Developing an Early Detection and Rapid Response Program for Invasive Plants; Linking Midwest Efforts to the U.S National EDRR System

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Somerville
New Invaders Watch Program

A Volunteer, Web-Based Early Detection Program for Invasive Plants in NE Illinois and NW Indiana

Why EDRR in the Chicago Region?

1. Identified as an important, but missing strategy for natural area conservation the region
2. Core partners came together
3. Grant funding secured from CW
4. Strong volunteer base and CW Coalition to work with

Partners are Critical!
Who is your “Volunteer” Base?

- Plants of Concern
- Citizens for Conservation
- Save the Dunes
- Bull Creek Watershed Group
- The Nature Conservancy, Indiana
- The Nature Conservancy, Illinois
- Shirley Heinz Environmental Fund
- The Land Conservancy of McHenry County
- Liberty Prairie Conservancy
- The Morton Arboretum
- Natural Resource Conservation District
- US Forest Service
- National Park Service
- US Geological Survey
- US Fish and Wildlife Service, IN
- Indiana Department of Natural Resources
- Illinois Department of Natural Resources
- Forest Preserve District of DuPage
- McHenry County Conservation District
- Lake County Forest Preserve District, IL
- Forest Preserve District of Will County
- Forest Preserve District Cook County
- Kendall County Forest Preserve District
- McHenry County Conservation District
- Kane County Forest Preserve District
- McHenry County Division of Transportation
- Lake County Stormwater Management Commission, IL
- Lake County Soil and Water Conservation District, IL
- Lake County Parks, IN
- Palatine Park District
- Highland Park District
- Downers Grove Park District
- Valparaiso Department of Parks
- Tallgrass Restoration, LLC
- Liberty Prairie Restorations
- Bloom Consultants
- Land Resources Management Group

Who is your “Volunteer” Base?

- VOLUNTEER GROUPS
- NGO’S, LAND TRUSTS
- ARBORETUM
- FEDERAL AGENCIES
- STATE AGENCIES
- ARBORETUM
- FEDERAL AGENCIES
- STATE AGENCIES
- FOREST PRESERVES
- CONSERVATION DISTRICTS
- COUNTY AGENCIES
- COUNTY PARKS
- PRIVATE BUSINESS

Train the Trainer

400 + Trained
146 signed up on the website
Selection of Target Plant Species

1. Gather information about potential target species:
   • Work from lists generated in your or adjacent states
   • Review herbarium records of potential target species
   • Review regional EDRR species lists
   • Review species identified as problematic in other regions of similar climate, habitat etc.

2. Determine need for formal risk assessment.

3. Solicit input from experts

4. Consider your target audience for training – e.g., ease of ID
Develop Identification and Data Collection Tools for Participants

Target Species ID Card Set (or some type of brochure)
Standard data collection protocol, including vouchering
Data Dictionary
Vouchering instructions
Do you Need a Website or Database?

A central location for program information, updates, data storage.

- Volunteer sign-up
- Additional Species information
- Training Opportunities
- New Sightings
- Online reporting form w/ instructions
- Developing a mapping module

http://ewrr.inhs.uiuc.edu/newinvaders/home.aspx
Species ID Information

* Common Name: Spotted Knapweed

Scientific Name: Centaurea maculosa

Genus: Centaurea Species: maculosa

Date Seen: 7/25/2006

Species Location Information

Place Name / Town Name (as in mi or km NE Pales Park)

Independence Grove

* State: IL

* County: Lake

Principle Meridian: Township:

Range: Sections:

QtrSection: - Select - QtrQrtSection: - Select -

Latitude: 42.3152

Longitude: 87.9531

Datum: 1927 Other Datum:

How did you determine your location?

Topozone.co

Other technique to determine your location:

Walking directions to location / Best access:

Main entrance road to north pavilion, head NW to prairie plantings around lake.

Location landmarks (roadways, buildings, lakes, etc.)

Land Ownership Information: (Do not enter private property without permission)

If you cannot find the public land owner on the last, please provide us, as "Other Land Owner", the name of the land owner, address, and email. Also provide "Other Public Land Name" that includes with the user land owner. Spell out words fully.

Land Owner Type:

Public Land Owner:

Other Land Owner:

Public Land Name:

Other Land Name:

Name of Occurrence

Area Affected / Gross area of infestation: (ft² or m²)

Value: 217880 Unit: square feet

Distribution of Plant Population:

Few scattered plants

Plant Growth Stage:

To Flower To Seed To Fruit Seed Present Dead/Dead

Note Information

Communities Types:

Other

Other Community Type:

Prairie plantings
Verification System – Quality Control vs Volume Reporting

• Require donor to submit vouchers or photos
• Professional botanists verify collections
• Field visit by verifier or local botanist may be required

Leafy spurge

Flowering spurge

or
Vouchers, Photograph, and Sketches

Vouchers Provided: Yes

If Yes, how do you plan to voucher specimen?

☐ Digital Images

Type of Voucher:

☐ Insect in alcohol or dry

☐ Herbarium Sheet

If you provide image(s), please complete the information below. If you provide specimen, please send your vouchers to:

New Invader Watch List
c/o Dr. R. Edward Devrell, Illinois Natural History Survey
1816 South Oak Street
Champaign, Illinois 61820

Upload image(s):

Note: To delete image(s), please select 'Check to Delete' checkbox(es), then click the 'Update' button below to update your information.

