



Wisconsin Headwaters Invasives Partnership Terrestrial Invasive Species Management Plan 2016

PURPOSE

This document was developed by WHIP's Strategic Plan Action Team as a component of a PFGP-WMA grant awarded by the Wisconsin Department of Natural Resources to WHIP over the period of 2014-2016. It was created in response to a need for a standard internal protocol for responding to newly detected populations of suspected terrestrial invasive plants, particularly those of high priority or previously unknown in our management area. This document will assist WHIP members in handling new species reports in a timely manner and ensuring each report receives appropriate follow-up action. It was developed with input from our 15 Formal Partners and will be offered back to them as a tool to assist in their handling of invasive plant issues and reports.

Since many of the sections described in our original grant proposal have already been incorporated into our new Strategic Plan (2016), the Invasive Species Management Plan is now an accompanying document to the Strategic Plan.

This document was developed with guidance from the WDNR's new "*Response Framework for Invasive Species*" and it will serve to guide our actions unless updated information or different direction from the WDNR is announced. Once finalized and adopted, this plan will be in effect for 5 years at which time it will be reviewed and updated to reflect any additional survey and/or changes in species status as required.

INTRODUCTION

The Wisconsin Headwaters Invasives Partnership is a 15-partner cooperative frequently called upon to respond to reports of invasive species in our management area (Oneida and Vilas Counties of north-central Wisconsin) both known and new. With varying methods of response utilized by all of our partners, it has become necessary for WHIP to establish our own protocol for handling reports of invasive species. This protocol will guide our actions to ensure that if a new invasive species report occurs, WHIP will quickly and efficiently:

1. Inform all appropriate parties (biologists, land managers, professionals)
2. Take action to monitor and control the invasive species as needed

By determining a plan in advance, WHIP can ensure that thorough communication occurs, and that we can efficiently assist our partner agencies with species management.

EARLY DETECTION/ REPORTING

During any WHIP activities, attention must be paid to species that may represent a new invasion in the WHIP management area, or is considered particularly rare in the WHIP area. Our limited budget (along with other factors) means that early detection is the most cost-effective and efficient way of managing these species while they are still at very low numbers. Similarly, the WDNR's Invasive Species Response Framework states that *"to be most effective, a response to a new introduction should occur quickly during the 'pioneering' stage, when the identified populations are still small and manageable"*. Urgency of reporting will vary depending on the status of the species discovered as defined by Wisconsin Administrative Code Chapter NR 40:

- According to the WDNR, species designated as **Prohibited** should be immediately reported to invasive.species@wisconsin.gov, or by visiting the Invasive Species webpage and filling out the appropriate form.
- For species designated as **Restricted**, all species representing a new county occurrence should be reported to invasive.species@wisconsin.gov or by visiting the Invasive Species webpage and filling out the appropriate form.

VERIFICATION OF SPECIES

Verification is required to determine the validity of a report and to ensure the required details of a new infestation (age, reproductive status, vigor, etc.) are known. Many invasive plants are spread inadvertently if they appear extremely similar to a number of "look-alike" natives. Obviously, verification should occur as soon as possible after species discovery, but prior to any control actions.

Notes:

- Upon discovery of a suspected invasive plant, a WHIP member will record the following:
 - Location details including County, Town, street address or highway mile, land-ownership, and GPS coordinates if possible.
 - Estimated number of the individuals found or the physical extent of the infestation.
 - Photo (s)
- A return site visit should be made by an expert. In WHIP's current network, qualified individuals include those identified by the local WDNR office as verifiers.
- If a site visit cannot be made, the WHIP member should return to the site and obtain a specimen to forward to the WDNR expert, using their directed protocol for preservation and vouchering.
- WHIP member may choose to ask the Coordinator to carry out the return visit for the specimen.

COMMUNICATION OF DISCOVERY

After a physical sample has been visually confirmed by an expert, parties who may contribute to decision-making regarding a new infestation must be informed. Here, it is necessary to follow steps that will differ depending on the species, size of infestation, location, and type of land ownership involved.

