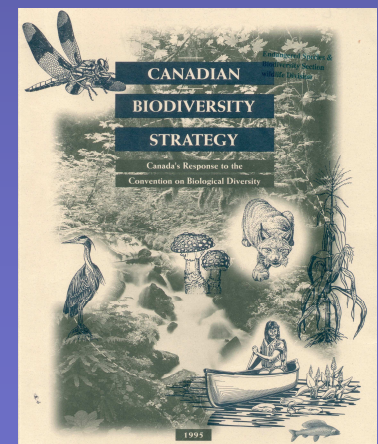


# Legislation Review- Invasive Alien Species

Exotic Species Education  
Coordination and Policy  
Development Project 2006-2008

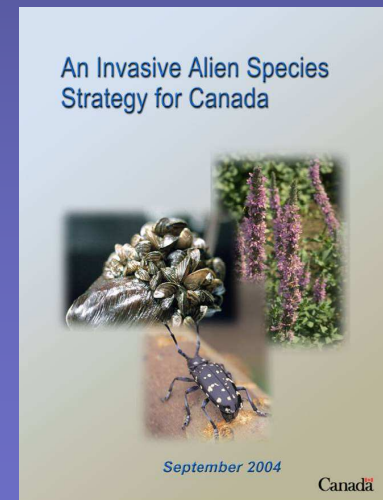
# Background

- With the signing of the Canadian Biodiversity Strategy, Canada, the provinces and territories, including Newfoundland agreed to:
  - To conserve biodiversity and use biological resources in a sustainable manner (Goal 1).
    - This includes preventing the spread of nvasive alien species.
  - To maintain or develop incentives and legislation that support the conservation of biodiversity and the sustainable use of biological resources (Goal 4).



# Introduction

- In 2004 Canada released a National Invasive Alien Species Strategy;
- Wildlife Division staff started to examine the issues associated with exotic species in the province;
  - In 2005 decided to examine the policies and regulations associate with the importation of exotics to the province.



# Introduction

- With support from the Department of Environment and Conservation, the Western Newfoundland Model Forest and the Invasive Alien Species Partnership Program.
- This review was initiated to get obtain a better understanding of the legislation in place to protect the province from invasive alien species.
- It also intended to highlight gaps the prevention of introductions
- When finalized it will provide policy makers with suggestions on how to improve management policies and practices which will limit further introductions of alien invasive species

# Approach

- Institutional Analysis:
  - Resource, rules, and the community involved.
- The review was focused by creating a list of potential pathways for introductions.
- A list of potential threats from invasives was also compiled to help.

# Pathways Examined

Alien	Intentional Introductions	Unintentional Introductions
Aquatic Invasive Species Alien	<ul style="list-style-type: none"> <li>o Live food fish</li> <li>o Aquarium &amp; horticultural pond trade</li> </ul>	<ul style="list-style-type: none"> <li>o Commercial shipping (ballast water management, hull fouling)</li> </ul>
Aquatic Invasive Species	<ul style="list-style-type: none"> <li>o Live food fish</li> <li>o Aquarium &amp; horticultural pond trade</li> <li>o Live bait fish</li> <li>o Authorized stocking</li> <li>o Unauthorized transfer or stocking</li> </ul>	<ul style="list-style-type: none"> <li>o Recreation/tourism – boating, float planes</li> <li>o Commercial shipping (ballast water management, hull fouling)</li> <li>o Garbage</li> <li>o Water diversions, canals, &amp; dams</li> <li>o Recreation/tourism – boating, float planes</li> <li>o Garbage</li> <li>o Water diversions, canals, &amp; dams</li> <li>o Natural transboundary spread</li> <li>o Natural transboundary spread</li> </ul>
Invasive Animals & Animal Parts Animal Pests	<ul style="list-style-type: none"> <li>o Wildlife/pet trade</li> <li>o Game or fur farming/ranching</li> <li>o Research &amp; development</li> <li>o Livestock, poultry, apiculture</li> <li>o Malicious introductions</li> <li>o Research &amp; development</li> <li>o Zoos (etc.)</li> </ul>	<ul style="list-style-type: none"> <li>o Animal products (meat, dairy, eggs, pet food)</li> <li>o Packing/packaging materials (containers, etc.)</li> <li>o Commercial transport – containers, airplanes, boats, trains, trucks, cars</li> <li>o Natural transboundary spread</li> <li>o Recreation/tourism (baggage)</li> <li>o Natural transboundary spread</li> </ul>
Invasive Plants & Plant Pests	<ul style="list-style-type: none"> <li>o Malicious introductions</li> <li>o Viable seeds &amp; grains;</li> <li>o Live plants &amp; plant parts for propagation</li> </ul>	<ul style="list-style-type: none"> <li>o Live plants &amp; plant parts for human or animal consumption</li> <li>o Other "carriers" and means of dispersion (animals, garden materials, garbage)</li> <li>o Natural transboundary spread;</li> <li>o Wood products and other plant products</li> <li>o Other "carriers" and means of dispersion (animals, garden materials, garbage)</li> </ul>
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		<ul style="list-style-type: none"> <li>o Natural transboundary spread;</li> </ul>

