

Agenda Item 6: Invasive Alien Species – North American Collaboration

XXI Meeting of the Canada/Mexico/U.S. Trilateral Committee for
Wildlife and Ecosystem Conservation and Management

Ottawa, Ontario, Canada

May 16 - 19, 2016

What are Invasive Alien Species

Definition¹:

- "An alien species (a species, subspecies or lower taxon, introduced outside its natural past or present distribution) whose introduction and/or spread threaten biological diversity" (Convention on Biological Diversity)
- National definitions may also include threats to the economy and the society, including human health



Examples:

- *Batrachochytrium salamandrivorans* (Bsal), White-Nose Syndrome in Bats
- Emerald ash borer, Cactus Moth
- Giant reed, Tamarix
- Lionfish, zebra mussel, Asian carps
- Wild boar

IAS Impacts

Biodiversity Impacts

- Next to habitat loss, invasive species are the leading cause of species becoming at risk of extinction
- In island ecosystems and many fresh water ecosystems, IAS are the greatest threat.

Economic Impacts

- Estimated economic impact of just 16 species found in Canada ranges from \$13.3 to \$34.5 billion annually
- Invasive Species cost the United States more than \$120 billion in damages every year.
- Significant economic impacts to trade as a result of controls and quarantine

Societal Impacts

- Media focus on invasive species is growing. High profile species such as Asian Carp , Lionfish dominate headlines
- Public awareness and expectations increasing
- Outdoor and recreational experiences negatively impacted
- Cultural and livelihoods impacts for indigenous people and local communities.

BIODIVERSITY



ECONOMY



SOCIETY



IMPACTS

Impacts are wide-ranging and also include impacts on health, infrastructures, sustainable development, etc.

Key Pathways of Concern



TRADE

Hitch-hikers on goods and packaging

Direct Trade in Alien Species, including Internet Trade

Horticulture
Aquarium/Pet Trade

TRANSPORTATION

Hitchhikers on vehicles, vessels, trains, planes

Examples:

Transoceanic ships (ballast and hull foulants)

Fire fighting aircraft (water tanks)

Trucks and All-terrain vehicles
Recreational boats and trailers

TRAVEL/ RECREATION

Movement of Firewood
Movement of live bait
Unauthorized fish introductions
International travel
Cruise ships

Increasing Risks

- Globalization, demand for trade, travel and transport increase the risks of new introductions
- Climate change, reduced ecosystem resilience and habitat degradation increasingly enables survival and spread of invaders
- Decline in environmental education and awareness.

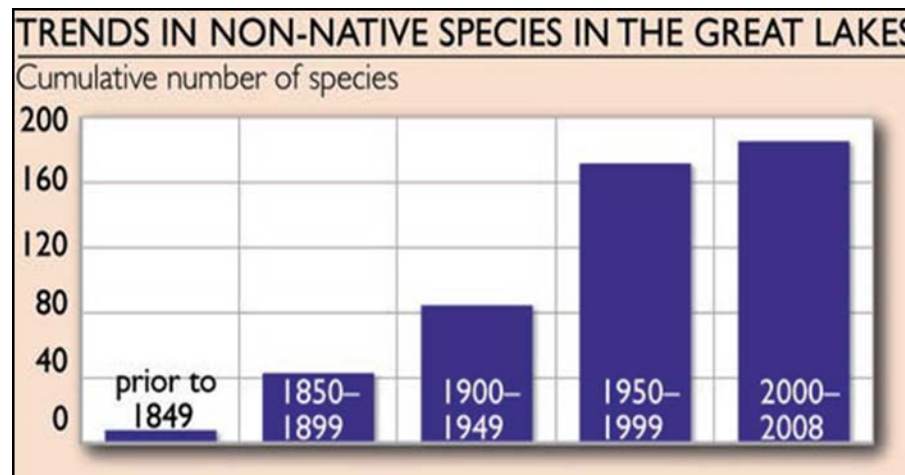
Invasive alien species will continue to significantly impact North-America's economy, environment and society

Response to Risk

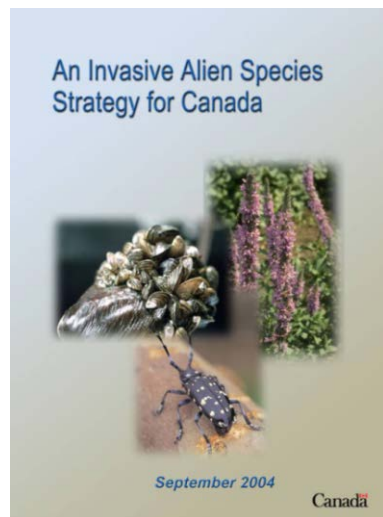
- Risks analysis (species, pathways): risk assessment, risk management, risk communication
- Horizon scanning

Great Lakes example:

- Half of non-native species attributed to ballast water
- Since the introduction of new regulations on ballast water management (2006) no new invasive alien species attributed to ballast water release and transoceanic shipping



Update: Canada



- **Invasive Alien Species Strategy** developed in 2004
 - 4 strategic prioritized goals: Prevention, Early Detection and Rapid Response, Management
- Responsibilities shared across federal departments and provincial-territorial-governments
 - Interdepartmental Director General Steering Committee on Invasive Alien Species for federal coordination
 - Federal-Provincial-Territorial sectoral committees: National Aquatic Invasive Species Committee, Forest Pest Working Group

• **2020 Biodiversity Goals and Targets for Canada**

Target 11. By 2020, pathways of invasive alien species introductions are identified, and risk-based intervention or management plans are in place for priority pathways and species.

