



# Spotter's Network *Action Plan*



2014



YELLOW LAMIUM REMOVAL  
Photo: Heike-Designs

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Environment and  
Climate Change Canada

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## 1.0 INTRODUCTION

An invasive species spotter's network is comprised of organizations, professionals, and volunteers who are trained in species identification and report sightings of invasive alien species (IAS) to a central location. Invasive species spotter's networks are a key component of early detection rapid response (EDRR), which is the accepted approach to addressing the increasing number of invasive species affecting ecosystems in Canada.

EDRR is a preventative approach to managing invasive species. Early detection through a spotter's network activates a response chain involving verification, risk assessment, a coordinated response by responsible organizations and individuals, followed by subsequent monitoring and treatment. An EDRR plan is the most economical way to prevent infestations of invasive species.

The purpose of this report is to determine the present level of proactive monitoring (in the form of spotter's networks) in Canada and what resources exist to support these networks. We have outlined which components should be in place to establish sub-national spotter's networks and what must be done to establish and promote a national spotter's network, connecting and supporting all organizations in Canada that are working to monitor and manage invasive species.

While the Canadian Food Inspection Agency of Agriculture and Agri-Foods Canada works to prevent the IAS from entering Canada, spotter's networks will be more focussed on detecting IAS and tracking new invaders; these mostly originate from movement of IAS within Canada.

## 2.0 CANADIAN COUNCIL FRAMEWORK FOR SPOTTER'S NETWORKS IN CANADA

### 2.1 BACKGROUND

By increasing the capacity for early detection of new invasive species occurrences, a Canadian Spotter's Network will improve the distributional and ecological data in each of the participating provinces/territories, as well as contribute nationally to early detection and rapid response (EDRR) efforts.

The Canadian Spotter's Network will be comprised of representatives from the provincial/territorial invasive species councils and the professionals and volunteers they recruit. Members of a Canadian Spotter's Network will share a common interest in reducing the economic, social and environmental impacts of IAS. The intent of the Canadian Spotter's Network will be to increase the number of eyes (trained volunteers) on the ground and on the alert for new and existing invasive alien species infestations so that they can be reported to the appropriate agencies, and subsequently acted upon. Ideally, observations might be compiled nationally and mapped.



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## 2.2 GOALS OF A CANADIAN SPOTTER'S NETWORK

Under the guidance of the Spotter's Advisory Committee, the goals of the Canadian Spotter's Network are to:

1. Nationally, raise public awareness on invasive alien species.
2. Encourage and support the development and promotion of spotter's networks in all Canadian provinces/territories.
3. Develop a common approach to spotter's networks in Canada through information sharing and development of common branding and slogans.
4. Contribute to an increased national capacity for early detection and rapid response (EDRR).

## 2.3 OBJECTIVES FOR 2014/15 FISCAL YEAR

### 2.3.1 BACKGROUND RESEARCH

#### Activities

- Create an inventory of existing spotter's programs in all provinces/territories.
- Create an inventory of existing spotter's resources (e.g. training materials, outreach materials, etc) in all provinces/territories
- Identify existing national/federal spotter's resources (e.g. training materials, outreach materials, etc), and resource accessibility.
- Explore existing networks in other jurisdictions for models (e.g. Australia, Texas)
- Identify communication methods to promote a Canadian spotter's network.

#### Deliverables

- Report on existing spotter's programs and spotter's resources in all provinces/territories,
- Summary document or spreadsheet identifying existing national/federal spotter's resources and their relative accessibilities,
- Report on international best models,
- Framework for a spotter's network for IAS councils across Canada (components),
- Communication strategy.

### 2.3.2 GAP ANALYSIS

#### Activities

- Explore programs/software and their compatibility.
- Identify spotter's program gaps, inconsistencies, and limitations.
- Identify spotter's resources gaps, inconsistencies, and limitations.

#### Deliverables

- Summary document identifying spotter's program gaps and recommendations,
- Summary document identifying spotter's resources gaps and recommendations,
- Summary document of compatibility analysis (software).

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### 2.3.3 RECOMMENDATIONS AND STEPS FORWARD

#### Activities

- Propose recommendations and actions to address gaps, inconsistencies, limitations, and overlap identified in the gap analysis (Objective 2)
- Examples may include:
  - Encourage and support the development and implementation of capacity-building activities in provinces/territories, as required (e.g. train-the-trainer workshops).
  - Identify transferable spotter's resources and share them amongst all provinces/territories.
  - Develop new spotter's resources, as required.
  - Investigate means to link existing spotter's programs (e.g. national or international website).
  - Branding of the "Spotter's Network" and messaging ie. "See it – Report it", including consideration of languages.
  - Other activities.