Notes:

- The WHIP member who was the original observer should notify the Steering Committee of the details of the new invasive plant report or delegate the Coordinator to do so.
- If report is from publicly-owned land (e.g., USFS, WDOT), the Coordinator will inform the WHIP contact person for that Partner, who will then be responsible for informing the appropriate individuals within their organization.
- If the report is from privately-owned land, the Coordinator will inform the landowner along with a selection of educational outreach material, and then will inform all Partner contacts so that all natural resource professionals in the region are aware.
- After the above are notified, a media release will be considered, to contribute toward preventing the spread. Before any communications are made by WHIP to any media, the topic will be first discussed at a Steering Committee meeting, and input will be sought from the WDNR if the new species is designated **Prohibited**.

ASSESSMENT AND RESEARCH

In the case of a newly verified invasive plant population, WHIP will maintain communication first amongst the Steering Committee, and secondly between WHIP and the Partner group on whose land the invasive was discovered. If the Partner group is not in a position to immediately respond or incorporate management of the species into their schedule or programming, WHIP will assess whether it can possibly take the lead.

Notes:

- The issue of whether or not WHIP is prepared to take action will be an agenda topic at least one Steering Committee meeting.
- The Committee will discuss:
 - ✓ Does WHIP currently have funds to dedicate toward coordination of a management or control effort? If not, is there a suitable funding source that WHIP can pursue in a timely manner to provide these funds (e.g., DNR WMA Suppression grant, etc)?
 - ✓ Does the WHIP Coordinator have hours available for 1. the application for these funds, and 2. coordination of the management effort itself?
 - ✓ Does any Steering Committee member possess the expertise to guide the management effort successfully (to choose a control action) or will the Coordinator undertake this research?
 - ✓ Do additional Steering Committee members have time available for consultation and/or supervision to assist?
 - ✓ If the majority of these answers are yes, then the Committee will discuss a plan to move forward either immediately or after a period of research and grant seeking.
 - ✓ The overall goal of the management effort must be clear from the outset, and identified as either Containment, Local Control, Eradication, or another outcome.

COORDINATION OF RESPONSE ACTIVITIES

Any response or management effort will be carried out with clear communication amongst the Steering Committee, Coordinator, Fiscal Agent, and the appropriate Partner contact.

Notes:

- As a Steering Committee, the decision shall be made as to what type of control is the most appropriate: Physical/Mechanical, Biological, Chemical, Regulatory activities, or other.
- If the group decision identifies Chemical control as part of the management effort, all documents must be obtained according to the Lumberjack RC&D's Pesticide Policy (2015) and first presented to the Lumberjack Executive Council for review.
- A response plan shall consider the following:
 - ✓ Risk to environmental or human health
 - ✓ Anticipated cost of eradication effort and follow-up monitoring
 - ✓ Available personnel for both implementation and supervision if required
 - ✓ Regional and local distribution, and landscape context
 - ✓ Age of infestation.
 - ✓ Neighbors' actions/inaction.
 - ✓ Pathways/source – identified, controlled, eliminated, etc.
 - ✓ Survey and assessment confidence.
 - ✓ Habitat type(s)
 - ✓ Life stage(s) present.
 - ✓ Land ownership

MONITORING AND RESTORATION

A major component of any control projects undertaken by our group will involve monitoring for effectiveness and restoration efforts. WHIP's mission states that it is "dedicated to the conservation of the native species, habitats and landscapes of Oneida and Vilas Counties in north-central Wisconsin", which indicates the importance of restoration.

