



Plants out of Place

The newsletter of the
INVASIVE PLANTS ASSOCIATION OF WISCONSIN

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IPAW Board of Directors

Jerry Doll, President

UW-Extension, Weed Scientist, Emeritus
7386 Clover Hill Dr., Waunakee, WI 53597
(608) 836-8809; jddoll@wisc.edu

Tom Hunt, Vice-President

UW - Platteville, Reclamation Program
207 Pioneer Tower, Platteville, WI 53818
(608) 342-1898; huntt@uwplatt.edu

Amy Staffen, Secretary

The Prairie Enthusiasts, Restoration Manager
3813 Euclid Avenue, Madison, WI 53711
(608) 238-0450; astaffen@tds.net

Thomas Boos, Treasurer

Department of Natural Resources
P.O. Box 7921, Madison, WI 53707-7921
(608) 266-9276; Thomas.Boos@wisconsin.gov

Doug Bastian, Forage First Product Manager

2901 Packers Ave., Madison, WI 53707
(800) 356-7333; DBastian@seedsolutions.com

Willis Brown, Michler and Brown, LLC

2601 Gregory St., Madison, WI 53711
(608) 278-9308; webrown3@hotmail.com

John Exo

UW - Extension, Lower Wisconsin River Basin
505 Broadway St., Baraboo, WI 53913
(608) 355-3554; john.exo@ces.uwex.edu

Mark Feider, Milwaukee Audubon Society

2125 W. Brantwood Ave., Glendale, WI 53209
(414) 228-7425; feider@wi.rr.com

Robert J. Frank

Fish & Wildlife, Stockbridge-Munsee Community
P.O. Box 70, Bowler, WI 54416
(715) 793-4044; bob.frank@mohican-nsn.gov

Vijai Pandian, Brown County Extension

1150 Bellevue St., Green Bay, WI 54302
(920) 391-4611; vijai.pandian@ces.uwex.edu

Jim Reinartz, UW - Milwaukee Field Station

3095 Blue Goose Road, Saukville, WI 53080
(262) 675-6844; jimr@uwm.edu

Gene Roark

16 Grand Ave., Madison, WI 53705
(608) 238-5349; geneandjeanroark@sbcglobal.net

Matthew Schmitz

The Bruce Co., 2830 Parmenter St
PO Box 620330, Middleton, WI 53562-0330
(608) 836-7041; mschmitz@bruceco.com

Rolf Uttegaard

Eau Claire County Exposition Center
P.O.Box 1092, Eau Claire, WI 54702
(715) 834-0065; bigute-hort@prodigy.net

Anne Walker, Home Land Garden, LLC

1704 Winnebago St., Madison, WI 53704
(608)241-4211

*Through Awareness
Comes Positive Change!*

Layout of Newsletter by:

Susan Slapnick - slapnick@wisc.edu

A Draft of Proposed Invasive Species Rules for Wisconsin is Available: (Chapter NR 40, Invasive Species Identification, Classification and Control)

by *Kelly Kearns, WDNR, and Jim Reinartz, IPAW
and Wisconsin Council on Invasive Species*

The Wisconsin Department of Natural Resources (WDNR) and the Wisconsin Council on Invasive Species have been working over the last three years to develop rules “relating to the identification, classification and control of invasive species, as part of the state-wide program to control invasive species”. These proposed rules, which will regulate a specific list of invasive species in Wisconsin, are available for review on the WDNR website (dnr.wi.gov/invasives/classification).

A WDNR working group and the Council have met regularly over the past three years to develop a draft classification system for invasive species. The purpose of these rules is to prevent the introduction and spread of invasive species in the state. The key components of the rule package include:

- 1) definition of legal and regulated classification categories of “Prohibited”, and “Restricted” species, and informal categories called “caution” and “non-restricted” that are administratively listed by WDNR but that are not regulated under the rules;
- 2) criteria for classifying species into one of these categories;
- 3) lists of all the specific species in the Prohibited and Restricted categories;
- 4) the actions that are prohibited with the regulated species;
- 5) exemptions for some activities involving invasive species under specific conditions or when authorized by a permit from WDNR;
- 6) specific actions that can be taken to enforce the rules; and
- 7) establishment of regulatory controls on certain pathways of introduction or spread of invasive species (e.g., firewood brought in from out-of-state, or transport of aquatic species on boats or in water).