#### Deliverables

- Identify deliverables for fiscal years 2013/14 and 2014/15 based on proposed recommendations resulting from the gap analysis (Objective 2).
- Examples may include:
  - Develop mechanism and strategies for sharing accessible resources amongst all provinces/territories (e.g. resource library, etc).
  - Design an interface to transfer data to regional/national/international databases (e.g. NatureServe, EDDMapS);
  - Common branding and messaging
  - Other deliverables.

## 2.4 ACTION PLAN 2014-2016

ACTIVITIES	DELIVERABLES	YEAR
<b>Background research</b>		
Create an inventory of existing spotter's programs in all provinces/territories/	List of existing spotter's programs in all provinces/territories	1
Create an inventory of existing spotter's resources	List of existing spotter's resources in all provinces/territories	1
Identify existing national/federal spotter's resources and resource accessibility.	List of national/federal spotter's resources and their relative accessibilities	1-2
Identify communication methods to promote a Canadian spotter's network.	Communication strategy	1-2
<b>Gap Analysis</b>		
Identify spotter's program gaps, inconsistencies, and limitations	Spotter's program gaps and recommendations	1-2
Identify spotter's resources gaps, inconsistencies, and limitations	Spotter's resources gaps and recommendations	1-2
Explore program/software compatibility	Compatibility analysis	2
<b>Recommendation and Steps Forward</b>		
Propose recommendations and actions to address gaps, inconsistencies, limitations, and overlap identified in the gap analysis	Identify deliverables for fiscal years 2014/15 2015/2016	1
	Mechanism and strategies for sharing accessible resources amongst all provinces/territories	2
	Interface to transfer data	2
	Others (to be determined)	2

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## 3.0 THE SPOTTER'S NETWORK

An inventory of existing spotter's networks in Canada is provided in Appendix 1.

### 3.1 COMPONENTS OF A SUCCESSFUL SPOTTER'S NETWORK

This list can serve as a checklist for developing a spotter's network program:

- Branding and messaging: Ideally used consistently across Canada
- List of priority species: Cooperation with the policy makers by selecting of the priority species (especially in places without a weed act or stand-alone legislation on weeds)
- Management: Ideally EDRR species are targeted in a spotter's network. Develop strategies for "actions" once a species is reported. Obtain management commitments from government s/ municipalities and landowners. what happens after the report is made?
- Reporting system: Development of a reporting form, protocol or app for phones, and a data base with dates, locations, geo-references etc.
- Data sharing: Map tool to provide a picture of spread (large scale) vs a tool for land managers
- Verification of reports: Development of a protocol on verification.
- Training materials: Development of training in form of a handbook in modules will enable participating organizations in tailoring the program for their needs. Templates for a power point presentation can be developed, ie. the handbook and training materials developed by the Citizen Science Program of the Lady Bird Johnson Wildflower Centre in Texas. Development of a tool kit to be used in the field by volunteers.
- Promotion: Templates for advertisement can be developed
- Strategies to seek partners (for financial support or to tap into volunteer resources): Template letters, list of partners or supporting organizations across Canada
- Strategies to keep volunteers involved, communication, feedback to participants.

### 3.2 MANAGING SPOTTER'S NETWORK DATA

A national database on invasive species currently does not exist for Canada. Data on invasive species is collected across the country by provincial invasive species councils, government departments and agencies, NGOs and stewardship groups. Many of these groups maintain databases or keep a record of invasive species sightings, but the existing data are not collected and presented in a central place. At the territorial or provincial level, the same problem may be occurring with various groups collecting data at different scales and in different environments (i.e. province-wide vs. municipal, terrestrial vs. aquatic).



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A central database or method to amalgamate invasive species data is a critical part of a Canadian Spotter's Network. A central database or an annual data amalgamation would provide a national picture of invasive species (i.e. current species distributions, high priority areas, etc.) and would contribute to an increased national capacity for Early Detection and Rapid Response. It would also allow a province or territory to be aware of threats in neighboring jurisdictions.

One method of amalgamating data to consider is the approach used by the Wild Species Program ([www.wildspecies.ca](http://www.wildspecies.ca)). It is a collaborative effort of all provincial, territorial and federal governments that gathers wildlife monitoring data from these governments and conservation data centres across the country. Criteria have been developed to establish General Status Ranks for each species in each province and territory, and an overall rank for Canada (e.g. Extinct, Extirpated, Sensitive, Secure, Exotic, etc.). A report of these status ranks is generated every 5 years.

A model similar to the Wild Species reports could be used to amalgamate data from a Canadian Spotter's Network. Provincial and territorial spotter's networks could provide point data for all or selected invasive species identified in their jurisdiction. The data in an Excel (or other) spreadsheet would be forwarded to a central location, where it is amalgamated with that of other jurisdictions to establish a general picture or map of invasive species for all of Canada. A report and distribution maps could be generated on an ad hoc basis for rapid response, or regularly every 5 years to provide a national picture of invasive species.

