



Invasive
Species
Centre



Development of an International Risk Assessment Database

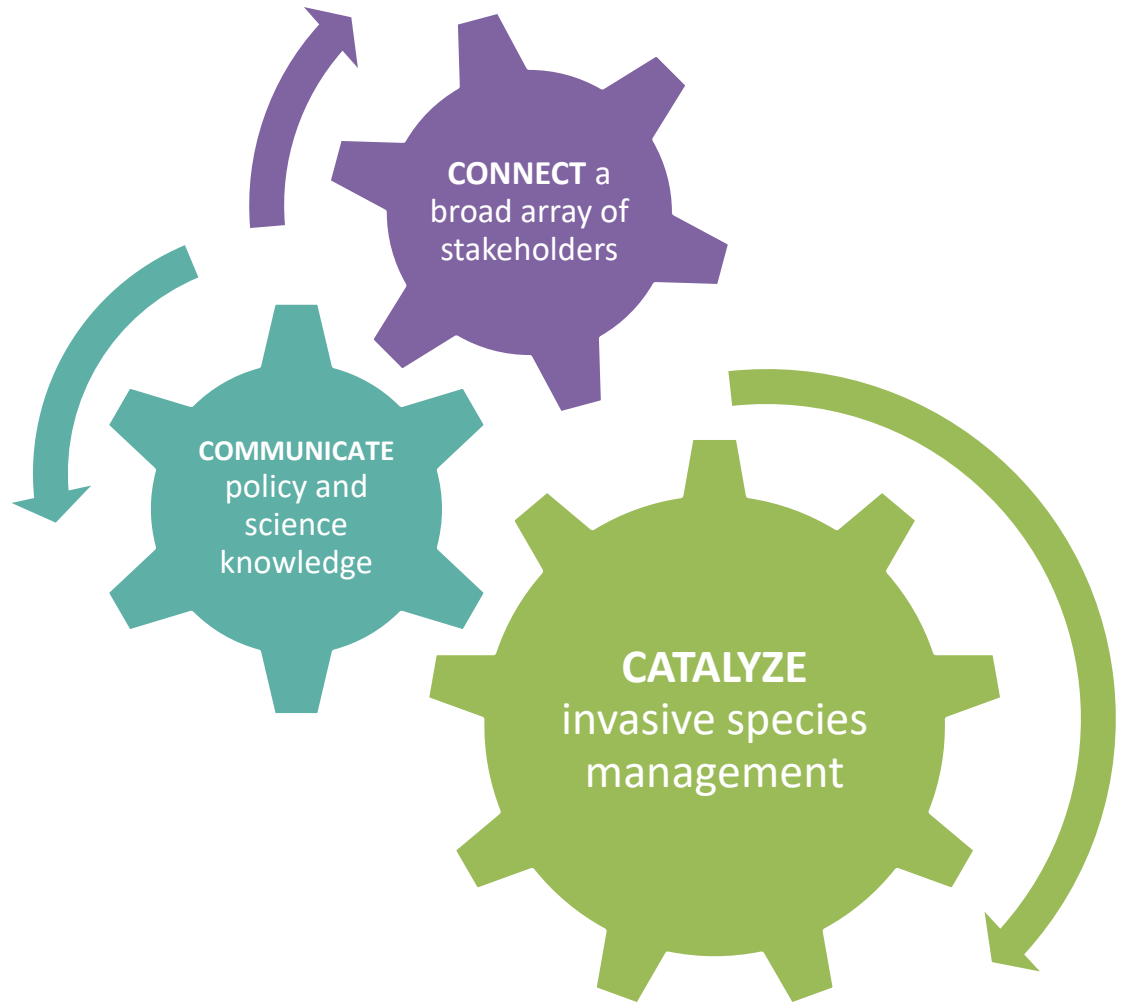
OCTOBER 26, 2017

20th International Conference on Aquatic Invasive Species
Ft. Lauderdale, Florida

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Invasive Species Centre*

Invasive Species Centre

A not-for-profit that
**prevents and
reduces the spread
of invasive
species** in Canada
and beyond.



What do we do?



- Training workshops
 - *Invasive species identification and reporting*
 - *Clean equipment protocol*
- Consulting services
 - *Invasive species management plans*
 - *Risk assessment and analysis*
- Technology transfer
 - *Development of web based tools and resources*
- Event coordination
- Volunteer engagement
- Outreach and education
- And more!

