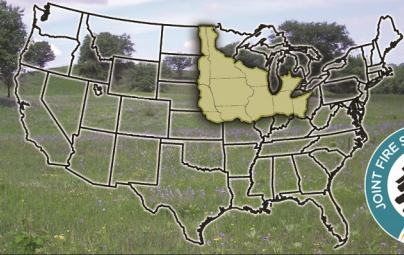


Tallgrass Prairie and Oak Savanna Fire Science Consortium

A JFSP KNOWLEDGE EXCHANGE CONSORTIUM



TPOS 2014-01

Using Online Resources to Learn About Fire Effects on Invasive Species: The Midwest Invasive Plant Network (MIPN) and USDA's Fire Effects Information System (FEIS)

Anders Gurda

There are numerous online resources that relate to land management, invasive species, prescribed burning, and fire science. Faced with a search engine's overwhelming output, it is often hard to know which sources of information are credible and which are the most useful. In this fact sheet we focus on **two websites that can provide land managers information on how prescribed fire may control invasive species**. The most helpful features of each site will be highlighted, as will strategies to maximize the usefulness of the resource.

Midwest Invasive Plant Network

Web address: <http://www.mipn.org>

MIPN's mission is simple, "To reduce the impact of invasive plant species in the Midwest." Organized around this goal in 2002, the network has benefited from the leadership of Purdue University, the Nature Conservancy, the Wisconsin DNR, and the U.S. Forest Service with considerable support from many university, organizational, and agency partners. There is a staggering amount of information available on MIPN's website, and **here we focus on how to identify invasive species, how to control invasive species, and how to report (or receive reports) on invasive species occurrences.**

Identification Tools- The first step towards control is accurate identification, here are two options

To use the Interactive Weed Identification Database:

1. From the MIPN homepage, click on the **Early Detection Rapid Response** (EDRR) tab
2. Scroll down to the **Other Resources** heading, click on the [Interactive Weed Identification Database](#) hyperlink
3. Click on the **Weed ID Tool** in the left column
4. Select your state and the type of weed from the dropdown menus, and **click go to step 2**
5. In Step 2, you will need to answer questions about the plant, and **click search database**
6. From the website: *"based on the user's input, the website will produce a list of plants (scientific and common names) along with thumbnail images . . ."*

To find and view UW Extension Weed Science Videos:

1. From the MIPN homepage, click on the **Education** tab
2. Scroll down to the **Videos** heading, click on the [UW-Extension Weed Science website](#) hyperlink. Here you'll find many helpful videos detailing how to identify some of the most common invasive species in the Upper Midwest.



Dr. Mark Renz, Assistant Professor and Extension Weed Specialist at UW-Madison discusses Leafy Spurge.

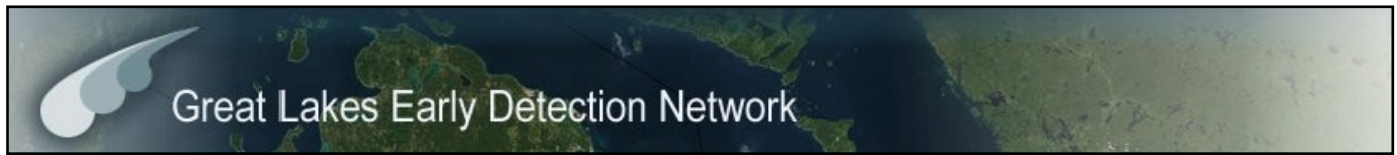
Control and Management– Here is how to find species-specific management recommendations

1. From the MIPN homepage, click on the **Control and Management** tab
2. Click anywhere on the Invasive Plant Control Database screenshot
3. Once there, click the **Start Search** button. There will be two steps:
 - Step 1: Search for a species by typing a common or scientific name into the search box (or use the dropdown menu)
 - Step 2: Check boxes to select search parameters of interest, which will limit the management recommendations displayed. If no parameters are selected, all control methods will be displayed.Important note: If you would like to narrow the search criteria, **make sure to indicate that you are NOT A NOVICE as failing to specify this will make prescribed burning information unavailable.**

Type - Prescribed burning	Spring burns can kill germinating seedlings and can suppress aboveground growth of established plants depending on fire intensity. After the fire, established plants will quickly resprout and reinvade areas; this management method is not recommended unless integrated with other techniques. Fire may benefit other species well adapted to this management (e.g. prairie grasses), resulting in improved competition with bindweed. A hand-held propane torch can be effective for treating seedlings.
User Type - Professional	
Effectiveness - in season ★ ★ ☆ ☆	
year after treatment ★ ☆ ☆ ☆	

An example of a management method recommendation for field bindweed (*Convolvulus arvensis*) on MIPN's Invasive Plant Control Database

Invasive Reporting— The MIPN website also provides a way to report invasive species to the Great Lakes Early Detection Network (GLEDN), an organization dedicated to sharing information about invasive species.



Through GLEDN individuals can report an invasive species, sign up to get alerts about invasive species, or view the existing verified reports of invasive species. Here is how:

1. From the MIPN homepage, click on the **Early Detection Rapid Response** tab
2. Click **anywhere** on the GLEDN screenshot to enter the network's website.
3. Follow their intuitive instructions to report invasive plant sightings

Fire Effects Information System (FEIS)

Web address: <http://www.feis-crs.org/beta/>

FEIS is a database that contains literature reviews of nearly 900 plant species. The reviews contain information about taxonomy, geographic distribution, basic biology, ecology, and how fire affects each species. Numerous land management agencies collectively choose which species are included in the database. Though there are hundreds of species contained within the archives, the search tools are intuitive and the results are carefully organized.

Species Reviews From the FEIS homepage there are two avenues to search for species reviews

1. Search by entering a common or scientific name. Note that **spelling must be accurate** as the search engine will not autocorrect or search for common misspellings.
2. Search by life form, nativity, invasiveness, and/or geographic area by checking options. Once your species of interest is found and selected, the output will include information pertaining to fire ecology, fire effects, fire case studies, and management considerations.

Once the **Life Form** box is checked, the additional criteria will appear

The search criteria highlighted here will result in a listing of **ALL invasive plants** found in Wisconsin

A screenshot of the "Search for Species Reviews" web form. The form has a yellow background and a title "Search for Species Reviews" in orange. Below the title is the instruction "Select from these criteria to search for species reviews:" followed by "Search" and "Clear" buttons. The form is divided into several sections: "Life form" (checked), "Plants:" (with sub-sections for ALL, Bryophyte, Cactus, Fern or Fern Ally, Forb, Graminoid, Shrub, Tree, and Vine or liana), "Animals:" (with sub-sections for ALL, Amphibian, Arthropod, Bird, Mammal, and Reptile), "Lichens:" (with ALL), and "Fungi:" (with ALL). Below these are "Nativity" (unchecked), "Invasiveness" (checked, with sub-options for Invasive and Noninvasive), and "Geographic Area - search by one of these criteria:" (checked). At the bottom, there is a "State" dropdown menu with a list of states: Vermont, Virginia, Washington, West Virginia, and Wisconsin (highlighted).