# Potential Treats of Invasives

Biodiversity changes (biological diversity loss)  
Changes in population and community structure  
Changes interspecies dynamics  
Changes to ecosystem (disruption to ecosystem)

Changes to natural fire regimes  
Changes to nutrient cycling  
Changes to trophic levels (food-web structure)  
Clogging of waterways  
Cost of control  
Cost of monitoring  
Cost of regulation implementation  
Damage to resource growth  
Damage to resource quality  
Damage to resource value

Destruction of range lands  
Ecological loss  
Extirpation of species

Homogeneous species in range areas  
Human disease  
Increased costs in power line right-of-ways  
Increases in natural predators (than would occur naturally)  
Loss of aesthetic values  
Loss of cultural values  
Loss of employment (e.g. industry closures)  
Loss of genetic variation with a species  
Loss of integrated pest management programs  
Loss of property value  
Loss of trade (due to restrictions)  
Loss of water quality  
Mortalities  
Replacement of natural predators (replacement of native species)  
Replacement of top predators  
Soil erosion

# Legislation Examined

- Federal Acts
- Provincial Acts



Canada 

# Methods for Federal Legislation

- Legislation was accessed through the Justice Canada website-[justice.gc.ca](http://justice.gc.ca);
- Acts were searched using the key words:
  - Alien, species, introduction, import invasive, indigenous, non-indigenous, and environment.
- Total of 40 Acts were reviewed.

# Departments

- Agriculture & Agri-foods Canada....6
- Canadian Food Inspection Agency.1
- Environment Canada.....8
- Fisheries and Oceans.....4
- Health Canada.....2
- Industry Canada.....1
- Natural Resources.....2
- Public Safety Canada.....2
- Transport Canada.....9

# Federal Legislation Reviewed

Department	Acts Reviewed	
Agriculture and Agri-Food Canada	Agriculture Products Marketing Act Canadian Food Inspection Agency Act Experimental Farm Stations Act Fertilizers Act	Health of Animals Act, 1990 Plant Protection Act Seeds Act (Weed Seed Order)
Environment Canada	Canada National Marine Conservation Areas Act Canada National Parks Act Canada Wildlife Act Canadian Environmental Protection Act	Migratory Birds Convention Act Parks Canada Agency Act Species at Risk Act Wild Animal and Plant Protection and Regulation of International and Inter-provincial Trade Act
Fisheries and Oceans Canada	Coastal Fisheries Protection Act Fisheries Act & Fish Inspection Act	Fisheries Development Act Oceans Act
Health Canada	Controlled Drugs and Substances Act	Pest Control Products Act
Industry Canada	National Research Council Act	
Natural Resources	Department of Natural Resources Act	Forestry Act
Public Safety and Emergency Preparedness	Canadian Border Services Agency	Customs Act
Transport Canada	Arctic Waters Pollution Prevention Act Canada Marine Act Canada Shipping Act Canada Transportation Act Canadian Air Transport Security Authority Act	Harbour Commissions Act Navigable Waters Protection Act Safe Containers Convention Act Transportation of Dangerous Goods Act

