risk assessment requires a perspective from first nations communities and their businesses.

Consideration could be given to ensuring that all partners, proponents, staff and committee members are educated on the history of aboriginal peoples, including the history and legacy of residential schools, the United Nations declaration, treaties, aboriginal rights, indigenous law and aboriginal-Crown relations. We've noted in our work a distinct absence of awareness of aboriginal interests when it comes to natural resources, as well as the siloed impact of governments, and how natural resources stand separate from social issues like indigenous rights.

First nations governments require a share of the resources to allow participation in the governance and business of forest management and operations. An aboriginal forest trust, investment in first nations and their governments, and investment in organizations like ours in British Columbia or the National Aboriginal Forestry Association—I saw Brad Young speaking to you earlier—should be considered to enable this work to happen.

Although it may seem that this presentation is largely based on the context and framework created by recent mandates with regard to UNDRIP, the Truth and Reconciliation Commission's work and the Supreme Court decisions, the baseline is that this new context requires first nations' consideration in the best management of natural resources in Canada.

This committee is the front line for consideration of this requirement, and we're excited to offer our thoughts and recommendations toward how this can move forward.

Thank you for hearing our thoughts at this time.

● (1215)

The Chair: Thank you very much, Mr. Atkinson.

Ms. Nicholls, I understand that you may want to make a brief opening statement. There's no obligation to use all the time, just so you know.

Ms. Diane Nicholls (Assistant Deputy Minister, Chief Forester, Ministry of Forests, Lands, Natural Resource Operations and Rural Development of British Columbia): Thank you.

I would like to thank the committee for the invitation to present.

I am the chief forester for the Province of British Columbia within the B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development. The office of the chief forester in the division encompasses most of forest management in British Columbia and the legislation, regulations, policy guidelines, etc. that govern that, of which forest health is a primary factor.

In British Columbia, a majority of our forest lands are publicly owned. As such, the ministry has a huge responsibility, along with partnering with our first nations, for management of the land base and the forests within it.

As you may or may not be aware, in the early 2000s we had a mountain pine beetle epidemic that swooped through the middle part of our province and ate up quite a bit of our lodgepole pine plantations and also natural stands.

As Keith alluded, we've also had, in the last two years.... In 2017, 1.2 million hectares burned up in wildfires, primarily in mountain pine beetle-affected mortality areas, and in 2018 we've had about 1.3 million hectares burned up around the province, not only isolated to mountain pine beetle stands, but, again, a good portion of it was impacted by the mountain pine beetle.

In addition to the mountain pine beetle, we now have an infestation almost at epidemic levels across our north area of spruce bark beetle, which is affecting our spruce, and balsam bark beetle. As an aftermath of the wildfires, the Douglas fir bark beetle is coming through in increasing numbers and is forecasted to do significant damage, again, to the central portion of our province with Douglas fir.

On the coast, as Keith said, key species are the western red cedar and the yellow cedar—key species in the sense of first nations' traditional cultural interests, but also because of their uniqueness to their zonation within British Columbia. We are seeing, through drought and climate change, some portions of the land base on the coast where the cedars are having a difficult time with drought-type areas, and we're seeing some dieback from tops and some mortality.

I'm not painting a very good picture for British Columbia. However, we do have robust forests. We are looking at many options on how to create better resiliency within our forests, which are showing significant changes primarily due, in my opinion, to climate change. It is to the point that some of our researchers are showing that a typical beetle life cycle of maybe two years is coming down to a one-year life cycle. There are significant changes in the life cycle of the critters that we're trying to manage, and that poses significant issues with regard to management techniques. It's almost like having a new creature that we don't know anything about and asking what the best management for that is.

Within British Columbia, how do we manage for forest health? We do aerial detection. We do overview flights for the whole province as best we can, depending on weather, of course. That is a very good tool, but it's also a very limited tool in the sense that, in burned areas, it's very difficult to differentiate from the air whether the tree is dead due to, say, a Douglas fir bark beetle infestation or whether it's just the fire impact that has turned the trees red. In addition, if you're looking at specific pests like the spruce beetle, you may not see the initial attack because the trees take a year to die from the spruce beetle. While there may be significant infestation, you may not pick it up until the following year, in which case they've flown away and moved somewhere else. It's a good tool, but it's a limited tool.