Notes:

- Each control effort will involve at least one follow-up visit made by a Steering Committee member, the Coordinator, or a willing Partner contact person who will share their findings.
- The Coordinator will circulate a summary to the Steering Committee.
- The Coordinator will maintain communication with the appropriate Partner contacts, and discuss carrying out surveillance for reinfestation along with other field activities if possible.
- According to WDNR recommendations, efforts will be made to incorporate both treatment effectiveness monitoring and surveillance monitoring for the return of invasives.
- On a regular basis (determined by the biology of the invasive species), monitoring information will be incorporated into a discussion of control effectiveness, and previously selected methods may be adjusted to improve outcomes and/or to reduce or minimize impacts.
- To ensure restoration is carried out smoothly, WHIP will utilize the restoration programs currently in place by the Partner group owning the land involved. If land is privately-owned, WHIP will discuss a plan at a minimum of one Steering Committee meeting and the Coordinator will first seek input from Partners who have experience with restoration programs (e.g., the County LWCDs).
- TIMING: Although it is tempting to implement restoration in the same growing season as the control effort, this will vary and is not always appropriate. The DNR Response Framework states that: *"In many cases it will be best to wait until the invasive species is mostly contained or removed to begin restoration. If native species are incorporated too early, it may prevent the use of pesticides or other necessary control methods"*.

EDUCATION/AWARENESS and PREVENTION

As a Cooperative Invasive Species Management Area (CISMA), WHIP's most effective strategy against invasive species is education on the importance of prevention. Part of being prepared for high-priority invasive species is ensuring that our communities are educated on species identification and potential pathways. Therefore, our Strategic Plan (2016) identifies "*Prevention through Education and Outreach*" as one of our top five primary goals:

"The role of outreach and education cannot be overstated in the effort to slow the spread of invasive species. Awareness of the characteristics and potential negative impacts of invasive species is essential to meeting the goals of WHIP and its Partners. Prevention is also the most cost-effective management strategy. Therefore, WHIP shall place a primary importance on education and outreach to the public, with a focus on how both visitors and residents can help to slow the spread of invasive species. In addition to programming, WHIP will also provide clear, direct, accessible outreach material and up-to-date information on current invasive species populations throughout our management area."

Notes:

- WHIP shall coordinate and implement activities to fulfill the objectives listed under Goal 1 in our Strategic Plan and described in the WHIP Work Plan.
- Annual measurable targets and deliverables related to outreach include:
 - Minimum of 1 public workshop in each county.
 - WHIP booth at both County Fairs.
 - No requests for information left unattended.
 - Materials provided for all Partner groups who request it.
 - Minimum of 4 presentations to groups
 - Contact with both Highway Departments, extend offer to all Town Boards
 - Minimum of 2 high school outreach events
 - Minimum of 2 elementary outreach events
 - Remain a PlayCleanGo Partner
 - Renewed partnership in IPAW and/or MIPN
 - Newly printed copies of WHIP brochure as needed
 - Brochures supplied to 2 libraries
 - Minimum of 2 facebook posts per week
 - Monthly newsletter distributed
 - Steadily increasing number of visits to website and facebook page
 - Minimum of 4 media spots
 - 1 new sign
 - Maintained partnership in PlayCleanGo
 - 1 conference attended every 2 years (UMISC) to represent WHIP
 - 1 face-to-face CISMA Coordinators' Meeting attended per year
 - 4 CISMA conference calls per year
 - Minimum of 1 DNR or Partner agency update circulated per month
 - Minimum of 2 items circulated to wider WHIP list

SPECIES PRIORITY LISTS

Awareness of the distribution and abundance of invasive plants across our two-county area is a mandatory component of being prepared for new invasions. From 2012 to 2014, WHIP invested significant effort to capture a “snapshot” of the status of local invasive populations. With funding from the Lumberjack Resource Conservation & Development Council (Rhinelander, Wisconsin), WHIP carried out invasive plant surveys on the right-of-ways along all county highways in our two counties. These surveys yielded 2381 invasive plant records. Maps produced from the survey data reveal relatively low occurrences of invasive plants as compared to other areas of the state. The favorable results could be interpreted that north central WI is not as highly vulnerable to the plethora of invasive plants common along roadways further south. However, the WHIP steering committee recognized the opportunity for proactive preparation for the onslaught of invasive plants likely spreading northward and the financial implications of mitigating these species at a later date.

Through examining these survey results and consulting with our partner groups, WHIP has now created three Priority Lists of terrestrial invasive plant species: “*Early Detection & Response*”, “*Priority Management*”, and “*Watch*”. Species are separated into three categories based on overall distribution, local abundance, ecological and/or human health threats. These lists are intended to serve as a guideline for WHIP members and partners. They will be reviewed and adjusted as needed.