In the proposed rule the **Prohibited species** category is used for “those invasive species that are not currently found in Wisconsin, with the exception of small pioneer stands of terrestrial plants and aquatic species that are isolated to a specific watershed in the state or the Great Lakes, but which, if introduced into the state, are likely to survive and spread, potentially causing significant environmental or economic harm or harm to human health.” The **Restricted species** category is used for “those invasive species that are already established in the state and cause or have the potential to cause significant environmental

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or economic harm or harm to human health...” The proposed rule will make it illegal to “transport, possess, transfer or introduce” both **Prohibited** and **Restricted** species, thus outlawing their sale or intentional planting in Wisconsin. For **Prohibited** plants, the intent is to contain, and if possible, eradicate them wherever they appear in the state. WDNR staff intends to use education and work with landowners to help them control any prohibited species on their property. The proposed NR 40 will give WDNR the authority to enter lands for the purpose of inspection, sampling and control of **Prohibited** invasive plant species; allow WDNR to order landowners to implement control measures, and allow for state control of **Prohibited** invasive plant species if the landowner is unable or unwilling to comply. There are no such control provisions or authorities for species in the **Restricted** category.

The Research Committee of the Wisconsin Council on Invasive Species developed a set of criteria for assessing the species to be classified. WDNR staff, with input from the Council and others, developed the lists of species to be assessed in the present effort to draft an invasive species rule. If you review the proposed NR 40 (dnr.wi.gov/invasives/classification/) you may notice that there are many species on the “IPAW Working List of the Invasive Plants of Wisconsin – March 2003” (www.ipaw.org) that were not reviewed for regulatory listing in the rule at this time. Many of these species were not considered for categorization now because the WDNR and Council felt that the economic importance of these species could cause the effort to develop any invasive species rule to become mired in controversy and stall. For other species, there was not enough information available at this time to determine their current or potential harm to the state.

For those species on the list to be assessed at this time, the WDNR had summaries of the available literature compiled for each species, specifically focused on the assessment criteria. [These current reviews of what is known about the biology and ecology of the species considered for listing are all available on the WDNR website; go to the “Classification Table” for the group in which you are interested and click on “Literature Review” for a species.] These literature summaries were reviewed by land managers and species specialists. In September 2007 the Council convened Species Assessment Groups (SAGs) that were charged with assessing all of the species proposed for classification and making recommendations to the Council regarding the regulatory category for each species. The Council

used SAGs to review species and make recommendations to gather the expertise and input from a wide range of specialists.

Six separate SAGs were comprised of experts in: aquatic plants and algae, woody plants, terrestrial herbaceous plants, fish and aquatic invertebrates, terrestrial vertebrates, or terrestrial invertebrates and organisms that cause plant diseases. The SAGs used the assessment criteria developed by the Council and the information reviews provided by WDNR to advise the Council on the placement of each species into a specific legal category. This process that the SAGs used resulted in a thorough documentation of the recommendations made for the classification of each species and much of that information is available in the “Assessment Summary Tables” at (dnr.wi.gov/invasives/classification).

In January 2008 WDNR held 6 informal open houses and listening sessions around the state to describe the recommended rule to interested people, to answer questions, and to get input from the public. The Wisconsin Council on Invasive Species has reviewed the proposed NR 40 and the informal public comments from the listening sessions, and recommended that the WDNR finalize the draft of the rule and put it forward to the Natural Resources Board for their approval to proceed with formal public hearings. This will begin the official rule-making process.

All IPAW members are invited and encouraged to use the WDNR website to review the proposed rule and lists of invasive species. This website is now a wonderful source of information about new and potential invasives. For example, the “Classification Table” portion of the site includes a link to county distribution maps for all of the terrestrial plants proposed for the Prohibited and Restricted categories. Please review these maps and if you know of occurrences of any of these species in counties that are not marked on these maps, submit that information to the DNR using the comment form on the website. Better yet, also submit a voucher specimen or photograph to the Wisconsin State Herbarium to officially document the presence of the species in the county.

For further information on this process or the species involved, or to submit comments on the current draft and process, contact Kelly Kearns, (608) 267-5066, or Tom Boos (608) 266-9276, regarding terrestrial plants, or Jen Hauxwell (608) 221-6373 regarding aquatic plants.

New Invasive Plants found in Wisconsin in 2007

by **Kelly Kearns**, Wisconsin DNR

Efforts to encourage people to identify and report new invasive plants in the state are proving successful, and several new species and new populations of recent invaders were reported in Wisconsin in 2007.