# Agriculture & Agri-foods Canada

- 6 Acts reviewed;
- Canada Agricultural Products
  - Regulates trade of products, by import, export and inter-provincial trade;
- Plant Protection Act
  - prevents the importation, exportation and spread of pests injurious to plants and to provide for their control and eradication and for the certification of plants and other things;
- Seeds Act
  - Prohibits the sale import or export from Canada any seed unless the seed conforms to the prescribed standard;
- Health of Animals Act
  - Regulates the importation into Canada any animal, animal product, animal by products, animal food, veterinary biologic or any other thing used in respect of animals. Prevents the importation of diseases and toxic substances that may affect animals or that may be transmitted by animals to persons, and respecting the protection of animals

# Canadian Food Inspection Agency

- 1 Act Reviewed;
- This Act established the Canadian Food Inspection Agency;
  - responsible for the administration and enforcement of the *Canada Agricultural Products Act, Fish Inspection Act, Health of Animals Act, Plant Protection Act and Seeds Act.*

# Environment Canada

- 8 Acts Reviewed;
- Canada National Parks Act
  - Aspires to maintain the ecological integrity of national parks (native condition);
    - a condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes.
- Canadian Environmental Protection Act
  - Several rules and regulations regarding the intentional importation of organisms in the country;
  - Can make regulations respecting living organisms; including those that are exotic or indigenous, research and development living organisms and living organisms manufactured only for export, and designating ecozones or groups of ecozones.
- Canadian Wildlife Act and Species at Risk Act
  - Both acts provide for measures where necessary for the protection of any species of wildlife in danger of extinction.

# Environment Canada

- Migratory Birds Convention Act
  - “Endeavour to take such measures as may be necessary to control the importation of live animals and plants which it determines to be hazardous to the preservation of such birds. Endeavour to take such measures as may be necessary to control the introduction of live animals and plants which could disturb the ecological balance of unique island environments.”
- Wild animal and Plant Protection and Regulation of International and Inter-provincial Trade Act
  - If the Minister is of the opinion that the import of any specimen, living or dead, would be harmful to Canadian ecosystems or to any species in Canada and that urgent action is needed, the Minister may recommend that an order be made under subsection
  - Allows the minister to make regulations regarding the transport of animals and plants listed under the act between provinces where the minister of the province to where the species is being imported deems it harmful to the environment.



# Department of Fisheries and Oceans

- 4 Acts Reviewed;
- Fisheries Act & Fish Inspection Act
  - Prevents alteration of fish habitat (alteration is often a pathway for introductions);
  - No permitted to release a deleterious substance into water, which would degrade or alter the quality of the water or habitat, this could include exotic species or invasive alien species;
  - Permission is required in the form of a license to release live fish into fish habitat or to transfer live fish;
- Coastal Fisheries Protection Act;
  - Canadian vessels cannot bring fish into the country that have been received outside Canadian fishing waters.

# Health Canada

- 2 Acts Reviewed
- Pest Control Products Act
  - Canada and the provinces and territories have traditionally administered complementary regulatory systems designed to protect people and the environment, including its biological diversity, from unacceptable risks posed by pest control products, and it is important that such an approach be continued in order to achieve mutually desired results efficiently, without regulatory conflict or duplication;
  - product, an organism or a substance, including a product, an organism or a substance derived through biotechnology, distributed or used as a means for directly or indirectly controlling, destroying, attracting or repelling a pest or for mitigating or preventing its injurious, noxious or troublesome effects.

# Natural Resources Canada

- Forestry Act
  - Minister may make regulations for the protection care and management over lands which the minister has responsibility;
  - Several activities for which regulations can be made against will assist in the prevention of invasive alien species.

# Transportation Canada

- Canada Shipping Act
  - Regulates the release of ballast water to prevent both the uptake and release of harmful organisms.
  - Provides for inspection opportunities.
- Transportation of Dangerous Goods Act
  - Utilizes other legislation to delineate potential dangerous goods.



# Methods for Provincial Review

- Legislation was accessed through the House of Assembly Website- [www.hoa.gov.nl.ca](http://www.hoa.gov.nl.ca);
- Acts were searched using the key words:
  - Alien, species, introduction, import invasive, indigenous, non-indigenous, and environment.
- Total of 19 Acts were reviewed.