The other tool we have, of course, is ground surveys. Again, it's a very good tool, but it's very expensive. It takes a lot of training, and individuals who know what they're looking for can cover the ground in a systematic way so we get good information. It's very expensive and very difficult to do, so we focus only on key areas where we think we can do some kind of management techniques.

● (1220)

The rate of spread we're seeing in British Columbia is faster than we've seen in history, and that results in increasing damage for both economic and social aspects within the province. As you are probably aware, B.C. communities are very much forest-dependent communities, especially in the rural sectors, and our economy is based on forestry. When we have impacts to forest health, it obviously impacts our economic wealth, and it also impacts our social ability to deal with the outcomes.

When we have unhealthy forests, we run the risk of habitat loss and the inability of some wildlife to move into new areas that are impacted by forest health. We are seeing some elements of this, and Keith mentioned this as well. We see increased fire, and in British Columbia we really are in a mode of both management and land restoration at this point in time.

In British Columbia, we really see forest management as the tool to make a difference in our forest resilience going forward. It's important to make sure we're doing the right forest management in the right places, and that knowledge is there and available to practitioners. That can be through harvesting, through silviculture, through plantations, through different techniques across landscapes, etc.

British Columbia has researchers in forest health. We have pathologists, entomologists, climate change researchers and geneticists, and all are looking at the components of forest health and what the changes are. However, British Columbia has a limited number of these resources, and with the changes we're seeing due to climate change, much more research is required.

I'll follow up with recommendations that, as chief forester for the province, I would like to see this committee consider. One is definitely to support ongoing forest health research. That can be linked to forest management, results or impacts, and precautions that can happen with regard to the research and how we use forest management.

We definitely need to have better identification, tracking and monitoring tools, probably through technology. I'm not a technologist, but I'm sure there are different ways of incorporating new technologies with regard to lidar adaptation and visual imaging. They can be used for identification, tracking and monitoring. They just enable us to get better information from our aerial overviews and ground surveys, and they may incorporate new techniques we haven't thought of yet.

Education and communication are crucial, for sure. A lot of our rural communities look out their window and see dead trees, and they are wondering what that's about. It's obviously the job of our ministry to inform them. The more education and information we can supply, the better.

I also want to reaffirm that forest management can be a tool for developing and maintaining healthy, resilient forests. We need to ensure that we understand what those interactions are for wildlife, water and other values on the landscape.

● (1225)

The Chair: Thank you very much, Ms. Nicholls.

We're going to open the floor for questions. I've just been advised that our interpreters are having a bit of difficulty hearing both of you, so if you could speak slowly and clearly when answering the questions, they would be most grateful.

Mr. Serré, go ahead.

[*Translation*]

Mr. Marc Serré: Thank you, Mr. Chair.

I'd like to thank the two witnesses for their presentations and the work they do in this sector.

My question is for both witnesses.

Ms. Nicholls, let me begin by congratulating you. Thanks to the work you're doing in your ministry, in British Columbia, you're a model for the provinces in forest management. You mentioned investing in research, something I'd like to talk about in a moment, but there's another issue I'd like to discuss with you first.

Forest management is an area of provincial jurisdiction, but the federal government plays a role, for instance, when it comes to pests. There seems to be, not a contradiction, but rather a lack of co-operation between the federal government and the provinces.

Do you have any specific recommendations for the committee from a jurisdictional standpoint? Are there things the provinces could do better? In terms of the division of powers, are there improvements the federal government could make?

Ms. Nicholls can answer first, followed by Mr. Atkinson.

[*English*]

Ms. Diane Nicholls: Thank you for that question.

If I understand the question correctly, you're wondering how the federal and provincial governments can coordinate and co-operate better on forest management for forest health. Is that correct?

Mr. Marc Serré: That is correct.

Ms. Diane Nicholls: In my experience, when the mountain pine beetle came through British Columbia, what was most beneficial was the co-operation where federal funds came into play being used in a provincial context on the land base. That co-operative program defined clear results—what the funds could be used for and how they should be used—while letting the province implement them. As difficult as that was, because we were learning at the same time as implementing, that, to me, looking back, was very progressive, in the sense that we jointly came up with the priorities for the work and the funds that would be made available, both provincially and federally. Utilizing those funds and creating the knowledge base, we were able to implement the education and the communications that were required.