The CCIS might consider engaging a sub-national Invasive Species Council to amalgamate spotter's network data as required. This would make sense for projects where only a few species are being mapped. Alternately, a permanent national database could be developed.

Establishing a permanent national database would require initial funding and equipment, and subsequent funding would be needed for continued management and maintenance of the database. Partnering with an organization that has a similar mandate and already handles large volumes of data could be extremely beneficial.

In the US, state invasive species databases are maintained and supported by Natural Heritage Programs (e.g. the New York Natural Heritage Program is the lead partner organization for New York's iMapInvasives initiative). A similar relationship could be established in Canada between Canadian Spotter's Networks and an organization such as the Atlantic Canada Conservation Data Centre or the Ontario Natural Heritage Information Centre, for example. These Centres have permanent staff and specialize in amassing and maintaining data.

Regardless of what method the Canadian Council on Invasive Species decides to use to create a national perspective on invasive species, there are several other questions that will need to be considered, including:

- What attributes will be collected?
- Will a survey form or set of data fields be developed for streamlined, nation-wide, data collection?
- How will existing data be amalgamated?
- How will data be presented?
- Will point data be displayed?
- Who will have access to what data? (i.e. what will the public see)

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A central database for invasive species would be “fed” by spotter’s networks across the country. Several different online data management tools are already in use by Canadian spotter’s to facilitate input from citizen scientists and the public. These include iMapInvasives, EDDMapS, and British Columbia’s IAPP Application. Data from these tools can be made compatible using a central translation system (i.e. a central database) or by downloading data into a spreadsheet with corresponding headings.

These tools provide a platform for volunteer spotter’s to enter geolocations on maps, make reports, facilitate wide sharing of IAS information and resources, and promote citizen engagement. They also aid in map creation, emergency response efforts and aligning the priorities of various groups involved.

Spotter’s networks not currently using a data management tool might consider adopting one for ease of data entry and transfer to a central system. When comparing these tools several aspects should be considered, including: ease of use for both citizen scientists and conservation groups, types of data collected, and technology required for use. To aid groups in these considerations, a preliminary comparison of existing data management tools in use across the country can be found in Appendix 2.

### 3.3 STRATEGIES FOR PROMOTING CANADIAN SPOTTER’S NETWORKS

A Canadian Spotter’s Network will connect provincial invasive species councils and other groups participating in IAS monitoring and management across the country. Although specific programs and priorities among these groups are diverse, three overarching communication goals/objectives can be used to guide the promotion of a Canadian Spotter’s Network:

- 1) Nationally raise public awareness about invasive alien species
- 2) Recruit volunteer spotters
- 3) Maintain volunteer engagement

#### ***Goal: Nationally raise public awareness about invasive alien species***

**Strategy:** Educate the general public on the environmental, economic and human health threats that invasive species present, pathways for introduction and how they can help prevent the introduction of an invasive species.

**Objective:** Create a Canadian Council on Invasive Species website containing educational resources from all provinces and territories.

**Tactics:** Minimal funding would be required to hire staff to establish and maintain a CCIS website. Cooperation between councils, government departments and agencies, and interest groups will also be required in order to obtain all available resources pertaining to invasive species.

The website should contain links to provincial and territorial invasive species councils and spotters’ networks. Educational resources and training materials from all spotters’ networks should also be made available to volunteer spotters via a CCIS website. The CCIS website will be a hub for information on invasive species in Canada, increasing the capacity to raise awareness of invasive species on a national level.

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### ***Goal: Recruit volunteer spotters***

**Strategy:** Employ all possible means of communication (newspaper, website, partner organization websites, social media channels, etc.) to reach all potential volunteers, using key messages.

**Objective:** Recruit a large and diverse group of volunteer spotters to participate in monitoring, reporting and eradication efforts.

**Tactics:** The responsibility of recruiting volunteers will fall to each individual spotter's network. The CCIS's role in volunteer recruitment will be to direct perspective volunteer spotters to their local invasive species council or spotter's network via links on the CCIS website, provide support to provincial and regional spotter's networks by providing common branding, slogans and key messaging.

The CCIS should develop a set of key messages to be used by spotter's networks across the country. People are more responsive and apt to participate in stewardship activities when they realize there are personal consequences such as impacts on health, or on sports and recreational activities. Key messages, therefore, should focus on presenting threats and worst case scenarios associated with invasive species. The spotter's network could then be offered as a solution, a way to combat invasive species. A CCIS Facebook could be an efficient communication tool to keep members and partners informed and a virtual site where all the promotional material is on line.

All spotters' networks should develop a single page brochure that includes key messaging, contact information for the CCIS and the local coordinating organization. Brochures can be distributed by partner organizations, garden clubs, municipal governments, and other interested groups.

If any local environmental email lists, e-bulletin boards or online newsletters exist, information about the spotters network and how to volunteer should be disseminated that way as well. This will ensure that the people potentially already active in stewardship activities are aware of the spotter's network.