Probably getting the most attention and action was our first report of **Hydrilla** (*Hydrilla verticillata*) that had



Hydrilla
(*Hydrilla*
verticillata)

Fred Hrusa
@ CalPhotos
Database

survived the winter in a private pond in Marinette County (Aquatic Biologists Inc, DATCP and DNR Water Resources). Also found with the *Hydrilla* was **yellow floating heart** (*Nymphoides peltata*). Both are



Yellow floating heart
(*Nymphoides*
peltata)

G.A. Cooper @
USDA-NRCS
PLANTS Data-
base

suspected to have been introduced accidentally when native aquatic plants were stocked in the new pond a few years ago. These plants are now being controlled and monitored at this pond. Another introduced aquatic plant, **brittle naiad** (*Najas minor*) was found during a DNR aquatic plant survey in Storrs Lake,

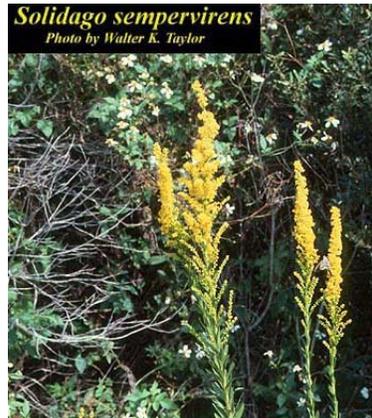


Brittle naiad
(*Najas minor*)

Robert H. Mohlen-
brock @ USDA-
NRCS PLANTS
Database

Rock County. It is uncertain how invasive this plant will become, but DNR researchers are monitoring the population.

Large populations of **seaside goldenrod** (*Solidago sempervirens*) were found growing along the ditches of I-94 in Kenosha, Racine and Milwaukee Counties (Don Reed and Larry Leitner, Southeastern Wisconsin



Seaside goldenrod
(*Solidago*
sempervirens)

Regional Planning Commission). This species of saline places along the east coast has been spreading inland along highways that are heavily salted in the winter. The plant's long fleshy and waxy leaves make this species easy to identify, while its very showy terminal inflorescence resembles that of *Solidago speciosa*. One lone plant of **scotch broom** (*Cytisus scoparius*) was found at a state natural area in southwestern



Scotch broom
(*Cytisus*
scoparius)

J.S. Peterson

Wisconsin (Mike Anderson, BioLogic Environmental Consulting). **Perennial pepperweed** (*Lepidium latifolium*) was found at a dock in Green Bay (Mark Renz, UW Madison Agronomy Department). The Door County Invasive Team and Brown County Extension are containing and monitoring the perennial pepperweed, which likely came in with some shipping containers. **Hill mustard** (*Bunias orientalis*) was first found invading grasslands in Green and Lafayette Counties just a few years ago, and now appears to be spreading rapidly and acting as a perennial (Mark Renz and Jerry Doll, IPAW).

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Hill mustard
(*Bunias orientalis*)

Black swallow-wort (*Vincetoxicum nigrum*) was known to be widespread in parts of Grant and Waukesha Counties, however recent surveys have also found populations in Prairie du Chien, Fort Atkinson and Door County. Local cooperators are working with landowners to get many of these populations contained.



Wild Yam
(*Dioscorea oppositifolia*)

Alan S. Heilman



Japanese hops
(*Humulus japonicus*)

Robert H. Read,
Wisconsin State
Herbarium

A backyard population of **Wild yam** (*Dioscorea oppositifolia*) was reported in 2006 by an Adams County resident, who had been cutting it back for several years. **Sericea lespedeza** (*Lespedeza cuneata*) is a serious invader of grasslands in Missouri and parts of Iowa, and was found in 2006 (Art Kitchen, US Fish

Japanese hops (*Humulus japonicus*) populations have recently been located in western Dane and Grant Counties, with the largest to date along several miles of the Little Platte River. **Oriental, or round-leaf bittersweet**, (*Celastrus orbiculatus*) populations continue to be reported at scattered locations, mostly in southern counties.



Sericea lespedeza
(*Lespedeza cuneata*)

G.A. Cooper@USDA-
NRCS PLANTS Database



Oriental bittersweet
(*Celastrus orbiculatus*)

Hugh H. Iltis, Wisconsin State
Herbarium

and Wildlife Service) growing in a Conservation Reserve Program planting in Waukesha County.

Amur honeysuckle (*Lonicera maackii*, not pictured) appears to be expanding its range northward, with plants being found in forests in several southwestern counties.

In addition to these recent first-time invaders, there have also been reports of new populations of other relatively new invaders that we are attempting to keep in check.