Mr. Marc Serré: Mr. Atkinson, do you have any suggestions for your involvement with indigenous communities, as linked to the provincial jurisdictions or the federal jurisdiction?

Mr. Keith Atkinson: Yes, very much so. Our perspective, and the reason my opening comments weighed so heavily on these new mandates and contexts, is that we strongly believe that the standards developed by indigenous peoples and the United Nations in that declaration create a good framework for how we can collaborate across jurisdictions. We're excited to see both Canada and B.C. endorse that declaration. I think the time is now for resources so that first nations can actually participate in that implementation. It's up to first nations to show what their rights look like in implementation under the declaration's standards. We need some resources to do that. I think they're in a position to move forward.

I would also echo what the chief forester just said. It was the start of our organization when there were federal resources made available to mitigate the mountain pine beetle. We were able to partner with British Columbia and our leadership to implement our strategies with our communities at that time. It was really unfortunate that we lost those resources and the ability to work on that over the last 10 years. I see this as a strong component of the federal, provincial, and first nations' ability to collaborate on the jurisdictions.

I want to remind everybody that the real challenge for first nations is that we have not had any support for territory-based management work, no recognition as first nations governments on their territories. That's only just beginning. That conversation is just starting now. We're working very well with British Columbia toward partnership and how to do that. We will need a strategy and support from the federal government to contribute to that as well, so we have all levels.

Thank you.

● (1230)

[*Translation*]

Mr. Marc Serré: Mr. Atkinson, you talked about red cedar research. How can the government help universities and indigenous communities do more research? Do you have any specific recommendations on how the government and private sector could co-operate to foster more research in the next 10 or 20 years?

[*English*]

Mr. Keith Atkinson: Yes. Thank you for that.

Establishing a research department or a program from an indigenous perspective has been on our mandate since our organization was created. Our community has provided a mandate to the First Nations Forestry Council. It really came from—and I mentioned it briefly in my opening comments—how do we translate our traditional knowledge into useful information, standards and policies that we can use today and talk about collaboratively for the best management of resources?

It remains a challenge in our communities. I am an indigenous person, but I studied western science in my forestry training. I work mostly in the western science model. It's a real struggle for me to reach to our knowledge keepers, our elders who are leaving this world, and capture that information and then translate it so we can use it in land and resource decisions. We continue to search for that kind of support for research departments from an indigenous perspective that can lead right in and collaborate with the western science model and lead toward decision-making.

The Chair: Thank you very much.

Go ahead, Mrs. Stubbs.

Mrs. Shannon Stubbs: Thank you, Mr. Chair.

Thanks to both of the witnesses for taking the time today to share their expertise and participate in our committee.

Ms. Nicholls, you noted that the rate of spread in B.C. has been faster than at any other time in history. You reinforced the fact that B.C.'s economy is based on forestry. Both of you have reinforced the point about the health, social and safety risks of the spread of the mountain pine beetle in particular. Of course, I know that you both know the impacts in Alberta, particularly in Jasper. Your comments about the increasing spread in B.C. are also reflected in the conclusions of researchers and the park conservation manager in Jasper, who said, “For the last four or five years, it’s been approximately doubling in the area impacted in Jasper.”

There was a colleague at this committee last week, Nick Whalen, who said, “I'm just looking at this map [of the spread of the mountain pine beetle] and I'm asking why we are doing anything.” He also said, “I'm trying to understand why we should not just in some sense leave well enough alone”.

I wonder if both of you would let us know your insight about that. Obviously, there are multiple factors and long-term factors in what is going on with the spread of the mountain pine beetle and other insects.

He also made another comment, wondering “why we are trying to manage a crisis that's unmanageable. Why isn't it better just to say this is what we see the forest looking like when this crisis has passed?”

Do you think that this is a crisis that's not manageable or preventable? What are your views on those comments?

● (1235)

Ms. Diane Nicholls: Would you like me to go first?

Mrs. Shannon Stubbs: Sure.

Ms. Diane Nicholls: Those are interesting comments, and that is a valid debate that is always ongoing when you have catastrophic losses like the ones we've seen. I can tell you a story about what we're dealing with in British Columbia currently.