Local media should be contacted to do news stories on spotter's networks. Again, focus should be on the threats posed by invasives and how the public can help.

### ***Goal: Maintain volunteer engagement***

**Strategy:** Ensure all volunteers are trained, and given proper tools and support to participate in a spotter's network.

**Objective:** Maintain an active and engaged group of volunteer spotters.

**Tactic:** Training materials and spotter's kits should be developed at a local level to meet local needs. However, all training materials and educational resources should be shared among spotter's networks via the CCIS website to share ideas and see what works.

Spotter's networks will develop training materials and spotters kits with information on species identification, how to take good pictures to aid in identification of plants and other species of concern, health and safety, and reporting. Training slideshows should be made available online to spotters for future reference. Spotter kits should contain accurate contact information for the CCIS,

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the coordinating organization and any essential regional contacts. Coloured identification guides and survey forms should be included.

Feedback and progress reports should also be provided to volunteers as work is carried out, to ensure that they feel valued and that their efforts are worthwhile. Updates for volunteers on invasive species management could be posted on social media at national and provincial levels.

Newsletters should be developed at a provincial scale. A spotter's network newsletter should include progress on current and past projects, any new projects undertaken, new sightings, new species, upcoming events and contact information for the coordinating organization. Newsletters should be distributed to volunteers and partner organizations.

To encourage participation in workshops, eradication events and other events, all provincial spotter's networks should have an interactive, online calendar. The calendars will show upcoming events and training sessions, and volunteers should be able to choose to register for events through the calendar.

Community-based Social Marketing provides direction on how to get results and in the long term and change behaviors. For example, it has been shown that participation is more likely if volunteers are asked to make a commitment (i.e. directly ask "Will you collect observations" and eliciting a response "Yes, I will"). In addition, if volunteers retire, attempts should be made to determine why and to overcome the obstacles to retention.

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## APPENDIX 1. SPOTTER'S NETWORK INVENTORY

### PEI Invasive Species Council

P.O. Box 265 Charlottetown PEI C1A 7K4  
(902) 892-7513  
peiinvasives@gmail.com  
www.peiinvasives.ca



**Contact:** Beth Hoar  
902-892-3837  
bhoar@charlottetown.ca

**Scale/Territory:** Prince Edward Island

**Target groups:** General public. Ongoing education campaign has targeted many groups, including: Garden clubs/Garden Show, educational institutions (UPEI, Holland College), watershed groups, nature groups (Eagle Festival), environmental groups (PEI Environmental Health Co-op, Dandelion Festival), Atlantic Arborists, Parks and Recreation conferences, Youth organizations (Canada World Youth). In the future, PEIISC hopes to target PEI Birders

**Species:** Interested in preventing all invasive species. Only collecting sighting data and providing information on website for invasive plants.

#### Information Management

**Use of a spotter form:** Yes

**Form Content:** X GPS values    X Date    X Species name    X Number of individuals or extent

**Others:** Habitat type, municipality/nearest town, street address, landmarks, contact information

**Validation system:** No

**Data management:** Database exists as a Word Document. Sighting data is added to the list in a rather hit or miss approach since no one is specifically in charge of this.

**Survey:** Surveys are conducted if the invasive reported is known to be a particularly bad invader or if it poses a public health risk (e.g. Giant Hogweed).

#### Resources, Tools and Activities:

- PEIISC website ([www.peiinvasives.ca](http://www.peiinvasives.ca)) provides links to factsheets for 10 invasive plant species and IAS plant list for PEI
- Two factsheets (Wildflower seed mixes and avoiding IAS introductions in the transportation and construction industries)
- Identification key cards – distributed at presentations and workshops
- Management reports for 8 IAS have been completed

#### Challenges/Lessons Learned:

- A major challenge is lack of funding and resources. PEIISC operates on volunteers (most of whom work besides), making it difficult to meet, deliver information, apply for funding, reach out to more organizations and take on more long term projects.
- Keeping council interest high
- Many organizations gathering information, but without a central group (with adequate resources) these bodies of knowledge remain separate and unrecorded.
- Public awareness a challenge

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## New Brunswick Invasive Species Council

nb.invasive@gmail.com  
www.nbisc.ca



**Contact:** Paula Noel  
506-450-6010  
Paula.Noel@natureconservancy.ca

**Scale/Territory:** New Brunswick

**Target groups:** General public

**Species:** Only those listed on drop-down list, plants, some insects.

### Information Management

**Use of a spotter form:** Yes

**Form Content:** X GPS values    X Date    X Species name    X Number of individuals or extent

**Others:** Habitat type, photos (full plant, close up of stem, leaf), municipality/nearest town, landmarks

**Validation system:** No

**Data management:** NBISC does not store own data. David Mazerolle of the ACCDC is a member and he adds reports to NBISC to the ACCDC database

**Survey:** Reported areas are surveyed if the species being reported is new to the province or very uncommon (to confirm identification) or where there is a health risk (e.g. Giant Hogweed)

### Resources, Tools and Activities:

Tips on website for preventing spread of IAS. 16 IAS plant species listed on website with information on identification, environmental impacts and distribution in province.

