HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Environment and Sustainable Development

ENVI • NUMBER 071 • 1st SESSION • 41st PARLIAMENT

EVIDENCE

Thursday, April 25, 2013

Chair

Mr. Harold Albrecht

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● (0850)

[*English*]

The Chair (Mr. Harold Albrecht (Kitchener—Conestoga, CPC)): I call meeting number 71 of the Standing Committee on Environment and Sustainable Development to order.

We have four witnesses appearing today, all by video conference. I want to thank all of our witnesses for being at their posts and ready and on time for our meeting to start. We will do our best to direct our questions to a specific witness, so we don't waste any time in that regard.

Also, for those of you who have not submitted a written report, it would be helpful if you spoke at a moderate speed, so our interpreters can follow you.

We welcome Arne Mooers, professor of biology at Simon Fraser University; Kim Barrett from Conservation Halton; Doug Chorney, president of Keystone Agricultural Producers; and Mr. Darrell Crabbe from the Saskatchewan Wildlife Federation.

We are going to start with Arne Mooers. Professor Mooers, thank you for being up early this morning.

Dr. Arne Mooers (Professor of Biological Diversity, Department of Biological Sciences, Simon Fraser University, As an Individual): Yes, it is early.

Mr. Chair and esteemed members of the committee, my name is Arne Mooers, and I am a professor of biodiversity at Simon Fraser University. I am also the chair of the Biodiversity and Conservation Committee at the Canadian Society for Ecology and Evolution , a learned society with approximately 1,000 members.

I am honoured to appear before you as an individual with a strong professional interest in the sound management of Canada's biodiversity. I've had this honour on one earlier occasion—in 2009, I believe—in the context of a report that we wrote for the six-year review of SARA, the relevant legislation with which I am most familiar.

Most of the questions directing your study of habitat conservation in Canada are not primarily scientific in nature and so I will be of little direct help. In particular, I have absolutely nothing to say regarding questions (a), (c), or (d), so please don't ask me about them.

Given that I am joined by Mr. Doug Chorney of Keystone Agricultural Producers, I thought I would give one recent example of why we are here this morning. I am referring to a paper that was published less than a month ago in one of the two top science journals in the world, *Science*, by a group of 50 international scientists, including some from Canada. This paper presents very surprising evidence, to me at least, that crop pollination the world over goes better the more species of wild pollinators there are doing the work, and that it is better when wild pollinators are the only pollinators around. Critically, it is better even when honey bee pollinators are brought in to augment the work.

This implies very strongly that the habitat surrounding agricultural lands and the diverse pollinators they support have direct economic benefits to humans on fiscal time scales and that there are no easy substitutes.

I would add that this same issue of the journal has information about the misuse of science and conservation decision-making, something we may want to discuss further, and a letter about the general trajectory of selectively logged forests. The data is piled up day in and day out on these important issues.

With regard to the questions at hand, my thesis is as follows: habitat protection is the *sine qua non* and absolutely critical to effective biodiversity resource management. However, the effectiveness of such management cannot be measured solely by the extent of habitat protection. What I mean there is that success cannot be measured in the number of acres of forest set aside for selective logging or the number of acres set aside for national parks.

Ideally, biodiversity resource management could be monitored with high-level integrators of what biodiversity does on the landscape, i.e., productivity, instability of the soil, the sequestration of carbon, and the net and stable production of things we like and things we need such as wildlife to enjoy, wildlife to hunt and fish, etc. We could then see how different management regimes would affect these metrics, including those that were based on habitat.

There is theory as to how much habitat one needs to keep intact in order to keep the requisite biodiversity components intact on the landscape and what happens when too much is lost, but this theory is exactly the sort of thing that could be misused by policy-makers. While I myself and many of my colleagues see the theoretical point of an ecosystem-based approach to biodiversity management, we cannot advocate for it at the present time.

A recent major report by Environment Canada, written to meet our obligations under the Convention on Biological Diversity and called "Canadian Biodiversity Ecosystem Status and Trend 2010", highlights how poor our knowledge base is at this high level of integration, that of looking at ecosystems. One of its 22 key findings was that the ecosystem research for policy-level assessments was lacking and that this lack hindered the development of the actual report. They say quite a bit more on that. Indeed, data were lacking for things as simple and important to Canada as changes in the extent of coastal habitats and changes to wetlands. This major report could not even offer anything on important aspects of ecosystem function such as pollination. There simply wasn't data there. So we—and when I say we, I mean Canadians, Canada—simply cannot yet measure the status and prospects of ecosystems.

My first recommendation is that the monitoring of ecosystem functions across all landscapes should be a major policy thrust of this and future Canadian governments. As your 2012 report from this committee stated, "Nature is part of Canada's brand". So we'd better find out what's going on.

However, what we can do now is measure clear indicators of sound biodiversity resource management. These indicators include the current status and trajectory of its constituent species. In the majority of cases on land, habitat deterioration is the main cause of threats to species. In fact, about 80% of species are considered at risk in Canada. I expect other witnesses, perhaps Ms. Barrett from Halton, will make this point eloquently.

If we see there are threatened species on the landscape, then most of the time that means that habitat is threatened. If we can manage the habitat so that species are not at risk of being lost, then we are likely managing that habitat responsibly. It is this connection between the integrity of an ecosystem and the services it renders and the fate of the species that produce this ecosystem that constitutes the main reason that I and a great many of my colleagues support the complete implementation of SARA and complementary endangered species legislation at the provincial and territorial levels.

We—that is, many of my colleagues and I—simply do not see any substitute at this time.

Though it may not be what you want to hear, many of us in the academic conservation community feel that implementing strong endangered species legislation may, in fact, be the best medium-term way that the federal government can improve habitat conservation efforts in Canada presently.

Thank you very much, Mr. Chair, and the committee.

● (0855)

The Chair: Thank you very much. I appreciate your being very sensitive to our timeframe. We're giving each of you a 10-minute opening round. I neglected to mention that earlier, so I appreciate your giving us a few extra minutes there.

We'll move now to Ms. Barrett.

Ms. Kim Barrett (Senior Terrestrial Ecologist, Conservation Halton): Thank you very much.

My name is Kim Barrett, and I've been the senior terrestrial ecologist with Conservation Halton for the past 10 years. Before that I was a species at risk biologist with the Ontario Ministry of Natural Resources.

Conservation Halton is one of 36 conservation authorities across Ontario. We're community-based local agencies that deliver services and programs that protect and manage natural resources in partnership with government, landowners, and other organizations.

Conservation authorities are unique to Ontario. We promote an integrated watershed approach, balancing human, environmental, and economic needs, and we're organized on a watershed basis.

In response to your specific questions, the first was about what types of stakeholders are involved in habitat conservation Ultimately the stakeholders involved in habitat conservation are landowners—the individuals, organizations, and corporations that actually own the land. Although their actions may be guided and supported by various intermediaries, it's very difficult to force anyone to improve habitat quality or quantity if they don't want to.

Those intermediaries are fortunately quite diverse and abundant, from the national organizations all the way down to local naturalist clubs and neighbourhood associations.

Conservation authorities across Ontario contribute quite substantially to habitat conservation in a number of ways. First, we collectively own, monitor, and manage about 146,000 hectares of land that provides habitat for many species. Second, we have stewardship programs that provide information and support to landowners and guide them through restoration activities on their properties. Third, we provide outdoor educational programming for almost half a million children each year.

Just a few other examples: many conservation authorities have agreements with our member municipalities to provide technical review planning applications with respect to impacts on natural heritage features and functions. We have staff sitting on species at risk recovery teams and conducting research. Because our mandate spans both aquatic and terrestrial systems, we have a holistic ecosystem-based approach to habitat conservation that few other agencies have.

Although the jurisdiction of conservation authorities covers only about 10% of Ontario's land base, this area contains more than 90% of Ontario's population, so I would contend that our contribution to habitat conservation in this challenging landscape is considerably greater than our geographic reach.

Your next question was related to the availability, sources, and dissemination of publicly available knowledge and expertise on habitat conservation. There are many groups with expertise on habitat conservation that have resources available, mainly online. For example, the Ontario Invasive Plant Council has published guidelines for the control of a number of invasive plant species.

Species at risk recovery strategies and recovery action plans, where they exist, provide direction and measures to improve habitat conditions for targeted species.

Many local environmental organizations, like conservation authorities and Carolinian Canada Coalition, offer workshops to local landowners, offering advice on different aspects of habitat conservation.

Much of the information that's directly applied to on-the-ground conservation efforts is spread by word of mouth on the basis of the direct experiences of others. Lifelong naturalists are keen observers and often provide a wealth of information that surpasses any published study in terms of relevance and practical application.

There is a gap between the primary literature and the applied practice of habitat conservation—and the transfer of this information is often delayed. Most conservation organizations don't have the resources required to access the primary literature, and in reality the primary literature may not provide the answers people are seeking. It's very difficult and expensive to conduct research on habitat conservation on a landscape scale and over a timeframe that's ecologically relevant, particularly with respect to long-lived species such as turtles and some birds.

Ecosystem-scale, long-term research such as that formally conducted in the Experimental Lakes Area is an appropriate void for federal scientists to fill.

In my brief I discussed an Environment Canada report entitled, *How Much Habitat is Enough?* One additional initiative I'd like to briefly mention is the Ecological Monitoring and Assessment Network, or EMAN, which Environment Canada coordinated from 1994 to 2010. This program played a key role in coordinating environmental monitoring efforts across Canada, and facilitated data sharing through the use of standardized protocols and citizen science monitoring. The loss of funding to this program is unfortunate because it's difficult to make decisions about the effectiveness of habitat conservation without monitoring the results of our efforts.

You asked about the most effective habitat conservation groups and the actions they take. The most effective habitat conservation groups are those with broad-based community support, and those that consult widely with affected parties to leverage support from multiple sources.