Black swallow-wort
(*Vincetoxicum nigrum*)

Kelly Kearns, Wisconsin State
Herbarium



Poison hemlock
(*Conium maculatum*)

William & Wilma
Follette@USDA_NRCS
PLANTS Database

Poison hemlock (*Conium maculatum*) and **wild chervil** (*Anthriscus sylvestris*, p.5) are still reported from only a few, mostly roadside, locations. However,

Japanese hedge parsley (*Torilis japonica*), appears to be spreading as rapidly as garlic mustard in numerous sites in southern counties. Anyone not familiar with this plant is advised to learn to identify it, monitor for it carefully, and remove it before seed set.



Japanese hedge parsley (*Torilis japonica*)

Merel R. Black, Robert W. Freckmann Herbarium

Giant manna grass (*Glyceria maxima*) has been located at several locations in the Pike and Rock River watersheds (Heather Patti, Cedarburg Science). Although only reported from a few Wisconsin sites, this very tall wetland plant appears to be very aggressive.



Giant manna grass (*Glyceria maxima*)

Emmet J. Judziewicz, Robert W. Freckmann Herbarium

Initial surveys on some of the public Lake Michigan beaches have revealed that **lyme grass** (*Leymus arenarius*) is more widespread and abundant than was

previously known. This grass stabilizes dunes that formerly shifted and may be threatening a number of rare dune species.



Lyme grass (*Leymus arenarius*)

Emmet J. Judziewicz, Wisconsin State Herbarium



Wild chervil (*Anthriscus sylvestris*)

University of Tennessee Herbarium

We are counting on IPAW members and others to report occurrences of new invasive species. Please send your reports, photos and voucher specimens to Brendon Panke, Early Detection and Mapping Specialist, Endangered Resources, WDNR 101 S. Webster, Madison, WI 53707-7921, (608) 267-7438 or brendon.panke@wisconsin.gov.



New Cooperative Species Management Area in Southeastern Wisconsin

Eight Southeastern counties have joined forces to control invasive species and heighten public awareness of the problems associated with the spread of non-native species. Federal, State, County, and local representatives of Sheboygan, Washington, Ozaukee, Waukesha, Milwaukee, Walworth, Racine and Kenosha counties are working with regional organizations such as the Southeastern Wisconsin Regional Planning Commission, Milwaukee Metropolitan Sewage District, and Town and Country Resource Conservation and Development, Inc. to form a Cooperative Weed Management Area (CWMA).

A steering committee has met monthly for the past 8 months to develop a strategic management plan, annual work plan, and a memorandum of understanding between the cooperating organizations. The goal of the CWMA is to facilitate cooperation and coordination of resources across jurisdictional boundaries in an effort to impede the introduction and spread of exotic invasive plants and animal species. For more information, or to get involved in this effort please contact: **Jill Hapner**, Washington County Planning & Parks Department, (262) 335-4802, or SeWISCMA@townandcountryrcd.org.

Survey of Invasive Plants in State Forests

by Sarah Herrick, Survey Coordinator

Invasive plants pose serious management challenges for Wisconsin's State Forests. State Forest land was set aside to preserve important watersheds and ecosystems, to provide recreational opportunities and habitat for wildlife, to produce quality forest products, and to serve as an example of sustainable management of forest resources throughout the state. These benefits and resources are threatened by the spread of invasive plants. Management and control of invasives is an important part of the sustainable forestry that will ensure that State Forest land will provide Wisconsin with economic, ecological and social benefits for years to come.

During 2006 and 2007 the Wisconsin DNR Division of Forestry coordinated surveys of invasive plants in the Black River, Brule River, Coulee Experimental, Flambeau River, Governor Knowles, Northern Highland-American Legion, and Peshtigo River State Forests. (See State Forest Map on p.11) The northern and southern units of the Kettle Moraine State Forest were surveyed in a separate effort. The purpose of these surveys was to collect information on the ecology of invasive plants, map the current extent of their infestations, and to establish a baseline GIS database to aid in the development of invasive plant management plans. This work will also serve to increase departmental and public awareness of invasive plant issues, and to create support for management and prevention programs.

Invasive plants are found throughout Wisconsin, but very little was known about their status in State Forests, in particular those forests in the northern parts of the state. Each State Forest identified a list of priority areas to survey for invasive plants. Priority areas included corridors along roads and trails, homesteads, boat landings, river ways, timber sales, gravel pits, recreational sites, and campgrounds. Survey crews developed a survey schedule for these areas based on phenology. Priority areas were surveyed as thoroughly as possible with surveys conducted on foot, or by bicycle, motorized vehicle, or canoe/kayak.