Brochures and field guide available on website:

- Field Guide to 12 Invasive Plants of Concern in NB (identification, distribution in province, negative effects, control methods)
- Invasive Alien Species Guide for the Greater Saint John Region (lists 19 terrestrial and aquatic plant and animal species)

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## Invasive Species Alliance of Nova Scotia (currently not active)

1250 Grand Lake Road, Sydney, NS B1P 6L2  
(902) 563-1973  
info@invasivespeciesns.ca  
www.invasivespeciesns.ca



**Scale/Territory:** Nova Scotia

**Target groups:** General Public

### Resources, Tools and Activities:

No resources available at this time. Website is not active.



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## Project UFO (Unidentified Foreign Organisms)

info@projectufo.ca  
www.projectufo.ca

**Contact:** Dr. Martha Jones  
martha\_jones@cbu.ca



**Scale/Territory:** Cape Breton Island

**Target groups:** General public

**Species:** All aquatic and terrestrial invasives, with a focus on sea squirts and shoreline invaders  
Data management:

**Survey:** “Aliens on the Beach” and “Sea Squirt” surveys are conducted by volunteers

### Resources, Tools and Activities:

There is a lot of information about invasive species on the Project UFO website. There is also a “Kids’ Space” where kids can learn about invasive species. This section also has invasive species games and trivia that can be printed off.

## Stop the Spread of Aquatic Intruders

*NOTE: This website is run by the PEI Aquaculture Alliance (PEIAA). The PEIAA does not collect data or run a monitoring system, but reflects data that has been found through this website. IAS sighting data is collected by the PEI Aquaculture Division and the Department of Fisheries and Oceans.*



info@aquaticintruders.com  
www.aquaticintruders.com

**Contact:** (for questions re: website only, for questions re: data contact DFO) Peter Warris  
902-368-2757  
rd@aquaculturepei.com

**Scale/Territory:** NB, NS, PEI, Quebec, Newfoundland and Labrador

**Target groups:** Recreational boat users, fishers

**Species:** Aquatic invasive species only

### Information Management

**Use of a spotter form:** Yes

**Form Content:** X GPS values X Date X Species name X Number of individuals or extent

**Others:** Authority which confirmed presence, substrate associated with (rocks, boots, equipment, etc.)

**Validation system:** No

**Data management:** Results are shared with industry through the Introduction and Transfer Committee (DFO) and are reported on the PEI Aquaculture Division website using maps (updated annually)

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**Survey:** Both active (surveys in consultation with industry/stakeholders) and passive (taking note of anything observed during routine field work) surveys are conducted by the Aquaculture Division.

**Resources, Tools and Activities:**

Many links to Canadian, US and international sites with information on aquatic invasive species. Poster, booklet, and harbour signs available for download on website. There is also an option to request a waterproof copy of the booklet in the mail.

The website also features an interactive map. Users can see what AIS are present at any harbours on the Eastern Seaboard.

## New Brunswick Aquatic Invasives

nbinvasives@asf.ca

www.nbaquaticinvasives.ca

**Scale/Territory:** New Brunswick

**Target groups:** Anglers

**Species:** Freshwater aquatic invasive species

**Information Management**

**Use of a spotter form:** Yes

**Form Content:** X GPS values X Date X Species name X Number of individuals or extent

**Others:** Contact information, location, observation

**Validation system:** No

**Resources, Tools and Activities:**

The website has information (identification, distribution, habitat, impacts, etc.) on 9 species that have already invaded freshwater systems in NB. The website also allows users to see what species have invaded individual rivers in NB. An excellent “observation” section details how to make an invasive species observation (what to record and make note of).

Links are provided for NBISC and other organizations involved with IAS work.

## Newfoundland and Labrador Invasive Species Council

nlinvasives@gmail.com / nlinvasives@yahoo.ca

www.nlinvasives.ca

**Contact:** Todd Boland

jtboland@mun.ca

**Scale/Territory:** Newfoundland and Labrador

**Target groups:** General public

**Species:** Terrestrial and aquatic, plants and animals



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### Resources, Tools and Activities:

Links are provided to resources from IAS councils across Canada and internationally. Factsheets are available for 11 IAS found in Newfoundland and Labrador. Factsheets are also available online for 14 plants and insects that could invade Nfld. Documents are also available with best practices for 6 invasive plants.