As a local example, the Cootes to Escarpment Park System in Hamilton and Burlington is a collaboration among 10 government and non-government organizations whose goal is to protect, restore, and connect more than 2,000 hectares of natural lands at the western end of Lake Ontario. This initiative was formed to coordinate management activities on a number of protected areas owned and managed by different organizations, including Conservation Halton, Hamilton Conservation Authority, Royal Botanical Gardens, and the Bruce Trail Conservancy. The area is a biodiversity hot spot with almost one-quarter of Canada's native flora and 50 species at risk. The eco-park system will provide a coordinated network of habitats for both people and wildlife.

● (0900)

The Hamilton Naturalists' Club, another partner in the Cootes to Escarpment Park System, has been a model for habitat conservation efforts since its inception in 1919. The club became the first volunteer organization in Ontario to purchase significant areas as nature sanctuaries in 1962. It now has five sanctuaries of over 300 acres and the support of over 500 very dedicated members.

Your fourth question is related to the definition of conserved land. Typically, conserved land is synonymous with lands that are owned by a public agency or non-government organization with a mandate for conservation, because private landholdings are subject to alteration. The use of conservation easements can be effective, but it's very dependent on having the right landowner for the right property. Easements don't provide the same flexibility as outright ownership of the property, and this may come into play as the status of various species guilds changes over time.

There was a time not very long ago when meadows and grasslands were considered underperforming areas in need of tree planting to maximize their ecological benefits. However, with the recent decline of grasslands species such as the bobolink and eastern meadowlark and a greater appreciation of the importance of the so-called lesser taxa such as butterflies and dragonflies, the best use of some of our conserved areas has shifted.

In Ontario, the concept of habitat banking seems to be emerging as a practical option to support species-at-risk conservation. This is a market-based system whereby someone proposing to remove habitat buys credits from a bank, which in turn restores habitat elsewhere. Its strength is that it provides certainty to the development community while facilitating opportunities to strengthen and support significant core habitats that have a higher probability of retaining their long-term conservation values.

You asked how best management practices and stewardship compare to prescriptive, government-mandated measures. In my opinion, they work together. Most on-the-ground work is accomplished through local stewardship efforts, but these are often facilitated by government-mandated measures and programs, especially when those programs include financial assistance.

For example, both the federal and provincial governments have funding programs for species at risk that provide much needed support for habitat conservation efforts. Best management practices are good, but they're not usually enough to stop the decline of species at risk that are impacted by habitat factors. You need prescriptive, government-mandated measures to go over and above the status quo and actually recover species at risk. For example, the determination of an overall benefit to the species is an integral part of the permitting process under paragraph 17(2)(c) of the Ontario Endangered Species Act.

There are always loopholes and gaps in environmental legislation that can be circumvented with a good lawyer and a lot of money, but if you have a landowner who's committed to conservation, they will do the right thing regardless of what the law requires of them.

Finally, you asked how the federal government can improve habitat conservation efforts in Canada. My first suggestion is to buy more land and set it aside for conservation. They're not making any more of it, and the elephant in the room is population growth, especially in the greater Toronto area. Habitat loss and degradation is by far the leading cause of the endangerment of species at risk. If you look at a map of the highest concentration of species at risk, it overlaps with the most densely populated area in the country, which probably has the smallest representation of national parks. Conservation of particular species and habitats may or may not be compatible with other uses of the land, and informed zoning with ongoing monitoring of protected areas is critical to ensuring that management objectives are achieved.

My second recommendation is to explore the strategic use of habitat banking to fund restoration projects and provide financial support to local stakeholders who are already actively engaged in habitat protection and restoration. The reality is that habitat conservation, particularly in a landscape characterized by relatively small individual private landholdings has to be done at the local level, one landowner at a time. We sometimes encounter landowner fatigue with all the different groups out there representing slightly different interests. To gain the confidence of these landowners, it's imperative that conservation practitioners at all levels collaborate to present a coordinated message.

My final recommendation is to improve science communication to the public so that it is transparent and understandable, and to promote habitat conservation in the mainstream media. Making the link between the environment and the economy is absolutely critical; each one is dependent on the other. There have been significant efforts in Ontario and elsewhere to quantify the true value of ecological goods and services, both to the economy and society as a whole. A full-on cultural shift is necessary to understand and accept the connection of our own well-being to that of the natural world around us.

I'll close with a quote from the Senegalese poet and naturalist, Baba Dioum, who said, “In the end, we will conserve only what we love. We will love only what we understand. We will understand only what we are taught”.

Thank you.

● (0905)

The Chair: Thank you, Ms. Barrett.

You're right on 10 minutes. I appreciate your sensitivity to that. Also, thank you for providing the committee with a written submission. It's very helpful for us to go back and refer to.

We'll now move to Mr. Doug Chorney with the Keystone Agricultural Producers.

Mr. Doug Chorney (President, Keystone Agricultural Producers): Thank you, Mr. Chairman.

Good morning, fellow witnesses and committee members. It's a pleasure to be here.

I am the president of Keystone Agricultural Producers, which is Manitoba's general farm policy group. We represent 7,000 farm families and 19 commodity groups across the province. Agriculture accounts for 5% of Manitoba's GDP. Industries connected to agriculture include food and beverage processing, agri-business manufacturing, value-added processing, and transportation.

Manitoba has a total farm area of 18 million acres, of which about 12 million are cultivated for cropland. KAP policy is very clear on the area of endangered species. KAP believes that farmers and landowners must be fully compensated for any measures required and any losses incurred while protecting endangered species on their property as mandated by legislation.

So who are the stakeholders? Obviously, farmers, agri-retailers, farm-equipment dealers and manufacturers, rural residents, conservation districts, eco activists and environmentalists, hunters, fishers, and first nations.

Who are the relevant stakeholder groups in Manitoba? They would be the Manitoba Habitat Heritage Corporation, the International Institute for Sustainable Development, the Nature Conservancy of Canada, Ducks Unlimited, Delta Waterfowl, and the Manitoba Conservation Districts Association. These groups are responsible for the majority of publicly available knowledge regarding habitat conservation.

So what is the current state here in Manitoba? Since 2005 in Manitoba 6,462 farmers have completed an environmental farm plan representing over 8.8 million acres. The environmental farm plan program promotes the use of land and also provides financial incentives and beneficial management practices to accommodate environmental objectives.

Further to that, in the last year we've begun a process of forming the 4R Manitoba program. Keystone Agricultural Producers, along with the Canadian Fertilizer Institute and the Manitoba Government, are signatories to a memorandum of understanding to implement the 4R nutrient stewardship program and to see this brought into effect not just for livestock producers but also for crop producers across the province who are using synthetic nutrients. The objective is to protect waterways and ecosystems in Manitoba from nutrient runoff.

In 2006 KAP partnered with Delta Waterfowl to deliver the ALUS program to producers in the province. Under ALUS, farmers received payments to protect conservation land. Through this they delivered a variety of environmental services, including those involving wildlife and pollinator habitat, improved water quality, cleaner air, and carbon sequestration. ALUS's success can be seen in Alberta, Ontario, Prince Edward Island, and, most recently, Saskatchewan.

As for agriculture and habitat conservation, farmers are stewards of the land out of necessity for their business. They are also in the best position to manage the habitats they are inhabiting. Habitats on farmland have decreased. Often the most ecologically varied lands are the most productive for farmland. Producers are often put under a microscope for their practices while urban residences can pollute with general impunity.

Government's role is to provide comprehensive and realistic responses to the land-use paradox faced by farmers. They're responsible for creating economic opportunities and feeding populations by farming the land while also being responsible for limiting any losses due to the disruption of the natural landscape. Over-regulation of farmers does not necessarily yield the best results when it comes to conservation efforts. Regulations are often not flexible enough to recognize the significant differences among farming operations. As well, they are often not enforceable at a meaningful level.

I could add that as of 2013 my family has been farming the same land in Canada for 110 years. Over that 110-year period we have not moved and we are still running our crop production sustainably on the lands we originally settled.

Regarding our recommended responses, we have found that education and incentive-based programs have a more positive result, because they allow producers to identify areas of significant opportunity that result in the highest cost-benefit ratio for e-genus provisions. Incentive programs like ALUS and the environmental farm plan program reward best practices and generate a culture of cooperation between farmers, government, and habitat.

● (0910)

We need to attach realistic values to the ecological goods and services, and provide the tools for the promotion of the service. The focus does not have to be on loss of land; rather, it can be on landscape, ecosystem, and habitat-based incentives. We need to encourage a dialogue between stakeholder groups, landowners, producers, and governments. Canada needs to have a working landscape. The bounty and beauty of our country is a national treasure for us all to enjoy. Managed properly, we can succeed in meeting our conservation objectives, while ensuring economic rewards for generations to come. I'm proud of the role agriculture can contribute to the future of the environment.

I would like to discuss ALUS a little bit, though I know this is perhaps somewhat repetitive for the committee because we've talked about it before. Essentially, ALUS pays farmers to reconstruct natural ecosystems. It rehabilitates life support processes for water filtration, purification, and nutrient cycling and carbon sequestration. The natural benefits include clean air and water, and habitat for fish and wildlife and species at risk, and sustainable food production on a working landscape.

Under ALUS, farmers conserve and restore essential features, such as wetlands, creeks, shorelines, native upland grasses, trees, and unique habitats such as tallgrass prairie. They help restore declining biodiversity for amphibians and native pollinated species.

While each ALUS project will have unique characteristics, the following operational principles are common across the program:

First, it's voluntary. Farmers choose to participate. They will be reimbursed a portion of their start-up capital costs, usually ranging from 50% to 100%. They will in most cases also receive an annual payment for performance when completing the program delivered.

Second, there is capping. Often farmers will enrol their cultivated land, but this excludes forested land areas because they would not be directly affected.

Third, it's integrated within the system. Every effort will be made to integrate projects with existing programs, such as crop insurance, extension services, a county's official plan, water source protection, incentive programs for BMPs, public and private conservation programs.

Fourth, it's targeted. Environmentally sensitive areas will be a priority for stewardship. Fragile or marginal lands may be retired from cultivation or farmed in a different manner to benefit the environment, as identified by the landowner through the environmental farm planning process. Natural features such as wetlands and associated upland areas, or other combinations of unique ecological services are preferred.