Indicators:

- Number of known new invasive alien species in Canada
- Percent of federally regulated foreign invasive alien species not established in Canada
- Number of intervention or management plans in place

Update: Canada (cont'd)

- **Federal-Provincial-Territorial IAS Task Force established in 2015**

- to provide recommendations to Wildlife-Conservation-Biodiversity Ministers for future collaborative actions in fall 2016.

Mandate:

- to identify key gaps, priority actions and best practices, to better position Canadian efforts in the fight against IAS
- to identify opportunities for strengthening the policy framework, improving leadership, coordination and collaboration and, development of strategic partnerships

- **National IAS Workshop (February 2016): Five key themes emerged from discussions with stakeholders**

- the importance of further **inter-jurisdictional coordination**,
- the need for **increased funding**
- the importance of stronger **education and awareness**
- the need for enhanced **emergency response actions**, and
- the value of facilitating more **collaboration and strategic partnerships**



Update: Canada (cont'd)

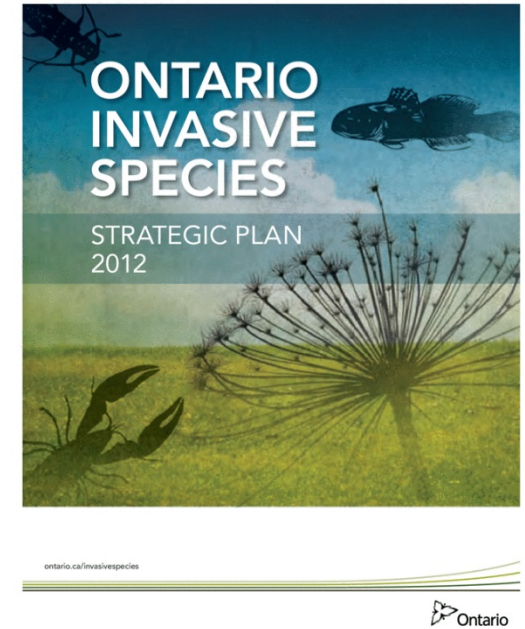
Recent developments (examples)

Federal

- Invasive Plants Policy and Directive (2013)
- Aquatic Invasive Species Regulations (2015)

Sub-national

- Ontario Invasive Species Strategic Plan (2012)
- Ontario Invasive Species Act
- Invasive Species Strategy for British Columbia (2012)



IAS Councils

- IAS multistakeholders councils in most provinces and territories
- Canadian Invasive Species Council since 2012

Update: Mexico

Invasive Alien Species Strategy published in 2010 by an Invasive Species Advisory Committee (Government/Academia/Civil society)

Cross cutting strategic actions

1. Review, adapt and develop the legal and normative framework
2. Build scientific, technical, human and institutional capacities
3. Enhance coordination between the different government branches, sectors, institutions and the general public
4. Boost communication, education and awareness of Mexican society
5. Increase knowledge to support decision making.

Strategic objectives

1. Prevent, detect and reduce the risk of introduction, establishment and dispersal of invasive species.

Prevention

2. Establish control and eradication programs for invasive species populations, which minimize or eliminate their negative impacts and favor ecosystem restoration and conservation.

Control, eradication and restoration

3. Inform the public in an appropriate and efficient way to achieve a broad civil support and participation within their reach in actions to prevent, control and eradicate invasive species.

Public outreach

Update: Mexico (cont'd)

GEF funded project “*Enhancing National Capacities to Manage Invasive Alien Species (IAS) by implementing the National Strategy on AIS*” 2014-2018

Environmental Sector at federal level:



Secretariat of the Navy:



Productive Sector at federal level:



Other national and international initiatives: e.g
Cuba’s Invasive Species Project

Associate Institutions/organizations

Institutions on state level:

- Ministry of Sustainable Development, Morelos State
- Ministry of Agri- and Aquacultural Development, SEDARGO, Morelos
- Aquaculture Association, Morelos



Civil Society Organizations:



Universities:



UANL



INSTITUTO DE ECOLOGÍA UNAM



Casa abierta al tiempo
UNIVERSIDAD AUTÓNOMA METROPOLITANA

Update: Mexico (cont´d)

Revision of legal framework: To identify gaps and synergies to better attend to biological invasions.

Invasive species list: The Ministry of Environment is currently reviewing the proposal to be published officially.