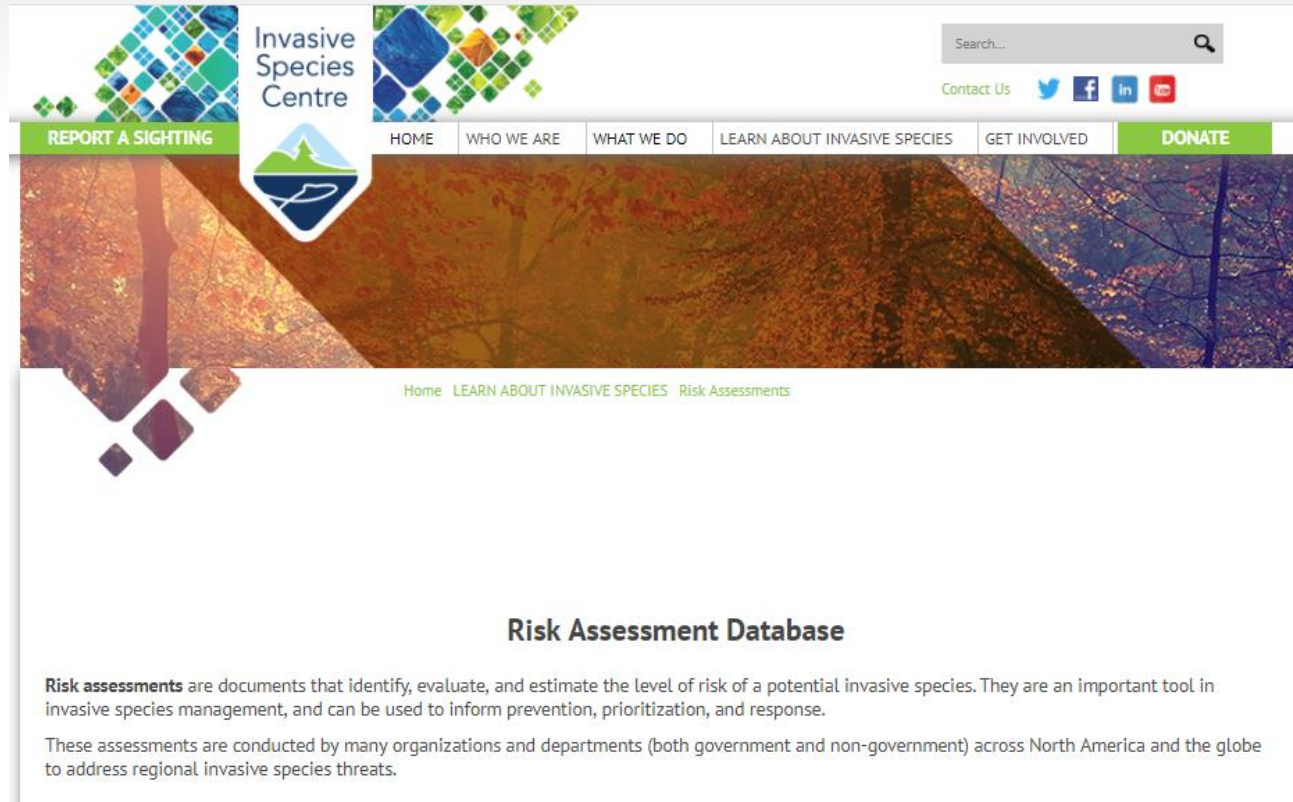


How are we doing?

2011-2017



Invasive Species Centre



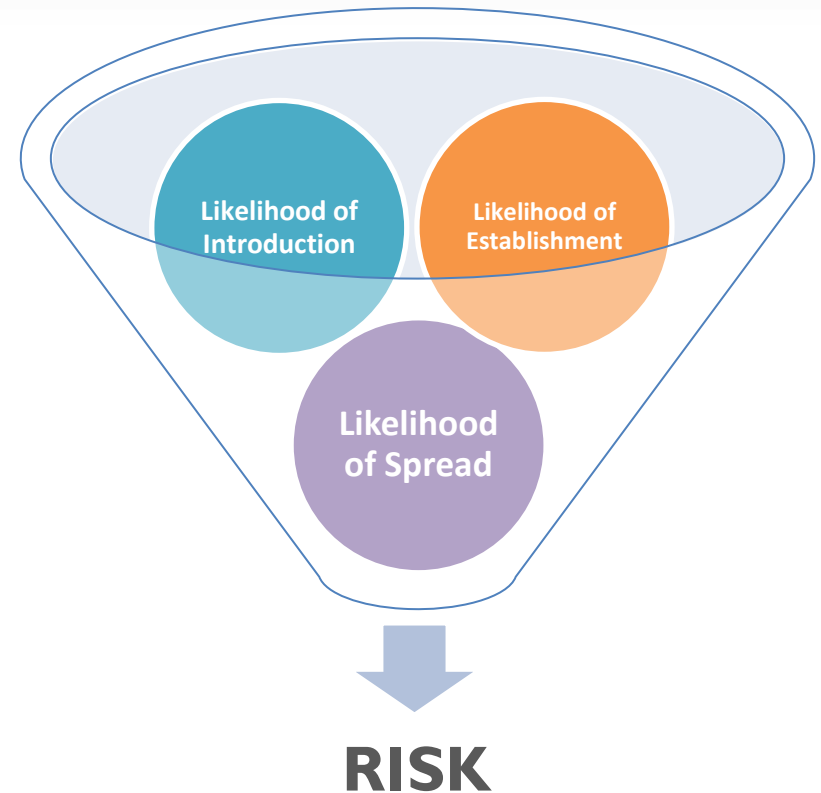
PROJECT HIGHLIGHT:

Risk Assessment Database

Risk Assessments

RISK ASSESSMENTS

- Identify, evaluate, and estimate the level of risk of a potential invasive species
- Are an important tool in invasive species management, and can be used to inform prevention, prioritization, and response.
- Are conducted by many organizations and departments (both government and non-government) across North America and the globe



(A good) Problem: Many Risk Assessments!

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CHALLENGE:

- Many risk assessments exist – but difficult to locate, and have uneven validity and credibility
- Information is spread across various government and non-government sources
- Many stakeholders do not know how to access risk assessments or where to find them
- Risk assessments should be readily available to enable and inform invasive species response

**A NEED FOR
A DATABASE OF
RISK
ASSESSMENTS**



Risk Assessment Database

INVASIVE SPECIES CENTRE RISK ASSESSMENT DATABASE:

- Online, accessible & searchable
- Initial search for assessments was focused on Great Lakes region, but long-term goals are for North American or International relevance

INCLUDES:

- 626 Species (aquatic, terrestrial, and wetland)
- 204 Full Risk Assessments
- 423 Summary/Characterization Assessments
- 10 Assessing Organizations



Accessing the Database

➤ WWW.INVASIVESPECIESCENTRE.CA

The screenshot shows the homepage of the Invasive Species Centre website. The browser address bar displays www.invasivespeciescentre.ca/default.aspx. The website header includes a login link, a link to visit the family of websites, and a link to become a member. The main navigation menu is located below the header, with the 'DONATE' button highlighted in green. A dropdown menu is open under 'LEARN ABOUT INVASIVE SPECIES', listing various topics: Aquatic, Aquatic Plant, Forest Pests, Plants, Invasive Species Education, Reference Resources, Economic Impacts, and Risk Assessments. The 'Risk Assessments' option is highlighted with a yellow box. The background of the website features a large image of a river flowing through a forest. The text 'and sharing reliable information' is visible on the right side of the image. Below the main navigation menu, there is a section titled 'Recent News' with a link to 'Response To MacLean's Editorial: An Unwelcome Invasion'. The text 'Protecting our land and water from invasive' is visible on the left side of the page.

Visit Our Family of Websites

Become a Member

REPORT A SIGHTING

HOME WHO WE ARE WHAT WE DO LEARN ABOUT INVASIVE SPECIES GET INVOLVED DONATE

Aquatic
Aquatic Plant
Forest Pests
Plants
Invasive Species Education
Reference Resources
Economic Impacts
Risk Assessments

and sharing reliable information

Recent News

Protecting our land and water from invasive

Response To MacLean's Editorial: An Unwelcome Invasion

In the September 2017 issue of Maclean's, the author of "A Welcome Invasion" suggests that not all non-native species are bad, some have unintended benefits, impacts have been small and local, and therefore

Searching the Database

All Columns

Records 1-10 of 586

reset

Species	Common Name	Environment	Full Risk Assessment	Categorization/ Summary Assessment	Assessing Body	Link
<i>Misgurnus anguillicaudatus</i>	Japanese weatherfish, Weather loach	Aquatic	Yes	Yes	OMNRF, USFWS	https://www.fws.gov/fisheries/ans/erss/hi_ghrisk/Misgurnus-anguillicaudatus-WEB-8-21-12.pdf
<i>Dreissena polymorpha</i>	Zebra Mussel	Aquatic		Yes	USFWS, NY	https://www.fws.gov/fisheries/ans/erss/hi_ghrisk/Dreissena-polymorpha-ERS-5-July2015.pdf , http://www.nyis.info/user_uploads/6299f_Dreissena%20polymorpha-ecological.pdf
<i>Xenopus laevis</i>	African clawed frog	Aquatic				
<i>Sander lucioperca</i>	Zander	Aquatic	Yes	Yes	OMNRF, USFWS, NY	https://www.fws.gov/njuriouswildlife/pdf_files/Sander_lucioperca_WEB_9-15-2014.pdf , http://www.nyis.info/user_uploads/cfd81_Sander%20lucioperca%20Ecological.pdf
<i>Iris pseudacorus</i>	Yellow iris	Aquatic				
<i>Rotala wallichii</i>	Whorly rotala	Aquatic	Yes		USDA	https://www.aphis.usda.gov/plant_health/plant_pest_info/weeds/downloads/wra/Rotala-wallichii.pdf
<i>Acipenser ruthenus</i>	White sturgeon, Sterlet	Aquatic				