Fifth, it's flexible. Farmers will sign a three-year agreement; however, the ability to opt-out every three years will remain and give flexibility to the farmer to adapt to changing economic conditions. Reimbursement of payments made for start-up costs and ecological services will be required in such cases.

Lastly, regarding trade, the ALUS project must be production neutral, so it will comply with trade rules.

That concludes my presentation.

The Chair: Thank you very much, Mr. Chorney, and thank you for re-emphasizing the alternate land use strategy for many of us on the committee. There's a rotation of committee members, so it's always good to be reminded of the different programs that are out there, that all of us may not be aware of.

We move now to Mr. Darrell Crabbe, the executive director of the Saskatchewan Wildlife Federation.

● (0915)

Mr. Darrell Crabbe (Executive Director, Saskatchewan Wildlife Federation): Good morning.

I'd like to first of all thank you for the opportunity to address the standing committee. Perhaps I can give you somewhat of an on-the-ground perspective on habitat securement and other habitat programs.

The Saskatchewan Wildlife Federation represents 32,000 members and 121 branches across Saskatchewan. We are certainly predominantly a rural organization, with 93% of our membership coming from outside of the two major cities in Saskatchewan, Regina and Saskatoon.

Our habitat trust program began 32 years ago. As of this year, we currently hold title to 62,000 acres of critical wildlife habitat in our province. We have conservation agreements on an additional 300,000 acres with landowners. We hold conservation easements on approximately 9,000 acres in the province. We also manage many of the other parcels for other NGOs and the provincial government. And we are heavily engaged and partners in the ALUS program here in Saskatchewan.

In response to your questions, we would refer three—(a), (d), and (e)—to other sources for answers, but we would like to address question (b): "Does Canada have publicly available knowledge and expertise on habitat conservation? What are the sources of this information and how is it disseminated?"

There is a great deal of publicly available knowledge and expertise on habitat conservation on the landscape. I would, however, state that the general consensus is that the federal government only recognizes national organizations in this field and not those who operate at the provincial level.

To question (c)—"What are the most effective habitat conservation groups or organizations, and what actions do they take?"—I would of course focus in on provincial organizations. Our experience shows us that conservation efforts are much more widely supported at a community level, that promotes ownership, than the national program, that does not engage those communities or its constituents.

Question (f) asks, "How can the federal government improve habitat conservation efforts in Canada?" First of all, we feel that if they were to ensure that future conservation programs were developed to provide access at the community level, not just national or international organizations whose conservation tends to not be shared by all residents...be able to provide realistic protocols for the funding opportunities or models, and provide realistic timelines for approval and delivery of the funding.

I might comment that the focus of this committee is described as a focus "to find ways in which the National Conservation Plan can complement and enhance current habitat conservation efforts". It's interesting to note that the Saskatchewan Wildlife Federation has ceased trying to access federal funding in our habitat conservation efforts, either terrestrial or aquatic.

Our previous experience of what we would consider unreasonable red tape, multi-level approval mechanisms, and decision timelines that were measured in months, not weeks, made any funding opportunities unrealistic for our organization to contemplate in our conservation programs.

We would comment that this wheel does not have to be rediscovered, as there are existing programs, with protocols in place to ensure program compliance and results, in effect in Saskatchewan, and they have been for the last 30 years. It's called the Fish and Wildlife Development Fund.

This system provides the necessary approval timelines and guidelines to make it a very efficient and effective program. In addition, because this program is delivered from a grassroots community level, we've recognized that we were able to secure habitat at a greatly reduced cost compared with national organizations, and that the members of the community accept the ownership, appreciate, and add an added layer of protection to these habitats.

We appreciate the opportunity to address this committee on the fundamental quality of life issue for the residents of Saskatchewan and Canada.

One last point I might make is that we're also currently involved in a very large connectivity model study here in Saskatchewan, being funded by a Go Green program from the Province of Saskatchewan. Again, the ALUS program seems to be doing very, very well in our province.

Thank you.

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

At this point, I want to thank our technical people, our IT people, for great video access today. I'm not sure who all is responsible, but I think it's important that as committee members we acknowledge their contribution to the success of our meeting today.

I'm going to move now to seven-minute rounds of questions from our members of the committee.

I would remind you, members, to please address each question to a specific witness so that we don't waste time deciding which person will respond. Obviously, if you want to switch between witnesses during your seven minutes, that's fine.

We're going to begin with Mr. Sopuck.

Mr. Robert Sopuck (Dauphin—Swan River—Marquette, CPC): Thank you very much.

Many thanks to our witnesses.

Mr. Crabbe, you talked about the Fish and Wildlife Development Fund. Where does that money come from?

● (0920)

Mr. Darrell Crabbe: Thirty per cent of all licence fees for hunting, angling, or trapping are put into the fund. The fund has a steering committee made up of seven representative organizations in Saskatchewan.

The fund has in it three different pillars, if you like: habitat securement, fisheries enhancement work, and public education on habitat and fisheries and outdoors.

Mr. Robert Sopuck: I appreciate that, and again it's important for the committee and Canadians to know that it's the hunters and anglers stepping up to the plate with money to do habitat conservation that's of benefit to all of society. I feel very strongly that the role of hunters and anglers in conservation, as the primary conservationists, is often neglected. I'm sure you would agree with that, Mr. Crabbe.

Ms. Barrett, you talked about the land purchase of critical habitat as being an important component of conservation programming. As you know, our government is committing between $20 million to $25 million a year to both The Nature Conservancy and Ducks Unlimited to do just that.

Do you support that program, Ms. Barrett?

Ms. Kim Barrett: Certainly I would support any program that funds purchases of ecologically significant lands, particularly in southern Ontario where land prices are just so astronomical. We can use any help we can get on the financial side of things for securing these properties.

Mr. Robert Sopuck: I know Mr. Chorney has some concerns about that particular program, as do those of us who own land. Nevertheless, it's an example of the federal government basically putting its dollars down and generating some significant results.

Ms. Barrett, you talked about the role of government in terms of prescriptive programming. But government programming can either be incentive-based or regulation-based. Given that you work mostly on a privately owned landscape with the conservation agencies that you represent, which of the two do you prefer, the regulatory or the incentive approach?

Ms. Kim Barrett: I think there's really room for both and it depends on the type of landowner that you're talking about. Typically with the farming community, incentives are a much better way to go. Farmers already know what's happening on their properties. Many of them have been stewards of the land for years. They know what they should be doing. They want to do the right thing, but oftentimes the only piece of the puzzle that's missing is the financial resources to actually implement habitat conservation projects on their properties.

There is an important piece, though, with the regulatory approach. I guess the first thing is the listing process for species at risk. That's a trigger to open up funding pots to landowners who access funds that they wouldn't have available to them if they didn't have species at risk on their property—for certain pots of money, anyway.

Mr. Robert Sopuck: Thank you.

Mr. Chorney, I'd like to pursue the regulatory versus incentives approach. Doesn't the regulatory approach under SARA, if it were fully implemented, and even in the situation where it is now, threaten property rights and make owning habitat for a native species on your farm, for example, a liability as opposed to an asset?

Could you comment on that, Mr. Chorney?

Mr. Doug Chorney: Yes, I would agree with that conclusion. It would be a concern and a liability going forward if we implemented the full measures. We need to have a practical approach to conserving habitat that makes sense to the people who are operating that landscape and responsible for it.

Mr. Robert Sopuck: Just to pursue that more, how would we then turn endangered species habitat on privately owned land into an asset for the landowner as opposed to a liability? How do we do that?

Mr. Doug Chorney: You would have to impose some valuation on providing that service. The ALUS type approach where the landowner has a motivation to provide that habitat financially would be the best incentive to see that happen. It would then become an asset rather than a liability. We do know there are tourist opportunities with habitat that can be accessed by people coming to your farm. That's an important economic opportunity.

● (0925)

Mr. Robert Sopuck: Given the federal role in agricultural policy in Canada, Mr. Chorney, would you support a change in agricultural policy so that incentive-based conservation programming on the privately owned landscape becomes a part of Canada's agricultural policy?

Mr. Doug Chorney: I would. I think that would make a lot of sense. We do draw a lot of comparisons to the environmental farm planning process and how we had policy that drove that process. It was a relatively new thing a dozen years ago for producers to engage in environmental farm planning but it really shows how, through enforcing the proper policies and incentive-based systems, you can change the way people operate their farms and manage their environments.

Mr. Robert Sopuck: Given that you talk to other farm leaders from across the country on a regular basis, do you think there's widespread support among the farm community and organized farm groups for an incentive-based conservation program?

Mr. Doug Chorney: Most certainly. I know that's the case. The ALUS program was begun somewhat in Manitoba and has become popular across the country. I often meet not just with other farmers but also with bureaucrats in the civil service. I know the deputy minister from Prince Edward Island was commenting to me how they have really modelled what they're doing in that province on what they learned from Manitoba. It's definitely a widespread and, I think, popular idea.

The Chair: Thank you.

Thank you, Mr. Sopuck, Mr. Chorney, and our other witnesses who responded to questions.

We move now to Mr. Pilon.

[*Translation*]

Mr. François Pilon (Laval—Les Îles, NDP): Thank you, Mr. Chair.

[*English*]

The Chair: Let me clarify something for all of the witnesses. You may need translation, or maybe you're totally bilingual. If you are, fine, but Mr. Pilon will probably be asking his question in French.

[*Translation*]

Mr. François Pilon: Thank you to all the witnesses.

I would like to ask Ms. Barrett a question first.

Your website indicates that Conservation Halton's watershed is made up of rich wetlands. During the committee's last meeting, one of the witnesses told us that it takes years for destroyed wetlands to regenerate naturally. We know that these wetlands are also very rich because of the biodiversity that can be found there.

When we talk about habitat conservation, do you think that wetland conservation should be a priority in the conservation plan?

