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Perspectives, roles and responsibilities of sectors
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Current knowledge and research
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Monitoring initiatives in the province
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Finally I would like to thank Amanda for all the time and energy she has put into making this Workshop and the project as a whole a success. Amanda has gone above and beyond what was expected when it came to pulling this project together. It has been a pleasure working with her.

Shelley
Exotic and Invasive Alien Species Workshop  
Corner Brook, NL  
January 22-23, 2008

On January 22-23, 2008 the Exotic and Invasive Alien Species Workshop was held in Corner Brook, NL. Over the course of two days approximately 70 individuals representing federal and provincial government agencies, academics, community groups, industry, aboriginal groups, non-government organizations and students participated in discussions pertaining to the issues and concerns associated with the introduction of exotic and invasive alien species in the province.

Increasing concern about the presence of exotic and invasive alien species in the province and the apparent lack of communication between groups involved in addressing this problem were the reasons for planning the workshop. The goal of the event was to improve understanding of departmental roles and responsibilities with respect to exotic and invasive species, while encouraging cross sector cooperation for the detection, monitoring, and management of exotic and invasive alien species in the province. The positive response to initial advertising for the workshop were taken as an indicator that this was a topic that is high on agendas, and that other groups also recognized the need for cooperation in dealing with the issues.

Overview

The agenda covered four main areas of interest:

- National initiatives and Provincial legislation;
- Perspectives, roles, and responsibilities of sectors;
- Current knowledge and research; and
- Monitoring initiatives in the province.

National Initiatives and Provincial Legislation

Representatives from Environment Canada and the Canadian Food Inspection Agency provided an overview of national initiatives that are being undertaken in cooperation with
provincial and territorial governments. The three federal initiatives pertaining to exotic and invasive alien species that were discussed included:

- **Canada’s Invasive Alien Species Strategy** – Developed in 2004 by the federal government in conjunction with provincial and territorial counterparts, the strategy outlines how to protect native populations and ecosystems from invasive alien species. The strategy highlights how to prevent, detect, respond and manage new invasive alien species through eradication, containment and control.

- **Canadian Invasive Plant Framework** – Lead by the Canadian Food Inspection Agency the framework identifies in a cooperative and coordinated approach priorities with respect to invasive plants.

- **Invasive Alien Species Partnership Program (IASPP)** – Administered by Environment Canada, with support from the Canadian Food Inspection Agency (CFIA) and the Department of Fisheries and Oceans (DFO), the IASPP provides funding to provinces, municipalities, and non-government organizations who are conducting work in support of the goals of the national IAS strategy.

The provincial Wildlife Division is in the process of completing a legislation review, which is examining federal and provincial regulations pertinent to the importation of exotics and the prevention of the introduction of invasive alien species. Ms. Shelley Pardy Moores provided a brief overview of how the review was conducted, applicable acts, gaps in current legislation and what steps will be taken address the gaps.

*Perspectives, Roles, and Responsibilities of Sectors*

One of the main objectives of the workshop was to increase understanding of the roles and responsibilities of groups involved in work related to the detection, control and mitigation of impacts of exotic and invasive alien species. Department representatives provided information on the concerns the department has with respect to the introduction of non-native species, work that is being conducted to address those concerns and what applicable legislative authority the department has. The session was not only effective in clarifying departmental roles and responsibilities, but also identified areas of overlap and areas for potential interdepartmental cooperation.
Key Note Speaker – Dr. Dave Langor

Dr. Langor, Natural Resources Canada (Canadian Forest Service – Edmonton), gave a presentation entitled “Diversity of Non-Native Arthropods in Newfoundland and Labrador”. He provided an overview of historical data on introductions, as well as statistics on the number and composition of exotic arthropods being found in the province. In addition to covering pathways of introductions, impacts on native fauna and flora, and the rate at which species are introduced, Dr. Langor spoke on management issues related to controlling exotic arthropods.

Current Knowledge and Research

The morning session on day two focused on current knowledge and ongoing research related to exotic and invasive species in Newfoundland and Labrador. Speakers outlined current research projects, providing information on the species, means and date of introduction, how the species has dispersed, impacts on native populations and ecosystems, and approaches being taken or considered to control the species and minimize impacts. Topics included:

- Impacts of hyperabundant moose on forest regeneration in Terra Nova and Gros Morne National Park
- Canada thistle: an invasive plant in our “neck of the woods”
- Red squirrel predation on balsam fir cones
- Changes in the small mammal community following introduction of the red backed vole: implications for community ecology
- Mushroom Bring From Aways (BFAs)

The session provided not only an overview of the state of current knowledge, but also identified gaps in both research and knowledge of species and impacts.