As I said, we had the mountain pine beetle go through, and at that time the provincial and federal governments made the decision—with the support of the people, obviously—that because British Columbia is so forestry-dependent, we should try to get as much economic value off these dead trees as we possibly could, while at the same time trying to mitigate any potential losses into the future, trying to be on the leading edge of the infestation.

At that time, we didn't know how long the shelf life would be. When I say “shelf life”, I mean the value of the wood when you can get a product out of it, rather than having it rot. We did a salvage program. We did what we call “uplifts”. We increased the amount of cut that was available to licensees to be able to get at the leading edge of the infestation and also get the wealth we could generate off the land base, all for good reasons.

Looking back now—history is 20/20—we know that in some areas it helped very much. In other areas it was very difficult to maintain a level across the land base where we weren't impacting habitat, areas that had other values.

Now we have the spruce beetle coming through, and one train of thought says that we should do the same thing, get the economic value off that land base, which is true. However, as chief forester responsible for forest management, regulations and policies in place, this time around we've said that there are some areas we will not get into. This spread is happening too fast for us to recover everything and try to pretend we can manage it.

We can do a better job of trying to plan for resilience in the future. We can leave some areas in retention, knowing that they're going to be dead and dying, and leave some areas for salvage operations where we can get some economic value. We understand that there are specific valleys that we will not have the opportunity to get into because of timing and infrastructure needs and costs. Let's find some research dollars to evaluate those effects, so when the next epidemic comes through, we know what the right levels of intervention are.

With regard to stopping some of these pests, it's like a wildfire. It's dependent on the climate. If we get long enough and cold enough spells in our climate, it maintains the populations and they don't increase. When we don't get that, which we're seeing with climate change, we see the bugs changing their life cycles and we see an increase. When the host is no longer available, the populations of the pests die down, or they go next door and find the next host.

Is it controllable? I would say that depends on Mother Nature and the weather.

Is there an opportunity to situate the forest so there are more options for us to manage? I would suggest there absolutely is.

● (1240)

Mrs. Shannon Stubbs: Mr. Atkinson, I would welcome you to comment.

In his previous testimony, Bradley also talked about indigenous practices of controlled fires at certain times of the year. You can comment on that if you want, or any aspect you'd like to highlight.

Mr. Keith Atkinson: I absolutely do want to point out that a lot of the dialogue in our communities has been about prescribed fire and traditional use of fire from our communities as a forest management strategy, I suppose you could say. The traditional knowledge and use of fire over the years would have left the forest in a different environment than the intensively managed forest plantation mono-culture that we've created through forest management. It has created that strong environment, as climate change did, to allow the pests to multiply with such an abundance in the host species that it needed.

That conclusion has definitely been talked about. It's very interesting to learn how our traditional knowledge would guide and advise our forest management going forward. That's exactly the kind of work we want to be able to do with our knowledge keepers, and in collaboration with the province and others, about how we do forest management going forward. That's where we want to get to the table to offer that.

It was quite devastating to watch the mountain pine beetle erupt as it did and do the damage that it did. You know, when we start mapping out.... As the chief forester was saying, we were kind of praying for those cold winters to come back to take care of that problem. It wasn't something we could get ahead of, I don't think, at that stage.

Now, with regard to the learning and the decision on how to go forward, really what came out of our communities was the health and safety of our members. We have a distinctly higher risk of fire hazard, being in communities that are much more rural than rural British Columbia towns out on the edge—

The Chair: Unfortunately, Mr. Atkinson, I'm going to have to stop you there.

Mr. Keith Atkinson: Okay.

The Chair: We have to move on to our next questioner, Mr. Cannings.

Mr. Keith Atkinson: Thank you.

Mr. Richard Cannings: Thank you very much to both of you for being here today.

I'm going to start with Ms. Nicholls.

We've had this mountain pine beetle epidemic. We've had the fires in the last couple of years. You talked about lessons learned, about how we can create forests in the future that have better resilience through restoration management techniques.

I'm wondering if you could perhaps expand on some of that in terms of how the replanting programs are going—we obviously have a lot of hectares to replant—and whether there is some science behind how you decide what we're going to replant in those areas. Are we going to replant lodgepole pine? Are we going to replant a mix?