The crews recorded over 5,000 observations of 114 species of invasive and non-native plants in the surveyed forests. Eleven species or groups of species accounted for 78% of these observations: spotted knapweed, non-native thistles, Eurasian honeysuckles, reed canary grass, common St. John's-wort, common tansy, buckthorn species, garden valerian, butter-and-

eggs, forget-me-nots, and sheep sorrel. The survey provides information about the extent of several species that are of great concern in Wisconsin. While not all of these plants are widespread in northern Wisconsin, they have the potential to spread aggressively and become problematic.

Garlic Mustard (*Alliaria petiolata*)

The shade tolerant herb garlic mustard is a serious invader of forest understories in southern Wisconsin; however, the survey found that it is not yet widespread in the northern State Forests. Small populations were found along trails and in campgrounds in Coulee Experimental, Northern Highland, Governor Knowles, Flambeau River, and Black River State Forests. Control measures have already begun in these areas to ensure that the populations do not spread. No garlic mustard was found in the Brule River and Peshtigo River State Forests.

Invasive Shrubs

Non-native honeysuckles (*Lonicera* spp.) and buckthorns (*Rhamnus* spp.) are among the most widespread invaders of forest understories. Survey crews located relatively large populations of these species in and around campgrounds, boat landings, and trails in all seven of the surveyed forests. There were also many areas where buckthorn and honeysuckle were not present. Preventing the spread of these pests into new areas should be a top priority. Other invasive shrubs and small trees like Japanese barberry, black locust, and Russian olive are present and locally abundant in one or more of the forests, but are not yet widespread.

Reed Canary Grass (*Phalaris arundinacea*)

This cool season grass is a serious invader of open and forested wetlands and moist uplands in Wisconsin. It was found to be widespread in all of the State Forests, and among the species most commonly observed during the survey. It was most often observed in low areas along trails and roads.

Spotted Knapweed (*Centaurea biebersteinii*)

Spotted knapweed was the most commonly observed invasive species on State Forest land. It is widespread in open areas, and while it does not pose a significant threat to forested habitats, it

Exciting Annual Meeting

by *Jerry Doll, IPAW President*

On a frigid evening in late January nearly one-third of the IPAW members came together for our 2008 Annual Meeting, a time of sharing, learning and enjoyment at the University of Wisconsin-Madison Arboretum. We **shared** a bit of the past (what have we been doing since our last meeting); the present (progress toward implementing goals set at our March planning exercise); and the future (plans to revive our committee activities, interact with and support local invasive groups, grow our membership, secure our funding base, and plan our next state-wide conference). We **learned** from our invited presenters, Debbie Maurer describing the Midwest Invasive Plants Network (MIPN), and Miles Falck a member of the federal Invasive Species Advisory Council who talked about their struggles to impact the National Invasive Species Council. And we **enjoyed** sharing life experiences

over food, beverage and a robust raffle which resulted in several members returning home with a prize pertinent to invasive plants.

We learned we can sponsor a stand-alone annual meeting and remembered the great synergy that happens when folks with common concerns gather for informal and semi-formal activities. At the 2009 annual meeting, there will be more time for semi-formal exchanges and dialogues that generate new ideas and energy and are an excellent forum for the Board to learn of and respond to members' ideas and suggestions. Of course you can contact any Board member at any time with comments. IPAW is your organization and we hope you both contribute to and benefit from your membership, and participate in making us even more effective at fulfilling our mission.

Lakeshore Nature Preserve Garlic Mustard Pull-A-Thon

by *Roma Lenehan, Friends of the Lakeshore Nature Preserve, IPAW member*

How do you create new volunteer interest for a routine activity like garlic mustard control? One answer, developed in 2005 by the Friends of the Lakeshore Nature Preserve, is a Garlic Mustard Pull-A-Thon. On the day of the event, an energetic group of volunteers pull garlic mustard two hours, ridding the Lakeshore Nature Preserve of this aggressive non-native weed. Supporters who do not wish to pull garlic mustard pledge money (\$0.10 to \$2) per bag of garlic mustard pulled by the group.

The Lakeshore Nature Preserve (formerly the Campus Natural Areas) is the 300 acres of natural area on the Lake Mendota shoreline of the University of Wisconsin-Madison Campus, including Picnic Point and Frautschi Point. This area, originally managed as part of the University of Wisconsin Arboretum, has been managed since 2000 by the Lakeshore Nature Preserve Committee. For more than a decade volunteers have made great efforts to rid the area of garlic mustard and other invasive species.