[*English*]

Ms. Kim Barrett: Yes, I do believe that wetland conservation should be a priority. There are a number of species that depend on wetlands for all or a portion of their life cycles—amphibians, ducks, insects, you name it, the list goes on and on. In southern Ontario, the rate of wetland loss has been absolutely staggering. So I think it's important to focus on habitat conservation of wetlands, particularly as they also provide a lot of important ecological goods and services—filtering the water, flood attenuation, etc. You get a lot of bang for your buck by investing in wetland conservation.

[*Translation*]

Mr. François Pilon: Thank you.

Mr. Crabbe, you received 10,000 acres of land and have acquired another 50,000 for habitat conservation efforts.

What has the outcome been? Have you achieved concrete results?

[*English*]

Mr. Darrell Crabbe: Is the question, do we measure the results of our habitat securement?

Mr. François Pilon: Yes.

Mr. Darrell Crabbe: Yes we do. Every two years we do a monitoring on our properties to see how effective they are. With the weather cycles here in Saskatchewan, they can.... As an example, last year, it was a very dry year and, obviously, you've probably heard that this year is going to be a good year for building arks in our province. So we do it every two years to try to get an understanding on how those properties are providing for biodiversity and species at risk.

[*Translation*]

Mr. François Pilon: Are those results positive or negative, for the moment?

● (0930)

[*English*]

Mr. Darrell Crabbe: Actually, they're excellent. We're very happy with the "building into our landscape" model that we've started here with the Go Green process, and we'll actually be monitoring our lands every year for the next few years. But initially we're very, very excited about the abilities or the functions that these properties are creating.

[*Translation*]

Mr. François Pilon: Thank you.

I will go back to Ms. Barrett.

You website states that the protected conservation lands in the watershed are a significant natural heritage that needs to be protected for future generations to enjoy.

In the last two committee meetings, at least two First Nations groups basically made the same points, not just about protecting land, but also about how to develop natural resources, with a goal of having the development process done in a way that ensures the continued existence of forested areas, natural resources, and the fish and wildlife found there.

Do you think a habitat conservation plan must try to attain those goals to be truly effective?

[*English*]

Ms. Kim Barrett: I would answer that question by talking about the way we do land use planning in southern Ontario.

Typically, municipalities will require the preparation of a subwatershed study. That's a broad-based idea that looks at multiple aspects of the landscape—terrestrial ecology, aquatic ecology, topography, geology—and it's a multi-disciplinary study that combines all of the ecology disciplines with engineering, looking at servicing and taking an ecosystem approach to planning the best possible use for those lands.

Ideally, the process works by setting aside a natural heritage system, identifying core areas that provide key habitat for species, and ensuring that the system is connected in such a way that once an area urbanizes those natural connections remain. Once the natural heritage system is identified, we can move forward with options for development of the lands.

At a local level, we already are stepping back and taking an ecosystem approach to land use planning.

[*Translation*]

Mr. François Pilon: My next question is for Dr. Mooers.

As a biology expert, what do you think the most effective means of conserving habitats are?

[*English*]

Dr. Arne Mooers: Bonjour.

I think you've heard about the most effective means for conserving land. You need regulation, you need buy-in, you need flexibility—you need all these things.

As a biologist, I think you have to measure the outcome and you need to have a backstop of regulation. Those are the two main things, I would say.

[*Translation*]

Mr. François Pilon: You just mentioned regulations, and I would like to know how you think the federal government could improve measures to conserve Canada's habitats.

[*English*]

Dr. Arne Mooers: I think my opening statement was quite clear, that without the effective implementation of endangered species legislation, SARA, we will not achieve the goal your committee has set, which is to meet CBD targets, Aichi targets that show proper stewardship of biodiversity.

The Chair: Thank you, Mr. Pilon.

We'll move now to Mr. Woodworth for seven minutes.

Mr. Woodworth.

Mr. Stephen Woodworth (Kitchener Centre, CPC): Thank you very much, Mr. Chair.

My thanks to the witnesses. The subject at hand is very complicated and endlessly fascinating.

I'd first like to direct some questions to Ms. Barrett. Being from the neck of the woods I hail from, I want to tell you that I'm very much a fan of what the Grand River Conservation Authority does there. I believe they are really a world-leading organization in the conservation of habitat, right in the middle of an extremely metropolitan area. I'm sure your organization does comparable work, and so I want to thank you for that.

I want to ask you about the Environment Canada publication mentioned in your submission, *How Much Habitat is Enough?*, because it responds to our question (b), about what publicly available knowledge and expertise exists. I've already taken too much time, so I want to ask you, if you could, to concisely describe for me what Environment Canada does in that publication.

● (0935)

Ms. Kim Barrett: The original publication came out in 1998. It was initially targeted to the Great Lakes areas of concern. It laid out specific targets for things such as forest cover, the percentage of stream length that's naturally vegetated, the percentage of wetland cover—those types of targets. The idea was that if you achieved those targets for coverage of different habitat types, you would maintain the full suite of biodiversity in those areas.

The guidelines were updated in the early 2000s. The most recent version came out just a few weeks ago, in fact; they've been updated through three editions.

As we use them, when we're doing watershed planning we look at those guidelines to think about what kinds of targets we should be looking at when doing restoration work. These guidelines have been really well received.

Mr. Stephen Woodworth: Does it also provide any monitoring or scientific guidance as to measures that might be undertaken to achieve those targets?

Ms. Kim Barrett: It's essentially a literature review of best practices that outlines different case studies: where those percentages have been achieved, what kind of biodiversity you can expect.

There are a few caveats. The guidelines are focused on populations that are of interest to the federal government—migratory birds and those types of things. But there are some good nuggets in there for wildlife that is under provincial jurisdiction as well—reptiles and amphibians, those kinds of things.

Mr. Stephen Woodworth: Excellent. I see that you describe this as an extremely valuable resource, and I'm always glad when the government, and particularly Environment Canada, gets that kind of recognition and credit.

I want to next ask you about conservation agreements, which as nearly as I can see are called in the Ontario legislation "stewardship agreements". Am I on the right track in equating those?

Ms. Kim Barrett: I think they're called different things, depending upon which organization you're dealing with.

Mr. Stephen Woodworth: In particular, I notice that the Ontario legislation, in subsection 16(3), indicates that those agreements "may authorize a party...to engage in an activity...that would otherwise be prohibited...".

When I was hearing your comment about "prescriptive" and "management" and "best practices" reinforcing each other, I thought of that and I wanted to ask you: do you think that the ability to be exempted from a prohibition would encourage private stakeholders to enter into stewardship agreements?

Ms. Kim Barrett: It might, if they were to have the flexibility to do things differently. Flexibility can be somewhat a double-edged sword, because on the one hand you don't want to be locked into being required to manage your property in a prescribed way. I gave the example of grassland species. Grasslands used to be considered areas that were woefully in need of being planted for forests, but now those habitat types have come to be appreciated for conservation values in their own right.

So it's a bit of a double-edged sword. It's certainly more attractive to the landowner, I would think, to maintain a bit of flexibility. On the other hand, if the habitat values that were meant initially to apply are still relevant, you wouldn't want those values to be changed. It's a double-edged sword.

Mr. Stephen Woodworth: It is a situation-specific case, but what I wanted to get to is that the federal Species at Risk Act does not contain an equivalent provision that would allow someone to be exempted, if they entered into a conservation agreement; the federal legislation is lacking that incentive. I wonder whether you would agree with me that it might be a useful improvement to the federal Species at Risk Act, if we were to provide the incentive to enter into a conservation agreement, to permit some exemptions from prohibitions where it was suitable to do so.

● (0940)

Ms. Kim Barrett: It would probably assist with the uptake. I would draw a parallel between SARA and the provincial Species at Risk Act, because the original provincial Species at Risk Act legislation was passed in 1971 or 1973 and was essentially a one-and-a-half-page document that said, Thou shalt not mess with the habitat of endangered species. The new act that came out in 2007 recognized that such a degree of inflexibility was completely unworkable. The new Ontario legislation introduced in 2007 contains provisions for permitting and flexibility for different organizations and has been widely viewed as a vast improvement over the original legislation, which was too rigid.

Mr. Stephen Woodworth: Dr. Mooers, do you agree that it would be an improvement to the federal legislation to introduce the same kind of flexibility that was introduced into the Ontario legislation?

Dr. Arne Mooers: I would answer that it's too early to tell whether SARA would need any new provisions. It must be fully implemented first on the ground, for probably a decade or so, and then we can evaluate what might be required.

The Chair: Thank you, Mr. Woodworth.

We'll move now to Mr. McKay for seven minutes.

Hon. John McKay (Scarborough—Guildwood, Lib.): Thank you, Chair.

As you know, I'm substituting here for Kirsty Duncan, who has forgotten more about environmental initiatives than I'll ever know.

I'm actually asking her questions, and I'll direct my first question to Dr. Mooers. The question is with respect to the performance measures. Could you tell me what would be the best possible study design that would allow us to infer the comparative effectiveness of the stewardship initiatives mandated by government?

Dr. Arne Mooers: No, Mr. Chair, but I could offer some names for a small committee that could come up with a design that might be useful.

Hon. John McKay: Thank you for that.

Do you know whether any study has been conducted, and if not, how far away from this ideal design are the studies that have been conducted?

Dr. Arne Mooers: I just need some clarification—a study for what exactly?

Hon. John McKay: I'm at a little bit of a loss to tell you myself, only because these questions are ones that Kirsty prepared for today. I'm assuming that these are environmental studies with respect to conservation.

Dr. Arne Mooers: The previous question referred to comparing different stewardship approaches to conservation, is that correct?

Hon. John McKay: That's right: what would allow us to infer the comparative effectiveness of stewardship initiatives of government-mandated measures?

Dr. Arne Mooers: I could get my research assistant to do a literature search this morning if that would be helpful. I don't know of any particular studies.