UBC has done a lot of work in projecting what the climate envelopes will be over the next 50 or 100 years. Maybe we should be planting Douglas fir in areas that used to have lodgepole pine and spruce—things like that.

Are we trying to learn from the past to create more diverse forests that will have resilience to whatever pest comes along, whether it's a pine beetle or a fir beetle or a spruce beetle?

Ms. Diane Nicholls: Absolutely. When I go around and speak, one of my comments is that we can certainly learn from the past and what we did, but we can't depend on that for the future because our ecosystems are changing.

In British Columbia, we have fantastic researchers, who have leaped ahead because we now have climate-based seed guidelines that look at the projections about where the climates are changing, how they're changing and where those seed sources should be changing along with them, to make sure that what we're planting comes from a seed source that is a resilient forest for that new climate.

We're also in the throes of creating climate-based seedling selection standards along the same lines. As you said, there are some areas that are going to get drier, hotter and shorter winters. The historical lodgepole pine may not be the best species to put there.

Having said that, British Columbia is a large land base and there is still a significant land base that we'll never be able to plant fast enough. Just because you plant, that doesn't mean that's what you end up with in your crop, because we have lots of naturals that come in as well. It really takes a forest management regime to look at the opportunities for where we plant, where we don't plant, and how we plant.

Some of the things being thought about.... In the areas where we won't get to plant, we're going to have lodgepole pine coming back. Rather than just letting it come in and having it over-dense and having the fuel loads build up, creating the same situation, maybe we have to find the elements that would allow us to space and thin those stands, get into those stands and open them up quite a bit more than we typically have. Prescribed fire is a tool, for sure. As Keith said, we can learn a lot from the elders in first nations on how to apply that, especially with respect to first nations' interests in plants and ecosystems and what they need for their traditional ways.

Going back to the idea that we can look at the past but can't push our future, we also have to look at new economies. When I say “new economies”, I mean using biomass for new products that we haven't traditionally made in British Columbia—things like bioplastics, biofuels, or biofabrics—and trying to bring in those opportunities so that, when we do forest management and we have this fibre that isn't your typical sawlog and can't go into a mill, it has a place to go, so we're not leaving those fuels out there and we can have cleaner air because we don't necessarily have to prescribe fire as much or have these catastrophic fires because of the fuel loads. That is another area that we really need to branch out into in British Columbia, and I think this is hand in glove with making a resilient, healthy forest through forest management.

It's not enough to say that we can do it. We have to have a place for it to go and a continuum across seed selection all the way through to final product.

● (1245)

Mr. Richard Cannings: Thank you.

Mr. Atkinson, one of the points you were making was around safety, around communities, getting out there and thinning the forest so the communities are safer when fires come in. That would also build more diverse forests and perhaps reduce the impact of pests on them. After the Filmon report in 2004, I know that some dollars came in. I think you mentioned that the first nations shared that with municipalities in British Columbia and it helped those programs to go on.

I'm wondering if there is a federal role here where we could provide more funding for that. It seems that we've done very little of what the Filmon report asked us to do, which would provide jobs—not just for first nations, but for all the forest industry—and create fire-safe communities.

Mr. Keith Atkinson: Yes, absolutely. Thank you for bringing that up. I couldn't agree more. I think there have been some attempts from our organization and from our leadership, especially as the forest fires have been increasing in the last couple of years, to seek out a new program and support the investment.

There is ongoing investment. The chief forester can probably speak to that, too. B.C. is working hard to invest in its fuel management development and land-based investment program, so we'll continue to work on that. I'm a strong believer that there's still an increased opportunity. There's a good opportunity for us to increase that work with aboriginal communities to ensure that their infrastructure and their communities become safer. We'd love to see that program advance, from the natural resource risk mitigation and management side, the health and safety side, and the emergency services side that we work on here in the province.

● (1250)

Mr. Richard Cannings: You also—

The Chair: It's bad news, but you were overtime.

Mr. Richard Cannings: I had a question about territory-based work and whether the feds could get in on that. I'll just say it's a good idea.

The Chair: Having heard the question, Mr. Tan is going to finish us off. Maybe we can incorporate that in there somewhere.

Mr. Tan, go ahead.

Mr. Geng Tan (Don Valley North, Lib.): I have a couple of questions for Ms. Nicholls.