On 19 May 2007 Friends of the Lakeshore Nature Preserve held their second Garlic Mustard Pull-A-Thon with volunteers ranging from 2 to more than 80 years old. Thirty-six energetic volunteers removed 103 thirty-gallon bags of garlic mustard from four areas of the Preserve. Thirty-four people pledged money for

each bag pulled, donating \$1480 for invasive species control. At Frautschi Point, ten University of Wisconsin Librarians, who chose the Pull-A-Thon as their annual service project, pulled 46 bags. Other groups pulled at Picnic Point and Big Woods.

The Pull-A-Thon was part of a larger effort to rid the Preserve of garlic mustard. In most areas of the Lakeshore Nature Preserve the garlic mustard was removed before the Pull-A-Thon. Areas that were especially bad and had few native plants were chosen as Pull-A-Thon areas. After the event, Friends' volunteers and student hires rechecked the Pull-A-Thon areas for missed plants and also removed garlic mustard from areas that the teams did not complete. In addition to the Pull-A-Thon, more than 815 volunteer hours were spent collecting 512 bags of garlic mustard in the Preserve. In many areas, garlic mustard is decreasing due to our aggressive management. An event like the Pull-A-Thon offers an opportunity to introduce both donors and workers to the importance and enjoyment of natural area stewardship.

To find out more about the Friends of the Lakeshore Nature Preserve and their invasive species efforts, see www.lakeshorepreserve.org, or contact Roma Lenehan, rlenehan@charter.net, (608) 238-5406.

Perennial Pepperweed: A New Invasive Plant in Wisconsin

by Mark J. Renz, Extension Weed Scientist

Perennial pepperweed (*Lepidium latifolium* L.) is an invasive creeping herbaceous perennial first found in Wisconsin in 2007. This mustard is capable of invading pastures, alfalfa fields, roadsides and many other upland sites, as well as riparian areas, drainage ditches, floodplains, and wetlands. Plants emerge early in the spring, forming a rosette that persists for several weeks. By late spring, plants bolt and produce a flowering shoot. After seed production, flowering shoots die back, although in moist soils new rosettes can emerge in the fall.



A large plant of perennial pepperweed.

Native to Europe and Asia, perennial pepperweed has been introduced and is common throughout many western states, and plants have recently been found invading several eastern and Midwestern states. Concern for large-scale spread is high as perennial pepperweed has the potential to invade natural and managed areas. The Wisconsin infestation was found in Green Bay along a disturbed roadside near a large transportation hub for a shipping company; this location suggests that seed was imported from a long-distance source. Rapid response and eradication of existing infestations is critical to prevent the spread of this invasive plant in Wisconsin.

IDENTIFICATION

- **STEMS** are green, semi-woody, and can be numerous (*see photo*). They range in height from 2 feet to over 4 feet tall, and die back by late summer.
- **LEAVES** are smooth and green to gray-green in color. Rosette leaves are 4 to 11 inches long and 1 to 3 inches wide with long petioles (*see photo*). Leaves on the stem are smaller than rosette leaves (*see photo*) and have a shorter petiole.
- **FLOWERS & FRUIT**: Small, four-petaled, white flowers form dense clusters throughout the top third of the stems (*see photo*). Fruit are small, round, two-chambered pods, 1/16" long.
- **ROOTS** are white (*see photo*) with a distinct horseradish smell. Roots can vary in size, but older plants can form semi-woody crowns near the soil surface. Roots are often creeping and are responsible for localized spread.
- **SIMILAR SPECIES**: Perennial pepperweed is often confused with another invasive plant called hoary cress (*Cardaria draba*), however, hoary cress stems are less than 3 ft tall and have leaves that clasp the stem and lack an obvious petiole.



Stem leaves of perennial pepperweed.

REPRODUCTION & SPREAD – Perennial pepperweed can spread either by seeds or roots.

- **SEEDS**: Infestations can produce many seeds, but few seedlings are observed in the field. Long distance dispersal is likely primarily from seeds.
- **ROOTS**: Plants primarily reproduce from perennial roots which are capable of generating new shoots. Root sprouts can be produced more than 10 feet from the parent plant each year; however, if roots are fragmented by tillage, spread can increase dramatically.



The white, horizontal, spreading roots of *Lepidium latifolium*

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MANAGEMENT

Preventing establishment is the best strategy for controlling perennial pepperweed since large, dense stands are difficult to control. Monitor fields frequently to locate new plants before they become established. If new infestations are found, plants should be intensively managed to prevent further spread and eradicate populations.