Monitoring

The final session focused on exotic and invasive alien species monitoring initiatives that have been implemented or are being developed in the province. Currently, Memorial University’s Botanical Garden has an invasive plant monitoring program in place, “Eyes
across the province”. A presentation on the program highlighted the approach taken by the Garden to monitor invasive plants, the importance of public education and involvement in the monitoring program, and changes that are being considered to improve the program.

There were two presentations focusing on monitoring strategies that are currently being developed in the province. A representative from DFO outlined the approach that the department will be taking in developing a monitoring strategy applicable to exotic and invasive species in the marine areas around the province. The Wildlife Division presented on the development of a monitoring framework that will focus on the prevention, detection, and control of wildlife, including plants in the province.

While the 3 approaches varied, there was a common theme in all three; monitoring is necessary and is a key component in the detection, control, monitoring and mitigation of impacts from the introduction of exotic and invasive alien species on native populations and ecosystems. In addition, it was agreed that the public must be involved and support monitoring initiative in order for it to be effective.

The monitoring presentations generated valuable discussion on additional monitoring being carried out in the province, in particular by the Canada Border Services Agency (CBSA) and the Canadian Food Inspection Agency (CFIA), alternative approaches and things to consider, and identified the potential for possible cooperation departments with respect to monitoring.

**Hurdles**

There were several issues identified as hurdles in dealing with the exotic and invasive alien species problem.

- *Jurisdictional boundaries* – Cooperation between departments to deal with species that move across boundaries is essential. Close working relationships are required to ensure consistency, information sharing, and to avoid duplication of work.
• *Gaps in knowledge* - In addition to not having a complete inventory of all exotic species that are present in the province, in many instances the impacts that these species may have on native populations and ecosystems are unknown. While impacts, and behaviors are understood in other areas, it is not always clear how the species will behave and what impacts it may have in Newfoundland and Labrador. Additional time, effort and resources are required to identify and address knowledge gaps.

• *Resource availability* – Inventories, as well as people, are required in order to work on specimens and collections, to get a better handle on the current situation and to start effectively addressing the problems associated with exotic and invasive alien species. In some cases agencies are working to solve this problem, but until more time, effort and people are dedicated to addressing the issues, this will continue to be a problem. It was best explained by one participant who said that while not all that can be done is being done, as much is being done as can be done with the resources available.

• *Definitions* - Consistency between department and groups in the terms “exotic” and “invasive alien species” is required. Currently there are some differences in the how these terms are defined between groups, this needs to be addressed to ensure that there is no confusion when the terms are used.

**Moving Forward**

A reoccurring statement throughout the workshop is that in order to effectively address the issues associated with the introduction of exotic and invasive alien species, public support, attained by increased public awareness is critical.

In discussing how to move forward it was agreed that monitoring will be a key component in detection, control and mitigation. There was some discussion on whether it would be more beneficial to be extremely focused with respect to monitoring, or if a more general approach would be more effective. When considering a more general monitoring approach there was some discussion around monitoring ports of entry, for all species, rather than just focusing on the presence or absence of a particular species. It
was agreed that no matter what approach is taken it will be important to be consistent across groups, jurisdictions, to be in step with national strategies, and to involve the public in some solid citizen science.

It was also suggested that the development of a working group consisting of several “teams” should be considered as an option for addressing the problems associated with invasive alien species. Teams would be focused on particular aspects including: pathways, data mining, tracking, and impacts. The purpose of the working group would be to keep participants up to date on what other agencies are doing, to encourage cooperation between groups, and to coordinate research and monitoring efforts to avoid duplication in work. It was suggested that while the smaller focused teams, may meet more frequently, the large group should meet on an annually basis.

**Conclusion:**

The aim of the workshop was to increase understanding of roles and responsibilities of the groups involved, increase cooperation between involved parties, and to highlight ongoing research and current knowledge, on these fronts the workshop was very successful. Over the course of the workshop, it became evident that participants were becoming more aware of how other groups are involved, and there was valuable networking taking place. The sense was that participants agree that in addressing the issues related to exotic and invasive species due diligence must be practiced, and that we must take action now.