## NWT Invasive Alien Project

**Organization:** Environment and Natural Resources

NWTSOER@gov.nt.ca or NWTBUGS@gov.nt.ca

[http://www.enr.gov.nt.ca/\\_live/pages/wpPages/invasive\\_species.aspx](http://www.enr.gov.nt.ca/_live/pages/wpPages/invasive_species.aspx)

**Contact:** Suzanne Carrier

[suzanne\\_carriere@gov.nt.ca](mailto:suzanne_carriere@gov.nt.ca)

**Scale/Territory:** Northwest Territories

**Target groups:** General Public

**Species:** Any

### Information Management

**Use of a spotter form:** No

**Validation system:** Yes

**Data management:** Feeding into NWT Wildlife Management Information System

### Resources, Tools and Activities:

- Website and Facebook page active
- A pamphlet is available
- No training so far; risk analysis done ([http://www.enr.gov.nt.ca/\\_live/documents/content/Report\\_on\\_Pathways\\_Analysis\\_NWT.pdf](http://www.enr.gov.nt.ca/_live/documents/content/Report_on_Pathways_Analysis_NWT.pdf))
- Report on Community [http://iris.info.yorku.ca/files/2012/12/GNWT\\_EVR\\_DES\\_final\\_large-April16-2012.pdf](http://iris.info.yorku.ca/files/2012/12/GNWT_EVR_DES_final_large-April16-2012.pdf)

### Challenges/lessons learned:

- Keep lines of communications (both ways) open.
- Do not restrict to alien species... any new species or any questions on any species should be investigated.
- Facebook group "NWT Species" is a hit, especially in summer.

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## Yukon Spotter's Network - Yukon Invasive Species Council (YISC)

info@yukoninvasives.com  
www.yukoninvasives.com



**Contact:** Andrea Altherr  
867-393-3394

**Scale/area of implementing:** The whole Yukon

**Target groups:** Public and professionals

**Target species:** Terrestrial plant species and 1 aquatic species: Leafy Spurge (*Euphorbia esula*), Spotted Knapweed (*Centaurea stoebe*), Creeping Thistle (*Cirsium arvense*), Tall Hawkweed (*Hieracium piloselloides*), Orange Hawkweed (*Hieracium aurantiacum*), Common Tansy (*Tanacetum vulgare*), Perennial Sow Thistle (*Sonchus arvensis*), Oxeye Daisy (*Leucanthemum vulgare*), Scentless Camomile (*Tripleurospermum inodrum*), Zebra and Quagga Mussel (*Drissena polymorpha*, *D. bugensis*)

### Information/Communication

**Validation of reporting:** Yes, by trained botanist

**Data management:** Presently Yukon government (YG) is collecting the reports. YG is in contact with the Alaskan Natural Heritage Program to feed into their data base. <http://aknhp.uaa.alaska.edu/botany/akepic/>

### Resources

- Tools/info sheets/etc
- Info sheets, poster, website, reporting form, field manual, key chain
- Facebook (coming soon)

### Challenges/ lessons learned:

- Partner with other organization
- Target professionals in separate sessions (make it easy available during work hours)
- Lots of advertisement and awareness for the program to create interest
- Keep contacting your spotter's to remind them of submission of their observations
- Keep list of interested people to invite for new training!

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## Alberta Invasive Species Council

ed@abinvasives.ca  
www.abinvasives.ca



**Contact:** Barry Gibbs

**Scale/area of implementing:** Alberta wide

**Target groups:** In development

**Target species:** Garlic mustard, hoary alyssum, flowering rush, yellow starthistle, Japanese knotweed, orange hawkweed, meadow hawkweed, mouse-eared hawkweed, himilayan balsam, pale yellow iris, purple loosestrife, Eurasian watermilfoil, sulphur cinquefoil, Medusahead, saltcedar

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## Information/Communication

**Use of reporting form:** Yes

**Data management:** EDDMapS Alberta

**Resources/Tools:** Training manual, instruction sheet, fact sheets, on AISC website  
Workshops and online training are in development. Spotters Network program in development

## Invasive Species Council of British Columbia

#100 - 197 North Second Ave., Williams Lake, BC V2G 1Z5

(250) 305-1003 or 1-888-933-3722

info@bcinvasives.ca

www.bcinvasives.ca



**Contact:** Gail Wallin  
gwallin@bcinvasives.ca

**Scale/Territory:** British Columbia. The ISCBC is supported by several regional committees: Northwest Invasive Plant Council (NWIPC), Fort Nelson Invasive Plants Management Area Steering Committee (FNIPMASC) and Peace River Regional District (PRRD).