Note: To update image(s), please just browse for new image(s); Please remember to update image's credit and description for the new image, then click the 'Update' button below to update your information.

Important: You can choose either one of the two options above.

Check to Delete

☐ Click here to view image

Image Credit1:

Debbie Maurer

Description1:

Flowers and buds after flowering.

File 1:

Browse...

Check to Delete

☐ Click here to view image

Image Credit2:

Debbie Maurer

Close up of flower
Rapid Response Network

A network of land owners, managers and licensed, trained volunteers that can help eradicate or contain new populations or that can assist private landowners, Townships, Municipalities, and Highway Departments in control efforts.

Automated alert system for new verified reports
Grant Funds over 4 years
(does not include in kind match)

- Project Coordination: $27,000
- Travel (training): $3000
- Cameras, plant presses, GPS units, herbicides, and handouts for training: $20,000
- Website, database, mapping, Response network, automated Verification system development and enhancement: $43,000 (includes 2 more years of funding)
- ID Card printing*: $5000 ($2/set to print)

*We will add five new species this fall
Successes

- County record for Giant Hogweed reported through the program
- Japanese Knotweed populations identified and controlled in Lake Michigan ravines
- Formed Lake and McHenry County CWMA
- County DOT’s control leafy spurge in Lake and McHenry Counties
- Lespedeza cuneata identified and controlled in State Natural Area
- Increased awareness, over 400 volunteer citizens and staff trained and over 14 agencies are a part of the Rapid Response network
- Local consultants are requesting training
Challenges not yet overcome….

- How to include more private landowners and address control needs.
- How do you measure participation (when you are looking for species that are uncommon, how many reports can you expect even with 100% participation?)
- Long-term funding
- Need broader regional assistance with program coordination efforts (e.g., Maintaining communication with a large number of volunteers)
How does a local effort like NIWP fit into a broader framework for EDRR in the US?

Randy Westbrooks – US Geological Survey
National Early Detection and Rapid Response System for Invasive Plants; Key Elements

Regional Invasive Plant Councils / Atlases (Volunteer Training, Data Archival and Synthesis)
MIPN EDRR and Data Management Committee

• Tracking existing and new EDRR programs
• Increasing awareness of data collection protocols and encouraging a standard
• Increasing awareness of EDRR plant species in the Midwest – 2006 flyer
• Exploring opportunities for regional data sharing and management –
State Invasive Species Councils (Interagency Coordination for Invasive Species),

State EDRR Coordinating Committees*
- Target Species List
- Training Workshops
- State ID Coordinator and Designated Botanists and Herbaria
- Vouchering
- Rapid Assessments (New Species)

EDRR Volunteer Detection Network – Detection and Reporting of New Invaders

*Proposed State EDRR Committee Composition - Volunteer Network Coordinator, ID & Vouchering (Botanist), Rapid Assessment and Control Recommendations (Federal and State Weed Scientists), Outreach and Education Coordinator, Public & Private Conservation Lands Liaison, Federal Regulatory Issues (APHIS), State Regulatory Issues, Terrestrial Weeds (State Dept. of Ag), Aquatic Weeds (State DNR)
Midwest State/Province Level Invasive Plant Working Groups

- Minnesota Invasive Species Advisory Council
- Wisconsin Council on Invasive Species
- Illinois Invasive Plant Council
- Ontario Invasive Plant Council
- New! Indiana Invasive Plant Taskforce
Statewide Early Detection Programs in The Midwest

Single Species Focus
• Illinois Kudzu Eradication Program
• Indiana Kudzu Eradication Program

Multi-species Focus
• Plants of the Future – Wisconsin

Other programs not statewide:
• Garlic Mustard – Northern MI
• New Invaders Watch Program – NE Illinois / NW Indiana
• Invaders – MBot Gateway Region
Regional Invasive Plant Councils – Interagency Coordination

State Invasive Plant Councils – Interagency Coordination

Cooperative Weed Management Areas and Task Forces

Rapid Response on-the-ground Weed Control and Eradication Efforts

Cooperative Weed Management Areas
Multi-Species Focus; Including EDRR Target Species

Invasive Plant Task Forces
Species Specific Focus
Cooperative Weed Management Areas in the Midwest
A Possible Future for IL …
NIWP Working with CWMA’S to develop a state-wide EDRR Program in Illinois

Develop a New Invaders Tool Box to guide and assist other CWMA’s / Watershed groups in developing their own New Invaders Program, while utilizing the established resources of the CW New Invaders Watch Program.
Regional Coordination – Midwest Invasive Plant Network: work to establish a method to share data and provide guidance on EDRR species for the Midwest.

State Councils – Encourage councils to form in states that do not have councils, encourage participation, action by councils and communication among state councils.

State EDDR Committees – Not yet addressed. May help guide the development of EDRR programs within states and provide guidance for statewide or local EDRR program development (experts for species selection, location to store data, etc.)

EDRR Volunteer Programs – Encourage development of EDRR Programs utilizing resources from MIPN (data sharing), State Councils and Committees and existing programs.

CWMA’s and Taskforces – Encourage continued growth and geographic coverage, EDRR programs can provide a focus for CWMA’s