Hon. John McKay: Regrettably I'm in a situation where I'm asking someone else's questions, so I'm not fully informed of the nuances and the subtleties of the question. But if you could respond to the committee through the committee chair with any helpful information, I'm sure that Kirsty Duncan would appreciate it.

The third question is, in your view, to what extent have the habitat provisions of SARA succeeded, say on a scale of zero to dismal failure? On what evidence are your conclusions based?

Dr. Arne Mooers: I think the committee is well aware that critical habitat designations under SARA are well behind schedule. I believe there are only seven action plans in place, given that there are over 300 federally listed species. I think we have to give the implementation with respect to the habitat provisions a D or an F, so I guess that's a dismal failure. Again, that is why we are calling for full implementation so we can evaluate the effectiveness of SARA. When we do have the full implementation and we can see what those habitat designations are and how they work on the ground, then we may be able to speak to some of the other members' concerns about how SARA might or might not be improved.

● (0945)

Hon. John McKay: You mentioned something about seven action plans. Give me some scale of what that actually means. There are seven action plans when in your view there should be how many action plans?

Dr. Arne Mooers: That's a fairly difficult question because you have to count backwards through all the timelines, but there should be hundreds.

Hon. John McKay: Literally hundreds?

Dr. Arne Mooers: Literally hundreds, yes.

Hon. John McKay: Really? Okay. Thank you.

My next question is for Kim Barrett. It's about the recommendation for research on habitat conservation, both on a landscape scale and an ecologically relevant timeframe. Do you have a recommendation that you specifically wish to put forward with respect to conservation?

Ms. Kim Barrett: I think I would just like to highlight that the federal government is really in the best possible position to do these types of landscape-scale studies over a long timeframe. In the academic world you're dealing with grad students who may do two to four years of research and then they move on to the next project.

But the federal government really has the capacity to do these longer-term studies that look at changes over time. I think the examples I mentioned were turtles and birds. So for turtles, there's one endangered species called the wood turtle that doesn't reach sexual maturity until it's 20 years old. They can live to be up to 50-some years old. So if you're making changes to their habitat, it may take several generations of those turtles before you can find out whether or not it was actually effective. That's the type of long-term data that is almost unheard of in the scientific community.

Hon. John McKay: Aside from the long-term data set, which requires a significant time commitment, do you have a specific recommendation for a funding commitment?

Ms. Kim Barrett: I guess it could be done within the government, and also with longer-term allocations to others. With most of the funding programs out there, you can apply to them on a multi-year basis. But it's not usually a 40-year timeframe—three to five years is considered a long-term study. So I guess making those longer-term commitments is the critical piece.

Hon. John McKay: So the issue is longer-term commitments. What about it as a funding envelope, also with respect to the form of application? Because from time to time—not necessarily in this context, but in other contexts—you hear of the eternal frustrations of applying for grants, which drives the researchers absolutely crazy to the point where they just give up. The sense I've been getting from a number of sources is that's exactly what they want you to do: give up, walk away, and do something else.

The Chair: A quick response—

Ms. Kim Barrett: Perhaps a better approach would be to reach agreements with partners who would do this research, rather than having them go through an annual grant application process. Perhaps they could collaborate on this kind of thing and sign agreements to do the research over the long term, rather than having this endless cycle of applying for funding year after year.

The Chair: Thank you, Mr. McKay.

We'll move now to Monsieur Choquette.

[*Translation*]

Mr. François Choquette (Drummond, NDP): Thank you, Mr. Chair.

I would like to thank the witnesses for taking part in this committee meeting, and for their interest in habitat conservation and conservation in general.

As you may know, this study is part of a broader plan, our national conservation plan.

Today is an interesting day, since we are going to be debating an NDP motion in the House of Commons on fighting climate change. Some Conservatives no longer believe that climate change is a threat to the planet and habitat conservation, among other things.

In that respect, I would like to know whether you think climate change is a threat to habitat conservation and if it should be one of the priorities of the report that will follow our study.

If you have any recommendations to make on the fight against climate change, I would be happy to hear them.

We could start with Dr. Mooers.

● (0950)

[*English*]

The Chair: Thank you.

Dr. Mooers.

[*Translation*]

Dr. Arne Mooers: Good morning.

[*English*]

Climate change is the single largest threat to Canada's well-being over the medium term—I'd like to state that absolutely unequivocally. It also makes this deliberation and a national conservation plan very difficult, because we have to plan for the future. It's a very complex issue and must be taken into account when doing the planning. With regard to specific recommendations, I think having a separate study on climate change and how it's going to affect the stewardship of biodiversity in Canada would be a good step forward.

[*Translation*]

Mr. François Choquette: Thank you very much.

Ms. Barrett, what do you think?

[*English*]

Ms. Kim Barrett: Climate change is particularly scary for those of us doing conservation in very fragmented landscapes, because you're essentially depending on having sufficient north-south connectivity so that species can migrate north as they need to. When you're dealing with a fragmented landscape, if those connections are broken, there's a pretty good chance those species won't be able to move quickly enough to survive.

At a conference a few years back I saw a presentation that looked at modelling different vegetation communities. The modelling showed that, essentially, new communities would be created that didn't even exist then. Ultimately, we have no idea what the species complement will be, and in turn, we don't know what types of wildlife those different habitats will support.

[*Translation*]

Mr. François Choquette: Thank you very much.

Mr. Chorney, what is your opinion?

[*English*]

Mr. Doug Chorney: Thank you.

Yes, I think it's pretty fair to say that, no, there's no controversy about the fact that the climate is changing. The causes of climate change could be subject to great debate and controversy. Do we need to be cognizant of how this affects our environment as farmers? Absolutely. We think about this all the time. I have seen cropping patterns changing across the north-central plains of North America directly as a result of climate change.

Do we need to have climate change in the back of our minds at the time of deciding how to deal with our environment and conservation planning? I think we do. How much our activities in Canada will affect climate change on a global basis is another point of great debate. We should lead by example, but it's pretty evident that developing countries are contributing much more to greenhouse gas emissions than we are here in Canada.

[*Translation*]

Mr. François Choquette: Mr. Crabbe, I only have 30 seconds left, but I would like to hear your comments as well.

[*English*]

Mr. Darrell Crabbe: I believe that with climate change, our focus and our connectivity model of research—the Go Green program that we're doing here in Saskatchewan—is trying to escalate or speed up the timelines to secure habitat, to provide the connectivity opportunities, as mentioned by a couple of the other speakers here before. For us in Saskatchewan, to be able to secure wetlands at this particular junction is very, very important.

The Chair: Thank you, Mr. Choquette.

We'll move now to Mr. Lunney for five minutes.

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

I want to pick up on what Mr. Mooers said. You talk about SARA being fully implemented. In reference to the farm plans, we talked about flexibility. I want to explore a little bit with you whether any habitat conservation strategy should ever focus on just one species, or whether it should be ecosystem-wide.

● (0955)

Dr. Arne Mooers: That's a very interesting question. I think if there's a single species at risk, most of the time it points to there being something wrong with the habitat in which it lives. I think the idea of concentrating at the policy level on areas where there are many species at risk is not necessarily a bad idea because that suggests that those habitats are especially at risk themselves, but we do not see at this time, as I said in my opening statement, a practical way to do ecosystem-based conservation at the regulatory level. Certainly, you've heard lots of very important and very good examples of how planning can be done at the watershed level, but the backstop has to be single species/endangered species legislation.

Mr. James Lunney: On the same front, then, how do you avoid the challenges of harming habitat or other species as you carry out the recovery of a single species?

Dr. Arne Mooers: You are well aware that there can be conflicts, and those have to be mediated. But we must bear in mind that those species would not be at risk, these two competing species, if we had managed the landscape properly to begin with. What I think is lost in some of these discussions is the fact that we're dealing with endangered species because of things, most of the time, that we have done to the landscape. So if we can manage the landscape effectively—and as I said, you've heard from our other speakers some very good examples of how we can manage the landscape—then we won't have the problem of conflicts between management protocols for individual species on the landscape.

Mr. James Lunney: Thank you.

We're both west coasters, I'm Nanaimo—Alberni, so I go from Georgia Strait all across to Tofino, Ucluelet, and Bamfield.

You'd be well aware that, just as an example of conflict, we reintroduced the sea otter not too many years ago, which is actually doing very well on the west coast of Vancouver Island. However, we had aboriginal folks here the other day, and one of them brought up the clam beds that had been there for thousands of years. They had raised clam beds, which would be an early form of aquaculture, but with the sea otters being very, very prolific—I've seen them on the west coast at Barkley Sound and up and down the island, even on the east side in Georgia Strait—a lot of them are coming back now and they're very successful at reproducing. The first nation word for them in the Nuu-chah-nulth language is literally, “he only eats the best”. They go in and take the most sexually mature among the shellfish and they're actually causing significant damage to first nations traditional clam beds and aquaculture projects. Then there's Dungeness crab on the west coast. They tell me out in Clayoquot Sound that the sea floor is littered with large male Dungeness crab shells. Are you aware of that particular situation?

Dr. Arne Mooers: Yes, we are aware of these perceived conflicts between particular species and ourselves. We've seen that with bison, we've seen it with grizzly bears, and we've seen it with cougars on the east coast. We know the story.

Mr. James Lunney: Going back to the first nation word for it, “he only eats the best”, first nations are actually thinking that we may need to call for a cull in some instances of sea otters because they're causing very significant damage.

I wonder if you're aware of another one on the west coast, the Bamfield Huu-Ay-Aht community's abalone project expansion, involving species at risk, federal investment through Fisheries and Oceans with the Bamfield Marine Sciences Centre, and five west coast universities.

In fact, if I'm not mistaken, Simon Fraser's involved in that as well. With great scientific endeavour, they found a way to raise these very valuable animals at risk in an aquaculture setting. You could stain the shells by feeding them a different coloured kelp, so they could be distinguished from a natural animal and then you sell them.

We lost the program because COSEWIC could not find a way to get their heads around permitting for a species listed as being at risk to allow them to sell it into the market to make the program sustainable. Then you could also release excess animals back into the wild. When they eat the natural kelp, they turn back to a natural colour and they could actually help a species at risk. We lost that program because of a rigid regulatory program. Are you aware of that?