While physical, mechanical, and biological control methods can



Inflorescence of Perennial pepperweed (*Lepidium latifolium*)

suppress populations, rarely do they eradicate them. If a population is found, herbicide treatments are recommended in conjunction with planting competitive perennial species such as perennial grasses or alfalfa. Herbicides are most effective when applied during the flower bud to early flowering stages. If plants are beyond this stage of growth, mow first and treat resprouting shoots. The table below presents a summary of effective herbicides available for use in alfalfa fields, pastures, and non-crop/natural areas.



A rosette of *Lepidium latifolium*

Table 1. Herbicides that control perennial pepperweed		
Registered for use in:		
Alfalfa	Pasture	Non-crop/natural areas
Glyphosate ^{*@} (many brands)	Glyphosate* (many brands)	Chlorsulfuron ¹ (Telar)
Imazamox (Raptor)	Metsulfuron ¹ (Escort, Cimarron)	Glyphosate* (many brands)
Imazethapyr (Pursuit)	2,4-D (many brands)	Metsulfuron ¹ (Escort, Cimarron)
		Imazapyr ^{1*} (Arsenal, Habitat)
¹ Provides excellent control 1 year after treatment		
* Nonselective herbicide		
[@] Will damage alfalfa unless used in conjunction with Roundup Ready alfalfa		

How well do you know IPAW? -- Take the Quiz!

1. IPAW has ___ current members. (60, 130, 210, 430)
2. The Wisconsin county having the most IPAW members is _____. (Milwaukee, Rock, Brown, Dane)
3. ___ of Wisconsin's 72 counties don't have any resident who is a member of IPAW. (10, 17, 25, 43)
4. IPAW has an annual expense budget of approximately \$__ thousand. (5, 10, 50, 75)
5. How many times was the IPAW website visited in 2007? (5,000; 12,000; 27,000; 50,000)

(Answers to the IPAW Quiz are on page 11)

Forestry Best Management Practices for Invasive Species

by *Thomas Boos*- WDNR Forestry Invasive Plant Coordinator

The Forestry Division of the Department of Natural Resources has undertaken a process to develop a manual of Forestry Best Management Practices (BMPs) for Invasive Species. Forestry represents one of four tracks that will focus on reducing the spread of invasive species by developing BMPs for human activities, including recreation, utility and transportation rights-of-way, and urban forestry. The purpose of the Forestry BMP process is to protect the productivity and sustainability of Wisconsin's forests by preventing the spread of harmful invasive pests during forest management activities on public and private land.

The **Forestry BMP** manual is being drafted by an Advisory Committee of affected stakeholders from industry, government, and non-profit groups (including IPAW), with input from forestry experts and practitioners. The manual will address forest management practices that can be vectors for the spread of invasive species. Topics being discussed include management planning, forest stewardship, timber harvesting, forest access, reforestation and restoration, and the transport and storage of wood products. From the outset, committee members have been committed to the common goal of sustaining the productivity and viability of Wisconsin's forest resources. Despite a variety of perspectives and experiences, the Advisory Committee has been successful in reaching consensus in a number of areas, and members continue to work together to reach agreement on several other key topics. The committee recognizes that to ensure success, the BMPs must be effective and reasonable to implement, incorporating input from all sectors of the forestry community. The completed forestry BMP manual will include standards of practice that will aid landowners, managers, and forestry professionals in limiting the potential for forestry practices to introduce and spread invasive plants, invertebrates and diseases.

Work on the **Recreation BMP** is well under way. An active and diverse Advisory Committee has convened

bimonthly over the last year to find ways to protect the natural areas that they value from invasive species. Individuals that represent horseback riders, off-road vehicle drivers, snowmobilers, bird watchers, hikers, bikers, hunters, public agencies, conservation non-profits, businesses, and other recreationists, are carefully considering the impacts of their activities on invasive species introduction and spread. The Recreation BMP will describe both management practices that can be implemented universally by all outdoor recreation enthusiasts, as well activity-specific practices.

A group working on the **Urban Forestry BMP** has begun discussions, and is currently developing a steering committee which will identify the stakeholders who need to participate in the process. Stakeholder groups may include: landscape architects, landscapers, gardeners, the nursery industry, the seed industry, arborists, urban foresters, UW Extension, and DNR Parks and Recreation, among others. This effort will result in a manual similar to that being developed by the Forestry Track. A **Rights-of-Way BMP** group is also currently developing a steering committee and identifying stakeholders who will surely include the Wisconsin Department of Transportation, County and Town Governments, railroads and utilities.

The efforts of the Forestry, Recreation and Urban Forestry tracks are being funded in part by a grant from the U.S. Forest Service (USFS), with the intent that the manual developed for Wisconsin will be used as a template for states in the Northeastern Region of the USFS. The development phases of each of the BMPs will include a public input process; concerned citizens will be encouraged to attend the public comment and input sessions. IPAW will be represented on the working groups for each of the BMP development projects, and PooP will keep you informed of the progress of this groundbreaking process.