Definitions

Early Detection and Response: This category of species exist only in isolated, scattered populations and are of high priority for early detection and rapid response efforts. Eradicating new invasions of these species early is the most successful way to prevent their spread.

Priority Management: Species in this category are established in the WHIP management area and their presence can negatively impact natural areas, making their control and management necessary.

Watch: Species in this category are yet to be observed in the WHIP management area but have been recorded in at least one adjacent county. These plants are a detection priority as they are known to be particularly damaging either to ecological systems or to human health.

Status in Wisconsin: P = Prohibited, R = Restricted

Species are chosen for regulation by state agencies based on the harm they pose to the state’s environment, economy, and/or public health. In general, species that are more widespread or naturalized are restricted while less widespread species are prohibited. The transport, introduction, and sale of all regulated species is illegal. In Wisconsin, it is illegal to possess a prohibited species, and property owners are legally required to control prohibited species present on their property.

Common Name	Scientific Name	Status in Wisconsin	Management Objective
		R = Restricted P = Prohibited	Contain, Control, Eradicate, or Other
Early Detection and Response			
Wild Chervil	<i>Anthriscus sylvestris</i>	P	
Common Reed (non-native)	<i>Phragmites australis</i>	P/R (R in WHIP area)	
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	R	
Wild Parsnip	<i>Pastinaca sativa</i>	R	
Garden Valerian	<i>Valeriana officinalis</i>	R	
European Marsh Thistle	<i>Cirsium palustre</i>	P/R (R in WHIP area)	
Butterfly Dock	<i>Petasites hybridus</i>	P	
February Daphne	<i>Daphne mezereum</i>	not regulated	
Priority Management			
Glossy Buckthorn	<i>Frangula alnus</i>	R	
Common Buckthorn	<i>Rhamnus cathartica</i>	R	
Garlic Mustard	<i>Alliaria petiolata</i>	R	
Purple Loosestrife	<i>Lythrum salicaria</i>	R	
Japanese Knotweed	<i>Polygonum cuspidatum</i>	R	
Yellow Flag Iris	<i>Iris pseudacorus</i>	R	
Eurasian Honeysuckles	<i>Lonicera tatarica</i> , <i>L. morrowii</i> , <i>L. x bella</i>	R	
Leafy and Cypress Spurge	<i>Euphorbia esula</i> , <i>E. cyparissias</i>	R	
Plumeless Thistle Canada Thistle Musk Thistle	<i>Carduus acanthoides</i> <i>Cirsium arvense</i> <i>Carduus natans</i>	R	
Japanese Barberry	<i>Berberis thunbergii</i>	R	
Garden Yellow Loosestrife	<i>Lysimachia vulgaris</i>	R	
Common Tansy	<i>Tanacetum vulgare</i>	R	
Black Locust	<i>Robinia pseudoacacia</i>	R	
Crown Vetch	<i>Coronilla varia</i>	R	
Watch List			

Giant Hogweed	<i>Heracleum mantagazzanium</i>	P	
Bohemian Knotweed	<i>Polygonum x bohemicum</i>	P	
Giant Knotweed	<i>Polygonum sachalinense</i>	P	
Policeman's Helmet	<i>Impatiens glandulifera</i>	P	

RESOURCES

Report an invasive species: <http://dnr.wi.gov/topic/Invasives/report.html>

NR40 details: http://docs.legis.wisconsin.gov/code/admin_code/nr/001/40.pdf

List of regulated invasive species under NR 40: <http://dnr.wi.gov/topic/Invasives/classification.html>

Priority Invasive Plants in Wisconsin website: <http://arcg.is/1TFjsdN>

Financial resources for invasive species: <http://invasivespecies.wi.gov/financial-assistance/>

WDNR Draft "Response Framework for Invasive Species":
<http://dnr.wi.gov/news/input/documents/guidance/ISResponseFramework.pdf>

WHIP Strategic Plan (2016): <http://bit.ly/1ocgZPm>