How does your current job as the chief forester compare with your previous career on the private side of forest management? Is there anything the government can learn from private sector forest management or vice versa?

Ms. Diane Nicholls: Do you mean with respect to forest health management?

Mr. Geng Tan: Yes, with respect to forest pest management.

Ms. Diane Nicholls: To begin with, most privately managed forest lands in British Columbia are quite small areas in comparison to the Crown lands there, and because they're private lands, they are governed by regulations. I wouldn't say the regulations aren't as stringent, but they're more results-based. They have more opportunities to do things quickly, I would say.

If an outbreak happens on privately managed forest land, the owners are able to address the issue very quickly. Sometimes it works and sometimes it doesn't, depending on the pest and the private lands.

The other focus on private land, of course, is the economic base. They're looking for maintaining their operation and getting the best value out of it, so they do invest in innovation. They invest in doing things differently on the land base in terms of forest management, not doing the same thing everywhere. If there is an outbreak, they shift funds right away to addressing the issue and figuring out what's best to do.

But when you're looking at something as big as the mountain pine beetle, it's very difficult to do anything different from what we do on Crown land. It's really a matter of working together for the best solutions.

Mr. Geng Tan: You mentioned in your presentation the need for better indicators and better monitoring technology. You also mentioned that ground surveys are very effective, but very expensive.

You didn't mention remote sensing technology. Don't you think that remote sensing technology can provide the necessary help to pest management in the forestry sector? As far as I know, remote sensing technology is very advanced and has gained wide application, and not just in forest management. Can you comment on that?

Ms. Diane Nicholls: Yes. I was remiss in not mentioning remote sensing. We do use remote sensing, and that's also part of the aerial overview surveys. The information I have from our folks who work with this is that it offers a level of indication of forest health—whether there is an issue there or not—but the difficulty is in differentiating the cause.

When you're on the ground, you can examine the material and how the tree is reacting. You can peel back bark or whatever and identify the pest and know what reactions are going on. Remote sensing hasn't gotten down to the finite information to be able to say whether this is a burned tree, or a Douglas fir bark beetle tree, or a spruce beetle tree in year one that will be dead in year two. We haven't gotten down to that granularity.

I believe that people with better minds than mine can use the technologies that we have to get that granularity, but we just haven't had the opportunity to see that and forge ahead with looking into it.

● (1255)

Mr. Geng Tan: Maybe we can consider training more volunteers —they are called citizen scientists—so we can get more volunteers working on the ground. Together with technology, like remote sensing, we can get a better result on the forest pest management.

I have roughly two minutes left.

I have one very general question. You can take your time, but of course, I have other questions for you, if I still have time.

Based on your long-term, nearly 30-year career working in the forest sector, especially forest pest management, how well are we doing? What are the challenges we're having or what achievements have we accomplished, compared to those of other countries, such as our neighbours or even countries in Europe? It's a very general question. You can take your time.

Thanks.

Ms. Diane Nicholls: It's a very general question and I'm not sure how to answer that.

Again, it depends. British Columbia is in a unique situation, in the sense that most of our lands are Crown-owned and we have expansive forests out there. As compared to other countries, the challenge involves the magnitude and the number of pests that are happening in our forests, all at one time.

From what I understand, other places have had epidemics before, but it's been an epidemic of this, and then it's gone, and then another one comes along. Historically, it was nice 20 years ago, when we had that opportunity in British Columbia. Right now, what we're seeing in British Columbia are the effects of climate change.

As I said, I really believe that, based on the information and the science I've read. In a sense, we have multiple pests happening at the same time or rolling over each other. That is a real challenge to deal with, because you can do one action for one pest, but it may not be the right action for the next pest. If they're rolling over each other, it's really a matrix decision-making assessment, with the right people in the room and the knowledge base, because we haven't seen this before. Even our researchers are grappling for the answers because they've been able to study one at a time, not this overlap and continuum that we're seeing with forest pests right now.

I guess that's how I would answer.

Mr. Geng Tan: Thank you.

The Chair: Thank you.

We're going to have to stop there. Unfortunately, that's all the time we have today.

Mr. Atkinson and Ms. Nicholls, thank you very much for contributing to our study. We appreciate your time, but we're going to have to adjourn for the day.

We'll see everybody on Thursday.

The meeting is adjourned.