“Individuals that represent horseback riders, off-road vehicle drivers, snowmobilers, bird watchers, hikers, bikers, hunters, public agencies, conservation non-profits, businesses, and other recreationists, are carefully considering the impacts of their activities on invasive species introduction and spread.”

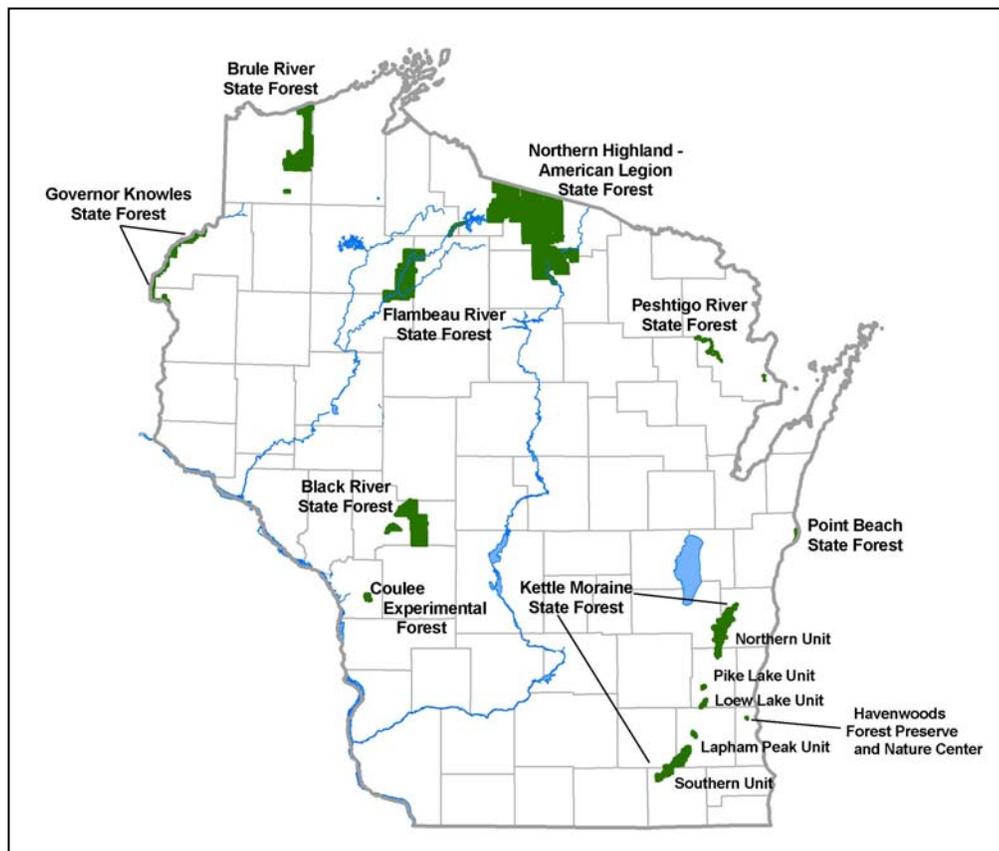
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severely reduces grassland biodiversity, and invades quickly following disturbance. Large populations were present in all of the surveyed forests except the Coulee.

Leafy Spurge (*Euphorbia esula*)

Leafy spurge is present in four of the seven surveyed forests. However, it is only common in the Peshtigo River State Forest where it dominates most open areas within the forest. Thus far nothing has been done to control the species, and at this point it will require a substantial effort to control the population.

The WDNR Division of Forestry has an annual appropriation of \$175,000 to distribute to the State Forests each budget year for projects related to invasive plant management. To ensure that money is used effectively, the forests are in the initial stages of developing Invasive Plant Management Plans using the survey work that has been completed. These plans will raise awareness of invasive plant issues and help prioritize active management based on the goals of the property. Forest staff will outline and submit invasive plant management projects for their property and funds will be distributed annually.



State Forests of Wisconsin

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Plants out of Place

is a periodic newsletter distributed to the members of **IPAW**.

Send comments, suggestions, and articles that you think may be of interest to IPAW to the newsletter **Editor**:

Jim Reinartz

UW-Milwaukee Field Station
3095 Blue Goose Road
Saukville, WI 53080

Phone: (262) 675-6844
Fax: (262) 675-0337
email: jimr@uwm.edu

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