Search bar provides fast results



Results can be filtered by:

- Species (alphabetical)
- Environment (Aquatic, Wetland, Terrestrial)
- Type of Assessment
- Assessing Body



Hyperlinks to accessible assessments



First Look – New and Improved Database

All Columns Records 1-50 of 586 [reset](#)

Species	Common Name	Environment	Assessment	Results
<i>Crambe abyssinica</i>	Abyssinian kale	Terrestrial	CFIA Categorization Assessment	
<i>Alosa pseudoharengus</i>	Alewife	Aquatic	USFWS Summary Assessment	
<i>Cuscuta approximata</i>	Alfalfa dodder	Terrestrial	CFIA Categorization Assessment CFIA Risk Assessment	
<i>Pterygoplichthys pardalis</i>	Amazon sailfin catfish	Aquatic	USFWS Summary Assessment	
<i>Profenusa thomsoni</i> (Konow)	Ambermarked birch leafminer	Terrestrial		
<i>Anguilla rostrata</i>	American eel	Aquatic		
<i>Phoradendron leucarpum</i>	American mistletoe	Terrestrial	CFIA Categorization Assessment CFIA Risk Assessment	
<i>Phellodendron amurense</i>	Amur cork tree	Terrestrial	CFIA Categorization Assessment IN Summary Assessment NY Summary Assessment	
<i>Perccottus glenii</i>	Amur sleeper	Aquatic	USFWS Summary Assessment	
<i>Echinochloa pyramidalis</i>	Antelope grass	Terrestrial	USDA Risk Assessment	
<i>Anubias barteri</i>	Anubias, Anubias barteri	Aquatic	USDA Risk Assessment	
<i>Pleioblastus argenteostriatus</i>	Argenteostriatus bamboo, Dwarf bamboo	Terrestrial	CFIA Categorization Assessment	

Risk Assessment Results will be included for each available assessment, specific to geographic area

New Species and New Assessing bodies are currently being added to the database

Simplified digital interface with integrated hyperlinks, where available

Both **technical** (risk assessments) and **non technical** (fact sheets) information will be included



Full Risk Assessment	Categorization/Summary Assessment	Assessing Body	Link
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How is this information used?

BENEFITS OF ACCESSIBLE RISK ASSESSMENTS:

- ✓ **Enables rapid response**
 - Risk information can be rapidly accessed to inform management and response for a variety of species
- ✓ **Reduces duplication of efforts**
 - Individual jurisdictions can borrow information from existing risk assessments; new risk assessments may not be needed, or can be completed more efficiently
- ✓ **Acts as a research resource**
 - Students, researchers, and decision makers can access risk assessments as a comprehensive overview of a particular species



Risk Assessment Database

NEXT STEPS:

- Complete '**Risk Assessment Results**' analysis, and include in searchable database
- Continue to add **more species** and risk assessments to the database as information becomes available
- **Host risk assessments** on Invasive Species Centre platform when Assessing Organization is unable to do so
- Develop risk assessment **contact database** – information on regional or organizational leads for completing risk assessments
- Conduct **analysis of risk assessment methodologies** to identify similarities and differences
- Consider adding **Pathway Risk Assessments** to the database



Risk Assessment Database

CALL FOR RISK ASSESSMENTS!

- Does your organization conduct risk assessments on invasive species?
- Would you like them included in the Invasive Species Centre's risk assessment database?

Email David Nisbet at dnisbet@invasivespeciescentre.ca



Acknowledgements



Thanks to the Ontario Ministry of Natural Resources and Forestry (OMNRF) for ongoing support of the Invasive Species Centre and the development of our risk assessment database.





Become a Member!

FREE
MEMBERSHIP
PROGRAM

What are the benefits to being a member?

- Access to the ISC Quarterly Newsletter
- Up-to-date Asian Carp Canada News
- Invitations to Special Events and Webinars
- Bi-weekly Media Scan of Invasive Species news across the country

Visit www.invasivespeciescentre.ca



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