**Target groups:** General public

**Species:** Invasive Plants and Species

## Information Management

The BC ISC has a Spotters Network, as well as general reporting tools including online reporting, a hotline and a phone app called “Report a Weed”. The Invasive Alien Plant Program (IAPP) - Map Display is a web-based mapping and reporting tool provided by the Ministry of Forests and Range to assist land management agencies, non-government organizations, and the public in developing and delivering effective invasive plant management programs throughout British Columbia. It displays invasive plant inventory and treatment information that is taken from the IAPP database. This information is data that has been entered by a wide variety of agencies and non-profit organizations around the province. IAPP Map Display is updated every 24 hours to give users access to the most current data available. <http://www.bcinvasives.ca/programs/spotters-network>

**Data management:** The information that is reported is held in the IAPP (Invasive Alien Plant Program) database <http://www.for.gov.bc.ca/hra/plants/application.htm>

## Resources, Tools and Activities:

The BC Spotter’s Network was developed as part of the two-year (2009-2010) Eyes Across BC program. Five different trainings sessions were developed: Invasive Plants 101, Agriculture and Range Invasive Plants, Aquatic Invasive Plants, Horticultural Invasive Plants, Aboriginal People and Invasive Plant. Workshop materials to host trainings sessions (participant packages, presentations) were also developed. Information on the program is posted on the website under the tab Programs/ Outreach/Spotter’s Network <http://www.bcinvasives.ca/programs/spotters-network>

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## INVASIVE SPECIES SPOTTER'S NETWORKS IN QUÉBEC, ONTARIO, MANITOBA AND SASKATCHEWAN

### QUÉBEC

The Ministry provides links for reporting. However, there are some that are not at all obvious to find.  
<http://www.mddefp.gouv.qc.ca/faune/especes/envahissantes/methodes-prevention-controle.htm>

<http://www.mddep.gouv.qc.ca/biodiversite/nuisibles/berce-caucase/>  
<http://www.mddep.gouv.qc.ca/biodiversite/eae/intrus.pdf>

St. Lawrence Fish monitoring network - Department of Natural Resources and Wildlife  
[http://www.mrnf.gouv.qc.ca/publications/faune/commu\\_poissons.pdf](http://www.mrnf.gouv.qc.ca/publications/faune/commu_poissons.pdf)  
one by the ministry

Fisheries and Oceans Canada accepts reports of exotic species in Quebec :  
<http://www.qc.dfo-mpo.gc.ca/publications/envahissant-invasive/signaler-une-espece-report-invasive-species-fra.html>

The ZIP committee, on the Magdalen Islands, was a project for the early detection of invasive species between 2008 and 2011. Can it be renewed?  
<http://www.zipdesiles.org/projets.htm>  
<http://www.dfo-mpo.gc.ca/Library/348747.pdf>

Network for the early detection of invasive alien aquatic species in the St. Lawrence  
Follow up by contacting Anne -Marie Pelletier after March 10 . 418-862-8213 p.303  
<http://sbisrvntweb.uqac.ca/archivage/030024026.pdf>  
by fishermen

Monitoring network of aquatic biodiversity  
<http://www.rsba.ca/autres/index.php>

\* You must create an account to report a case.

Contact:

Luc Gagnon , Director : (tel) 418 562-0936

Blaise Barrette, President and Webmaster : (tel) 418 566-5995 , ( fax) 418 737-1379

Sandra D' Août , Secretary - Treasurer: (tel) 418 560-2561 , ( fax) 418 737-1379

Email: [http://www.rsba.ca/nous\\_contacter/nous\\_contacter.php](http://www.rsba.ca/nous_contacter/nous_contacter.php)



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## ONTARIO

The Ministry of Natural Resources of Ontario has established a field guide to identify AIS : [http://www.web2.mnr.gov.on.ca/mnr/Biodiversity/Invasive\\_Species/field\\_guide\\_aquatic\\_invasive\\_species.pdf](http://www.web2.mnr.gov.on.ca/mnr/Biodiversity/Invasive_Species/field_guide_aquatic_invasive_species.pdf)

Invasive Tracking System  
<http://www.invasivetrackingsystem.ca/index.php>

\* The last sighting was in 2012. An account must be created to report a case.  
Contact: <http://www.invasivetrackingsystem.ca/SendEMail.php?Name=ITS+Comments&Subject=ITS+Comments&Send=%9E%2F%8E%1E%BE%14%D7%19%18%40%D0X%11%CF-%87%D6%9CS%E9%5BmJU>

Ontario 's Invading Species Awareness Program  
Supported by the Ministry of Natural Resources and the Ontario Federation of Anglers and Hunters ( OFAH ).  
<http://www.invadingspecies.com/report/>  
Contact: [info@invadingspecies.com](mailto:info@invadingspecies.com)

Ontario 's Invading Species Watch  
The same organization has developed this program to detect zebra mussel larvae, Spiny Waterfleas ( *Bythotrephes longimanus* ) and Fishhook Waterfleas ( *Cercopagis pengoi* ) based on the voluntary participation of residents. This program is 10 years old. It uses the EDDMaps tool to facilitate reporting.  
<http://www.invadingspecies.com/get-involved/invading-species-watch-program/>