● (1000)

Dr. Arne Mooers: I am aware of it, yes.

Mr. James Lunney: Can you comment on that, please, because that seems to be the program that you're encouraging us to implement wholesale?

Dr. Arne Mooers: That is the program that I'm encouraging you to implement wholesale, and as I've said before, after it has been properly implemented and we can see not just one or two examples, then we can start to have a discussion about what changes should be made.

Mr. James Lunney: Do I have time for one more?

The Chair: One more minute.

I'm sorry, Mr. Lunney, you're over the time. I was thinking it was seven minutes, my apologies. You were a little over.

We're going to move now to Monsieur Jacob.

[*Translation*]

Mr. Pierre Jacob (Brome—Missisquoi, NDP): Thank you, Mr. Chair.

I would like to thank the witnesses for appearing this morning.

My first questions are for Dr. Mooers.

In December 2012, you and your colleagues sent an open letter to the Prime Minister. In the interest of people who might not have read it, could you explain what it contains, tell us how many scientists signed it, and tell us how the Prime Minister responded?

[*English*]

Dr. Arne Mooers: I should clarify that the letter has been signed but not yet sent to the Prime Minister. I do have it in front of me. It was signed by approximately a thousand scientists across the country. The letter is openly available, but it hasn't been delivered yet.

If I look through it very quickly, the letter states pretty much the position that I've been giving here. We are concerned about rumblings from the federal government about opening up the act and we are asking it to first implement the act fully and then have a proper evaluation of its effectiveness. That is the content of the letter.

[*Translation*]

Mr. Pierre Jacob: Okay.

What do you think the federal government could do to increase habitat conservation efforts?

Again, my question is for you, Dr. Mooers.

[*English*]

Dr. Arne Mooers: I don't think I am the person most suited to answering that question among the people here today. I think you've heard very good discussion and good examples of the sorts of things that different levels of government can do. I think it's very important that the federal government create a culture of conservation. Many of us in the conservation community are worried that that culture is not being created at the federal level.

So in terms of education, in terms of visibility, in terms of discussion, in terms of the rhetoric, just in terms of the mindset, many of us feel that the federal government is not in step with the citizens of Canada on this file.

[*Translation*]

Mr. Pierre Jacob: Thank you, Dr. Mooers.

I know you have lived and worked in a number countries. You have no doubt noticed significant differences between Canada's environmental policy and that of other countries. What approach do you think is preferable and why?

[*English*]

Dr. Arne Mooers: That is a very interesting question. Thank you for it.

When I worked in other countries, Canada was seen as a leader in conservation. Brian Mulroney signed the Convention on Biological Diversity before anyone else, before any other OECD countries. We were very much at the forefront. I think, as the committee knows, that international perception has changed dramatically.

I think the question was what is the best way and whether we could do some comparisons. I don't want to speak out of hand here. I think there are countries that seem to be taking the issue more seriously. I think Australia has a remarkable endangered species law, though it's very new, and we don't know how effective it is on the ground. They are very much ahead on the monitoring and in their understanding of their biodiversity.

I think some of the other more developed countries.... The United States for instance, has a much stronger culture of conservation than we do, both at the private and the government level. Europe is in a different boat because they dealt with their biodiversity long ago by getting rid of it; they don't have much left to manage. They look to places like Canada with envy and consternation because they know we are stewarding a lot of biodiversity for the rest of the world. So we are in a unique position.

● (1005)

[*Translation*]

The Chair: Thank you, Mr. Jacob.

[*English*]

We move now to Mr. Storseth.

Mr. Brian Storseth (Westlock—St. Paul, CPC): Thank you very much, Mr. Chair, and thank you to the witnesses for coming today.

Mr. Mooers, I have a couple of quick questions for you in regard to your background first of all. Can you fill me in on your background? Are you an international affairs expert?

Dr. Arne Mooers: No, which is why I said that was a very interesting question.

I am a professor of biodiversity and an evolutionary biologist. I just happen to have worked in some other countries.

Mr. Brian Storseth: Excellent. So then it's actually just your opinion what you're suggesting in regard to Canada's reputation around the world, or do you have some kind of database or dataset that would acknowledge this?

Dr. Arne Mooers: I think my information is as good as your information, and that's what I read in the press.

Mr. Brian Storseth: Perfect. I'm not the one speaking on behalf of other populations.

I guess I have a question for you in regard to the Species at Risk Act. You have talked about the implementation of it. Is this legislation perfect as it's written right now?

Dr. Arne Mooers: Is any legislation perfect as written?

Mr. Brian Storseth: I'm asking you because you're the one suggesting we shouldn't be looking at making any changes to the legislation before its full implementation for a decade. So I'm asking, do you think this legislation is perfect?

Dr. Arne Mooers: I think the answer to the question is in your question. Until it's fully implemented, I can't have an opinion about whether it's perfect or not. We have to see how it actually plays out on the ground over the medium term.

Mr. Brian Storseth: So then you're not here today suggesting that the legislation is perfect.

Mrs. Barrett, I actually had a couple of questions for regarding some comments you made on landowners. You had talked about how landowners who are conservationists tending to do the right thing.

How do we get them there? How do we win the hearts and minds of landowners? Is that through education? Is that through regulation? Do you have an opinion on the best way to get them there? I ask because I agree with you. The landowner who practises conservation because he or she believes in it is going to be the person who does it all the time whether the government's watching or not.

Ms. Kim Barrett: Yes, I think the target audience really has to be the “unconverted”, for lack of a better term.

What I would like to see is really pushing home this connection that we have to the land. Typically what you hear out there is that it has to be either the economy or the environment, and that's just not the case. The more we can do to inform people about all the ecological goods and services that natural areas provide, in that they do provide cost savings in terms of other infrastructure needs....

A great role for the federal government might be to put on a marketing campaign. Canada's economic action plan comes to mind because I saw those commercials over and over again. If we could have commercials like that on the mainstream media touting the benefits of habitat conservation and ecological goods and services, who knows? It might be enough to push a critical mass over the edge into this holistic thinking of how we're connected to the environment.

● (1010)

Mr. Brian Storseth: I agree with you. They're great commercials.

But one question I have is this. Which level of government is best to really focus on that education? Or is it about a level of government? Is it something that we should all be doing?

Ms. Kim Barrett: Yes, I think it's something we should all be doing. Different levels of government have different specific mandates. But habitat conservation is really something that transcends from municipal all the way up to federal politics.

Mr. Brian Storseth: How much time do I have, Mr. Chair?

The Chair: You have 40 seconds.

Mr. Brian Storseth: Perfect.

I would just like to ask Mr. Chorney a question. It's good to see you again. I've been seeing more ag guys here at the environment committee than at the ag committee lately.

The question for you is in regard to regulation of our producers and farmers. You're talking about 12 million acres of land in Manitoba alone that farmers are cultivating. They are the ones who have to look after our biodiversity and our habitat in large swaths. What is the best way to approach farmers? Is it winning their hearts and minds with incentives and education, or is it through strict regulation?

Mr. Doug Chorney: I think we know for certain that the incentive approach is by far the most effective. We have a responsibility, as well, to show leadership on this front. We're doing things such as partnering with municipal governments and leaders on the Lake Friendly Initiative to clean up Lake Winnipeg.

I had a meeting with our provincial minister of conservation and water stewardship just yesterday. We want to demonstrate that producers will do the right thing, and are already doing the right thing in many cases, to ensure the health of our environment.

We need to work together. Incentives help bring everybody onside, but we have a responsibility ourselves to lead that process and to make sure that the public understands what we're doing and how we want to be part of the solution.

The Chair: Thank you, Mr. Storseth.

We're going to move now to Mr. Pilon.

[*Translation*]

Mr. François Pilon: Thank you, Mr. Chair.

My first question is for Mr. Chorney and will be along the same lines as what my colleague Mr. Choquette asked.

Climate change is a known factor that increases the spread of invasive species, which cause significant loss for farmers.

How do you intend to deal with that problem? What help could the government provide?

[*English*]

Mr. Doug Chorney: Invasive species can mean wildlife as well as plants. Certainly with climate change we are seeing a new spectrum of problem weeds in crops that we haven't necessarily had to deal with so much in the past. We're also seeing some insect issues that are unique to climate change, with the hot summer winds from the U. S. south tending to blow up all kinds of new problems, whether it be crop disease or insects. That has led to a change in how we approach our vine crop rotations and the types of crops we can grow.

We just had our StatsCan report come out yesterday showing that Manitoba farmers will seed 1.1 million acres of soybeans this year. Ten years ago there were almost no soybeans growing in Manitoba —none on my farm. This year, one-third of my farm will be growing soybeans. That's the way farmers tend to adapt to and deal with changes in the environment and with different species that could be invading our environment. We try to work with what we have. We can't change what's happening, so we have to take steps to deal with what mother nature has given us and make the best of it.

Soybeans have been a tremendous success, for many reasons. On my farm one of the reasons I got really interested in it was that I wouldn't as a result need to use any nitrogen fertilizer. Nitrogen fertilizer prices are very high, and nitrogen fertilizer also contributes to nutrient loading in our freshwater lakes. So l grind soybeans. I've reduced my nitrogen purchasing by over 33%.

[*Translation*]

Mr. François Pilon: My second question is for Dr. Mooers.

On your website, Scientists for Species, you quote Edward O. Wilson when you put contemporary environmental problems into two categories: problems related to the damage done to the physical environment, and problems related to the loss of biodiversity.

Could you clarify that nuance, the distinction you make, and explain why you make it?

● (1015)

[*English*]

Dr. Arne Mooers: I...perhaps not as well as you would like.

The problems associated with a loss of biodiversity are direct. As I pointed out in my presentation, the more pollinator species you have doing the work, the more crop yield and fruit set increase. You've heard of many other examples of this. There are very strong links between biodiversity and the sorts of services we like.