# Departments

- Environment and Conservation.....6
- Fisheries and Aquaculture.....3
- Government Services.....1
- Health & Community Services.....1
- Labrador and Aboriginal Affairs.....1
- Natural Resources.....6
- Tourism, Culture & Recreation.....1

# Provincial Legislation Reviewed

Department	Act Review	
Environment and Conservation	Endangered Species Act Environmental Protection Act Provincial Parks Act	Water Resources Act Wilderness & Ecological Reserves Act Wildlife Act
Fisheries and Aquaculture	Aquaculture Act Fisheries Act	Fish Inspection Act
Government Services	Dangerous Goods Transportation Act	
Health & Community Services	Health and Community Services Act	
Labrador and Aboriginal Affairs	Labrador Inuit Lands Claims Agreement Act	
Natural Resources	Forestry Act Heritage Animals Act Livestock Health Act	Natural Products Marketing Act Plant Protection Act Vegetable Grading Act
Tourism, Culture & Recreation	Tourist Establishment Act	



# Environment and Conservation

- Environmental Protection Act
  - Regulates the requirement of an environmental assessment for introduction, transfer and transport of aquatic species.
  - Requires a environmental assessment for government introduction species programs.
- Provincial Parks/Wilderness & Ecological Reserves Acts
  - Prohibits the introduction of any plant or animal species in a provincial park, except in accordance with a permit for management or science purposes.
  - Prohibits the introduction of any plant or animal species in a provincial wilderness or ecological reserve.
- Wildlife Act
  - Prohibits the import a wild animal (including eggs and offspring) into the province or between, Newfoundland and Labrador unless it is on Schedule B, without permission of the minister.
  - Prohibits the release of an animal into the wild.

# Fisheries and Aquaculture

- Aquaculture Act
  - Regulates licenses, what species can be cultured and how many
  - Regulates the risks associated with potential escapes.
  - Regulates the health of the fish, including disease and parasites.
- Fish Inspection Act
  - Has regulations pertaining to the transfer or disposal of fish of a non- NL registered boat.

# Government Services

- Dangerous Goods Transportation Act
  - A dangerous good as a product, substance or organism included by its nature or by the regulations in a class listed in the Schedule. The Schedule contains a Class 6 - Poisonous (toxins) and infectious substances and a Class 9 - Miscellaneous products, substances or organisms considered to be dangerous to life, health, property or the environment when transported in a vehicle on a highway and prescribed to be included in this class.

# Health & Community Services

- Health and Community Services Act
  - This is a general act which allows for coverage of human health issues as they arise.
  - Invasive alien species that can affect human health can be addressed under this act.

# Natural Resources

- Forestry Act
  - Provides rules and regulations regarding forest roads, and their decommissioning.
- Livestock Health Act
  - Provides regulations for the movement of livestock and other farmed animals in and out of the province.
- Plant Protection Act
  - Mirrors the national act; is concerned with the entry of plant pests.
- Vegetable Grading Act
  - Again Mirrors national legislation and regulates the importation of fruit and vegetables and interprovincial trade.

# Comments

- Most of the Legislation reviewed was written before the IAS issue was elevated to the level it is now.
- Many acts both nationally and provincially deal with substances, and organisms which could be interpreted as invasive alien species.
- Many of these Acts were written to deal with specific issues as they relate to an industry or human health (i.e. Plant Protection Acts).

# Gaps

- Federal Legislation is quite effective with regards to importing exotic species into the country doesn't look at between provinces.
- Provincial legislation seems to cover off the animals through the Wildlife Act however there is little protection from exotic plant invasions.
  - No list of prohibited plants or no regulation preventing the release of plants into the wild.

# Gaps

- Regulations or policies that could reduce accidental introductions is not in place.
  - Currently there are no rules regarding the cleaning of vehicles, boats or machinery coming across the gulf to the island or from the island to Labrador.
- Enforcement.



# Additional Comments

- Very useful to examine what the federal government and other agencies have in place;
  - Often provided us with the opportunity to inform them of our legislation.

# What Next?

- More Legislation?
- Better inter-agency cooperation.