Early detection network  
The same organization also has a network of early detection with EEE identification workshops for people who wish to participate.  
<http://www.invadingspecies.com/get-involved/early-detection-network/>

## MANITOBA

ISCM wishes to have a "Weed Spotter's Volunteer program " <http://fuellingchange.com/main/project/442/Weed-Spotters-Volunteer-Program>

## SASKATCHEWAN

The Government of Saskatchewan offers a phone number to report invasive species : <http://www.environment.gov.sk.ca/Default.aspx?DN=f261b408-d5e3-4a45-831a-c81e5d33a636>

Saskatchewan Invasive Species Council (SISC) offers a tool for reporting invasive species on their website, iMapInvasives , developed and funded by the New York State Invasive Species Council .  
[http://www.imapinvasives.org/skimi/report\\_invasives/](http://www.imapinvasives.org/skimi/report_invasives/)

Contact: [info@npss.sk.ca](mailto:info@npss.sk.ca)

## APPENDIX 2. DATA MANAGEMENT TOOL COMPARISON TABLE

Data Tool	Data Collected	Stewardship Features	Use in CAN	Other Comments
<b>iMapInvasives</b> (Owned by The Nature Conservancy (US). Developed through collaboration of many US conservation groups and the SK Conservation Data Centre)	<ul style="list-style-type: none"> <li>- Date</li> <li>- Species (drop down menu)</li> <li>- Location description (state, county, address, GPS, habitat description)</li> <li>- How you identified species (field guide, online resource)</li> <li>- Photos submitted via email</li> <li>- Other comments</li> </ul>	<ul style="list-style-type: none"> <li>- Collects absence data as well as observation data</li> <li>- Can create polygons to show exact extent of infestation</li> <li>- Advanced mapping capabilities</li> <li>- Can record and manage treatments</li> <li>- EDRR</li> </ul>		<ul style="list-style-type: none"> <li>- New users request to make account, wait for email with login information</li> <li>- Survey simple, single page</li> <li>- Website can be accessed online via smart phone (app needed?)</li> </ul>
<b>EDDMapS</b> (Developed by the Center for Invasive Species and Ecosystem Health at the University of Georgia)	<ul style="list-style-type: none"> <li>- Date</li> <li>- Species (drop down menu)</li> <li>- Infestation details (area, habitat type, density, habitat)</li> <li>- Location description (jurisdiction, GPS, point and click on map)</li> <li>- Photos submitted in form</li> <li>- Other comments</li> </ul>	<ul style="list-style-type: none"> <li>- Creates point distribution maps for each spp.</li> <li>- EDRR: online data entry forms, e-mail alerts, public data verified by local specialists</li> <li>- Custom applications can be developed</li> </ul>	AB,MB,ON,SK	<ul style="list-style-type: none"> <li>- New users create login information</li> <li>- Survey simple, format easy to use</li> <li>- Maps for each species available by municipality or data points</li> <li>- Users can manage their reports</li> <li>- Possible smart phone access</li> <li>- Can link directly to local factsheets</li> <li>- Help available for bulk data imports</li> </ul>
<b>IAPP</b> (Used exclusively in BC by agencies and groups working to monitor and manage invasive plants)	<ul style="list-style-type: none"> <li>- Date</li> <li>- Species (drop down menu)</li> <li>- Size of infested area</li> <li>- Location description (UTM, DMS, point and click map, text field for address or landmarks)</li> <li>- Photos submitted via email</li> <li>- Other comments</li> </ul>	<ul style="list-style-type: none"> <li>- Jurisdiction field- user selects group/agency responsible for site</li> <li>- Surveyor provides population data, proposed activity, can add multiple species per site</li> <li>- Can add GIS data</li> </ul>	BC	<ul style="list-style-type: none"> <li>- Users must have an IDIR for provincial government staff or a BCEID for MFLNRO clients</li> <li>- Survey format not oriented for public</li> <li>- Surveyors gather sightings from public via Report-A-Weed tool, use IAPP to manage sites</li> <li>- Application used only by BC</li> <li>- Public can see data and maps generated by IAPP</li> </ul>
<b>Nature Watch</b> (Administered by the Laboratory for Integrated Environmental and Policy Change at the University of Ottawa)	<ul style="list-style-type: none"> <li>- Not collecting data on invasive species, but for Frog Watch:</li> <li>- Date</li> <li>- Species (drop down menu)</li> <li>- Abundance</li> <li>- Photos submitted in form</li> <li>- Other comments</li> <li>- Locations are created, so multiple observations can be recorded for a single location</li> </ul>	N/A	All provinces and territories	<ul style="list-style-type: none"> <li>- New users create login information</li> <li>- Survey and user interface simple, easy to use</li> <li>- Many citizen scientists already involved with Nature Watch</li> </ul>