There are changes to the environment, such as climate change, causing direct problems to humanity in terms of our ability to adapt because of where we live and how the climate is changing. But these, of course, are linked, as you pointed out in your previous question to Mr. Chorney.

[*Translation*]

Mr. François Pilon: I will now go back to Mr. Chorney.

In your opinion, what type of incentive programs should be offered to private landowners so that they conserve habitats and apply stewardship initiatives?

[*English*]

Mr. Doug Chorney: The ALUS program laid out an excellent template to provide an incentive, where you'd look at the public benefit and the value to the public and the cost to the landowner to comply with the environmental outcome you're trying to achieve.

It has to make sense for the landowner, and every case is unique. If you take southern Ontario land costs versus Saskatchewan or Manitoba land costs, there is a different dollar amount to attribute to different behaviours that you want to inspire landowners to undertake.

But it has to be an economic success. I think we can take baby steps. We all know there are limited public finances available to deal with these issues, but a simple thing such as eliminating property taxes from land that isn't farmed because it is going to be put into an environmental stewardship program would be a good first step.

We know that in one municipality here in Manitoba they started a program under which they paid the farmers $40 per acre to store water and restore wetlands. They had a municipal fund to completely pay this cost. The fund was quickly oversubscribed and they had to turn away landowners, because farmers, given the little incentive, quickly stepped up to do their role.

It would be different in every jurisdiction, but I think we know that given the right conditions landowners will do the right thing—given the education and incentive to move in that direction.

[*Translation*]

The Chair: Thank you, Mr. Pilon.

[*English*]

We'll move now to Mr. Toet for five minutes.

Mr. Lawrence Toet (Elmwood—Transcona, CPC): Thank you, Mr. Chair.

Thank you to all our guests here today.

Mr. Chorney, you touched briefly on the wetlands. Mr. Crabbe was talking about having to build arks in Saskatchewan over the last couple of years, and you're obviously very familiar with those same issues that we have in Manitoba.

You touched a little on the role the agriculture community is playing in Manitoba. I wonder about the possibility of expansion of that role in the rehabilitation of wetlands, which obviously would act as a great habitat conservation project but would also play a great role in flood mitigation and also in drought mitigation as we go forward. We've seen loss of a lot of the wetland habitat in Manitoba.

You just touched on it briefly, but is this something the agriculture community is ready to embrace, and is it looking forward to being part of the solution?

Mr. Doug Chorney: I think wetland restoration is an important issue, and there is a lot of talk amongst producers in conservation districts here in the province about how they can work in that vein.

But we have to take a total watershed approach. If Manitoba did everything perfectly, it would not have enough impact to really solve our flooding problems. We just had reports released, here in Manitoba, studying the 2011 flood events, and we know that there are things happening outside of our jurisdiction that affect what is going on here.

It would take some planned, long-term water storage to solve problems for the entire basin. The report suggested the Holland Dam, which was originally part of the Duff Roblin flood prevention plans formulated in the late 1950s or early 1960s when they built the floodway around Winnipeg; this was one part of the plan that was never completed.

We have such things as the Lake of the Prairies—the Shellmouth reservoir up in Russell, Manitoba—which helps the Assiniboine valley producers. But we have found, with all the extra water we were receiving from Saskatchewan in the last couple of years, that this system is not adequate to cope, so we need to revisit it.

Some people have chosen to blame the management of the Shellmouth reservoir for problems in the Assiniboine valley, but closer analysis and talking to the engineers who are studying these things indicates that there's not enough capacity in that system to absorb all this extra water. There's been extremely efficient drainage activity in Saskatchewan. Farmers used to think that when they got a land scraper and made a little cut in their field to drain a low spot, they were doing things. But I understand that in Saskatchewan they have excavators and Cats digging major channels to divert water to Manitoba as fast as possible.

All this water coming at us is of real concern to our Manitoba farmers. I don't think we can expect landowners in Saskatchewan to hold water for free; nor should we expect Manitoba landowners to do so. This is an area in which we need to factor in how much it is really costing us, through AgriRecovery programs and disaster financial assistance, to deal with these excess water events. If we spent that money up front and undertook some deliberate water storage projects, perhaps we could avoid the recurring cost and in fact treat the problem rather than the symptom. We have pretty significant costs, with Manitoba now at $1.2 billion as their estimated cost for the 2011 flood.

● (1020)

Mr. Lawrence Toet: I'm sure you must be very happy to hear, then, that the Conservative government is working towards a great amount of funding for permanent mitigation measures. This would fall under that umbrella, so I think it's a great step going forward.

Mr. Crabbe, this ties in a little bit. In your introduction you talked about the connectivity program in Saskatchewan; you touched on it but never built on it. I see connectivity as being an important issue, but maybe you could respond a little bit on the role of Saskatchewan, as part of the watershed that's draining into the lakes in Manitoba, in wetlands rehabilitation, along with this connectivity aspect.

Can you give us some insight into Saskatchewan's stance on this?

Mr. Darrell Crabbe: Do you mean, on the connectivity program?

Mr. Lawrence Toet: You talked about a connectivity program, but I mean also on your ability to participate in some of the wetlands rehabilitation that is required. As Mr. Chorney said, we can't hold it all in Manitoba; there is a role for everybody to play here.

Mr. Darrell Crabbe: I can certainly report to you that it's a huge issue here in Saskatchewan. Illegal drainage is the primary culprit we're trying to deal with. No one has ever been charged in Saskatchewan for illegal drainage; however, we certainly have rules and laws in place to deal with it.

As we speak, almost 50% of the wetlands in Saskatchewan have been eliminated over the last 40 years. Actually, the percentage might be a little higher. We have been trying to develop incentives in Saskatchewan through the ALUS program. Right now, it's the number one pilot project we're using to look at those issues, to develop wetlands where wetlands have been drained and maintain existing ones that are functioning. It certainly is a huge problem. We recognize, from the conservation community, the effects we're having on Manitoba.

Mr. Chorney brought up Lake of the Prairies as an example. To try to mitigate some of these actions, they drained Lake of the Prairies to the point that we just had a huge fish die-off there, because they had drained it in order to capture some of the potential run-off.

These types of issues are commonplace in Saskatchewan because of that.

The Chair: Thank you, Mr. Toet. Your time is up. We'll have to move on to our next witness, Mr. Sopuck.

Mr. Robert Sopuck: Thank you very much. I'd like to question Dr. Mooers regarding the idea of the full implementation of SARA. I assume you're familiar with the goshawk issue in British Colombia?

Dr. Arne Mooers: Can you refresh me on the goshawk?

Mr. Robert Sopuck: Sure. The goshawk is a ubiquitous species across the country; I've even got some on my farm. COSEWIC has deemed a subspecies of goshawk, or a population of goshawk, to be a SARA-listed species. I had meetings with forest companies from that area, having been in the forest industry myself in the past, and I saw the maps that the recovery plan is suggesting of areas that are off limits to sound forestry activities. If a fully implemented SARA were fully implemented in that particular area, 3,000 jobs would be lost immediately.

Do you think those 3,000 jobs and 3,000 families are important?

● (1025)

Dr. Arne Mooers: Of course I think those 3,000 jobs are important. I think the current instantiation of SARA allows for a regulatory impact assessment statement. I don't believe the goshawk population has actually been officially listed. You can correct me if I'm wrong.

Mr. Robert Sopuck: Again, this points to the flaws in SARA. Back when I was in the forest industry, I was part of the Canadian Pulp and Paper Association's team that was evaluating initial drafts of the act. We begged the Liberal government of the day not to do what they did with this particular act. We predicted that all of these things were going to happen.

But this is a real life example, not some kind of academic exercise regarding a subspecies of a bird. These are real people, real lives, real communities. That's one of the reasons that full implementation of SARA, as you are recommending, is very problematic and difficult for us. Can you appreciate what fully implementing SARA actually would mean?

Dr. Arne Mooers: I don't think I would be here today if I didn't feel like I could understand what I was saying.

I think we should be clear, first of all, that the goshawk population you're talking about has not been listed. There are provisions in SARA for it not to be listed. The federal government has that opt-out clause. It has nothing to do with COSEWIC's work on designating it as being endangered or not, so I'm not quite sure why you're pointing to this as a problem.

Mr. Robert Sopuck: It's a problem right across the country because many academic scientists, in their safe, tenured positions, take these positions on various pieces of environmental legislation without considering the community impact in the least.

Again, I'm surprised that my friends opposite who claim to be so caring about the working person and jobs aren't talking about these kinds of issues. Can you see that the community impacts of much of this legislation certainly need to be looked at? If the community impacts are unacceptable, don't you think that's a reason to change certain pieces of legislation?

Dr. Arne Mooers: I think we'd have to sit down and talk a little bit about the details. The federal government doesn't have to do anything, actually, after a species is listed. They only have to come up with a recovery strategy and an action plan. That action plan doesn't even have to be implemented under the current implementation of SARA.

I'm not sure that opening SARA up at this point would actually solve this perceived problem that you have. I would just like to add that I don't think it's fair to say that academic scientists don't understand about working people and jobs.

Mr. Robert Sopuck: I represent a rural constituency and, quite frankly, I will defend the rural resource industries in my constituency and across the country with every fibre in my being.

In the interest of full disclosure, I should let you know that 320 acres of my land are under a conservation easement with the Nature Conservancy, so I know of what I speak. I live in a managed agricultural landscape with cattle production, grain production, as well as wildlife production close to a national park.

In terms of fully implementing legislation, would you suggest that the migratory birds act be fully implemented?

Dr. Arne Mooers: Do I suggest that the migratory bird act be fully implemented?

Mr. Robert Sopuck: Yes.

Dr. Arne Mooers: Are you going to tell me that the Migratory Birds Convention Act is not fully implemented?

Mr. Robert Sopuck: There is a reason for the question.

The Chair: A quick response.