Development of Economic instruments: Study to identify the different economic incentives and instruments that can be applied to the issue of AIS.

Development of Cost benefit studies of AIS in Mexico in collaboration with Landcare Research Institute

Outreach material in collaboration with the University of Florida



Update: United States

National Invasive Species Council

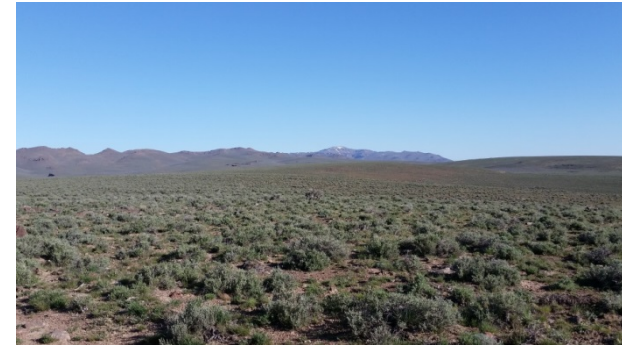
- Created by Executive Order 13112 in 1999
- Secretaries and administrators of 13 federal departments (Co-chairs are from the Departments of Agriculture, Commerce and the Interior)
- 3rd Management Plan currently under review
- Secretariat to facilitate day-to-day operations
- Invasive Species Advisory Committee
- Involvement with other interagency processes, as well as states, tribes and other non-federal stakeholders



Update: United States (cont'd)

NISC Roles

- Provide institutional leadership and set priorities
- Facilitate coordination and cost-efficiencies
- Remove barriers
- Assess and strengthen capacity
- Foster innovation
- Raise awareness and motivate high impact actions



Recent Initiatives:

- Framework for the early detection of/rapid response to invasive alien species released in February
- Starting to explore opportunities for applying existing and/or creating new authorities to address invasive alien species that impact 1) infrastructure or 2) wildlife health
- *Creating an annual Innovation Summit to promote and foster innovative solutions to the prevention, eradication, and control of invasive alien species

Existing North American Initiatives



Governmental

- The North American Plant Protection Organization (NAPPO), under the framework of the International Plant Protection Convention, has included an invasive species panel
- The CEC supported projects related to IAS, including risk assessment protocols for aquatic invasive alien species and the creation of the North American Invasive Species Network
- Trilateral collaboration on risk assessment tools with a focus on pathways of introduction
- Trilateral agreement on the conservation and restoration of the insular ecosystems of Canada, Mexico and the U.S., which can include the removal of invasive alien species
- The TransPacific Partnership, which includes Canada, Mexico and the U.S., is the first regional free trade agreement to explicitly include a provision on invasive alien species



Existing North American Initiatives (cont'd)

Non-Governmental

- Development of a North American Invasive Species Framework (recommended at the 2014 Weeds Across Borders Conference).
- The next North American IAS Forum is scheduled to take place early in spring 2017 in the United States and will be hosted by the North American Invasive Species Network.
- North American Invasive Species Network (NAISN): Consortium that uses a coordinated network to advance science-based understanding and enhance management of non-native invasive species.



Existing Bilateral Initiatives - Examples

Canada and US:

- Canada-United States Great Lakes Water Quality Agreement (GLWQA), Annex 6: Aquatic Invasive Species
- Great Lakes Governors and Premiers of Ontario and Quebec Mutual Aid Agreement on Aquatic Invasive Species
- The Pacific NorthWest Economic Region's Invasive Species Working Group

Mexico and US:

- Efforts to address transboundary invasive alien species of concern, including Tamarisk/salt cedar, zebra and quagga mussels or *Cactoblastis cactorum*
- Efforts to address common pathways of introduction, including those associated with trade and aquatic invasive alien species

Principles for future collaborative work

CBD Guiding Principles on IAS: Early detection systems and regional and international coordination are essential to prevention



- **Aichi Targets:** *By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.*

Principles for future collaborative work (cont'd)

- Build on existing initiatives, while avoiding unnecessary duplication
- Strengthen synergies and collaborations
- Identify major gaps and opportunities, build on successes and lessons learned
- Focus on high-level areas for cooperation across the three governments prior to engaging formally in discussions with non-governmental partners on a possible North American IAS Framework
- Leverage available resources and expertise within governmental agencies
- Complement efforts by states, provinces, tribes/indigenous people and other non-governmental partners



Opportunities for enhanced collaboration

Goal: To strengthen the North-American mechanisms for preventing the introduction and spread of new invasive alien species

CWS, CONABIO and NISC could work together to explore the development of a joint strategy / action plan identifying key areas of trilateral collaboration, including but not limited to:

- Promote transboundary / regional projects, including for species / pathways of joint concern (e.g. island initiative)
- Raise the profile of the invasive alien species issue in international frameworks and through regional initiatives (e.g. concurrent national IAS awareness week)
- Share scientific and technical information (e.g. risk analyses, technical expertise in EDRR, etc.)