Mr. Robert Sopuck: Again, under the Migratory Birds Convention Act, you cannot destroy a nest of a migratory bird. However, because many migratory birds nest in prairie Canada, normal farming practices inadvertently affect nests and a fully implemented migratory bird convention would actually stop almost all prairie agriculture. These kinds of examples point to the difficulties with legislation that does not take into account what is actually happening on the landscape.

Thank you very much.

● (1030)

The Chair: Mr. Sopuck, I'm going to need to cut you off there. Your time is up.

We'll move now to Mr. McKay for five minutes.

Hon. John McKay: Thank you, Chair.

As a non-member of this committee, I do find it an interesting conversation to move from the implementation of SARA to the difficulties of flooding in Saskatchewan and Manitoba. Part of this is caused by a failure to properly manage the properties in a way that allows for the absorption of as much rainfall as possible.

To use an urban example—I'm from Scarborough—one of the reasons that we have difficulties with our floodplains is that it was thought to be really smart urban development to pave over everything and have everything run into the creeks. Now every time there's a flooding event, we have big problems instead of allowing nature to absorb the floods.

I want to actually pick up on a comment by Mr. Chorney and ask for Professor Mooers' comment on it. I was watching your reaction to Mr. Chorney's suggestion of tax relief with respect to certainly wetlands, or lands that are not usable, if you will, by farmers. You seemed to think that was a good idea, and I just wanted to get your comment on that.

Dr. Arne Mooers: Well, I'm not an expert in international affairs. I'm also not an expert in taxation and economics, but those sorts of approaches make prima facie sense superficially because there seems to be very little red tape, very few start-up costs. When you talk to people, they seem like they're the sorts of things that people would like. As a non-professional, I think those are exactly the sorts of things that different levels of government can do quickly and effectively to increase stewardship of biodiversity in Canada.

Hon. John McKay: Intuitively I think you're right.

I just want to direct a question, then, to Mr. Chorney. If this is a good idea, in effect farmers taking land out of production in order to let nature do its job, your first issue was that the program got oversubscribed quite quickly. So (a) it's an issue of funding, and (b) is there a way in which the tax relief, possibly even the transfer of some of those properties out of the farmer's name and into the crown or someone else, would actually help mitigate some of the difficulties that both Saskatchewan and Manitoba are having with flooding events?

Mr. Doug Chorney: I actually think there's a good example in North Dakota and Minnesota, where the Red River Basin Commission has actually implemented these kinds of ideas. They've had really good landowner cooperation. In some cases they've actually, as you suggest, acquired the properties and made them permanent water storage areas. Sometimes these are areas that were not very productive agriculturally to begin with, and it was only through rising commodity prices and economic pressures on the farm budgets that they tore these wetlands up and drained them and tried to farm them.

So given the opportunity, landowners quite often—well, in every instance they cooperated down in those jurisdictions so that they would set aside those properties permanently. Not only does it give you this opportunity to prevent flooding in the springtime but in-season excessive precipitation events can be mitigated. What they found is they actually demonstrated that they can protect a lot of the agricultural land adjacent to these projects from these major precipitation events. Because the water is stored there for a longer period of time, rather than just to prevent a flood, there's a very efficient nutrient interception.

Storing water temporarily doesn't really do much for helping save the lakes from nutrient loading, but storing it for a long term and actually deliberately growing biomass crops, even cattails—on which we're doing research here in Manitoba on how to harvest them and create a bit of a bioeconomy—will do a great deal to prevent those nutrients from getting ultimately into our freshwater lakes.

● (1035)

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

We'll move now to Mr. Woodworth for five minutes.

Mr. Stephen Woodworth: Thank you very much, Mr. Chair.

I want to ask Dr. Mooers about some issues that concern me regarding his approach that the amendment of SARA should be off limits for at least 10 years. I wonder, Dr. Mooers, if you are familiar with the Environmental Enforcement Act that was passed two or three years ago to bring our enforcement of environmental regulations and legislation up-to-date and increase penalties and make them more effective and give judges more flexibility in things like the environmental damages fund and so on. Are you familiar with that legislation.

Dr. Arne Mooers: I am not.

Mr. Stephen Woodworth: I want to tell you that it was passed through this committee with gusto, even though at that time it was an opposition majority committee, and that it indeed gave greater effective opportunities for the enforcement of environmental legislation. But regrettably, it was not made to apply to the Species at Risk Act because the environment committee was studying the Species at Risk Act at that time, and no one wanted to impose on that study.

I'm wondering if I might convince you at the very least that it would be appropriate to amend the Species at Risk Act to bring its enforcement provisions up-to-date and to put them on a par with that environmental enforcement legislation that was made to apply to virtually every other environmental act in Canada, except the Species at Risk Act. Could I persuade you that we ought to immediately act to amend the Species at Risk Act in this regard?

Dr. Arne Mooers: You won't be surprised to hear that there's no way I could comment on that without looking at the Environmental Enforcement Act and those amendments that were made to it.

Mr. Stephen Woodworth: All right.

I'm beginning to get the picture that your comments are based on your acknowledged limitations of knowledge, and I appreciate that. But I want to move on to the next issue that concerns me about your proposal that we should not amend the Species at Risk Act for at least 10 years. It has to do with paragraph 41(1)(c), which requires that every recovery strategy must include an identification of a species' critical habitat.

My recollection of the evidence that I heard when this committee studied the Species at Risk Act was that this has in fact impeded the development of recovery strategy, simply because in the case of many species the identification of what is critical habitat is very difficult and requires lengthy study and scientific investigation.

Do you see the problem with the necessity to determine critical habitat? Do you understand what I'm talking about?

Dr. Arne Mooers: I think that it's impossible to create a recovery strategy without identifying critical habitat.

It does also say with the “best available information” in paragraph 41(1)(c), and I think that's what the recovery teams have been striving to do.

Mr. Stephen Woodworth: Are you aware of the fact that there are complaints that too much time is spent, in fact prolongation of risk to species in trying to sort out that question of critical habitat?

Dr. Arne Mooers: Complaints by whom?

Mr. Stephen Woodworth: By people involved in developing recovery strategies and environmental groups. I'd have to refer you to the evidence that we heard at committee about two years ago on this point. It sounds like you're not aware of that evidence.

Dr. Arne Mooers: I know members of the recovery teams and I know that it's a difficult problem, but as I said, it makes no sense to write a recovery strategy without identifying critical habitat.

● (1040)

Mr. Stephen Woodworth: I'd like to ask a few questions of Mr. Crabbe.

The Chair: You have time for one.

Mr. Stephen Woodworth: Could you tell us, Mr. Crabbe, a little bit about the Wildlife Tomorrow program that I understand your organization runs? I gather it's a stewardship initiative of some 400,000 acres. What are some examples of outcomes from this program?

Mr. Darrell Crabbe: It's a public awareness program that recognizes the landowner, as mentioned before, for doing the right thing. We have thousands of landowners in Saskatchewan who put aside a slough, a wetland, a tree row, or whatever it might be and leave it and don't take it out. Today's modern agricultural processes would, in many cases, suggest you should pull out tree rows and those sorts of things. So we just started the program about 20 years ago.

The Chair: Mr. Crabbe, we'll have to move on to our next questioner. Our time is up.

We'll move on to Monsieur Choquette.

[*Translation*]

Mr. François Choquette: Thank you, Mr. Chair.

Before I begin with my questions, I would again like to thank the four witnesses for their involvement in habitat protection. What you are doing for nature conservation, each in your own way, is very important.

Dr. Mooers, the Conservative members of this committee have asked you a lot of very specific questions. It was becoming quite amusing to hear them. If you would like to, I think we would all agree to have you send additional information on your position on the Conservatives' concerns about specific legislation or perhaps all legislation. You would be welcome to. You could send that information to the committee clerk, who will be pleased to receive it. Do not hesitate to do it if you do not have all the details currently.

I would like to come back to your recommendation to the committee on adopting strict legislation that would be applied. This is responding to the fact that the Canadian Environmental Assessment Act and the provisions on fish habitats and navigable waters have been weakened. What bothers me is the Conservative rhetoric that pits the economy against the environment. According to them, if we look after the environment, 3,000 jobs will disappear. That bothers me. I think that rhetoric is wrong. We need to learn to combine, to reconcile the economy and the environment. That is what will enable us to make the situation constructive for everyone.

Mr. Mooers, I would like you to make a recommendation on federal legislation. You spoke about it, but I would like it to be stated clearly so that the analysts can take note of it.

[*English*]

Dr. Arne Mooers: I recommend that the current committee recommend to the government that implementing strong endangered species legislation is the best medium-term way for the federal government to improve habitat conservation efforts in Canada at the present time.

[*Translation*]

Mr. François Choquette: Thank you for that clarification, Dr. Mooers. I think it is very important to have very clear recommendations on that.

Since you are a scientist, I would like you to tell us about the importance of making decisions based specifically on scientific fact. We sometimes forget to do that. References obtained on the ground are important, of course, but we need scientific facts. Unfortunately, there have been a lot of cuts to science recently.

Would you like to make a recommendation regarding science and our conservation plan?

[*English*]

Dr. Arne Mooers: Regarding science?

[*Translation*]

Mr. François Choquette: Yes. Would you have a recommendation to make about science?

[*English*]

Dr. Arne Mooers: I would make a two-part recommendation specifically regarding environmental legislation, such as what we are considering here: first that the scientific information that is used be clearly separated from the policy that flows from it, so that citizens can see how the science is being used. One shouldn't mix science and policy. I think COSEWIC's recommendation and subsequent listing is a good example of that demarcation.

The second part of my recommendation would be that the government recognize that decisions should be evidence-based.

● (1045)

[*Translation*]

Mr. François Choquette: Thank you very much, Dr. Mooers.

I think I only have about 30 seconds left. I would not have enough time to ask more questions. But I would like to thank you once again for your involvement. Everything you are doing for habitat protection, each in your own way, is important.

[*English*]

The Chair: Thank you, Mr. Choquette.

I want to echo the words of our committee members and thank each of our witnesses for being here, especially those who are in a different time zone and had to get up early to be part of this hearing today.

At this point, I would like to adjourn the meeting.