

Invasive Plants of the Southwestern WI

Mark Renz

Associate Professor and Extension Specialist

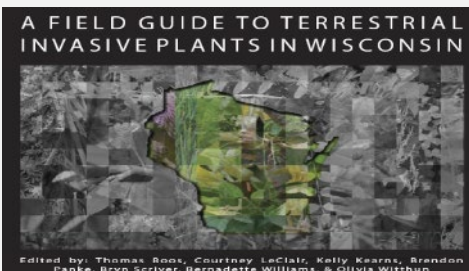
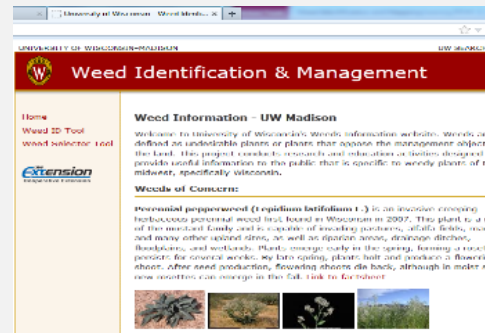
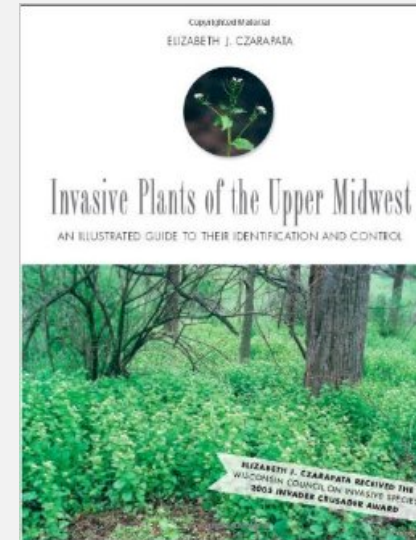
University of Wisconsin Madison



Lots of Resources Available to Help!!!!

- Can access through WIFDN website:
- <https://fyi.uwex.edu/wifdn/>
- www.ipaw.org
- <http://weedid.wisc.edu>

- Don't hesitate to ask experts for help.....



NR40 Classification

PROHIBITED



- Not yet established or only in pioneer stands
- No person may transport (import/ move), **possess**, transfer (buy/ sell) or introduce a prohibited species without a permit

RESTRICTED

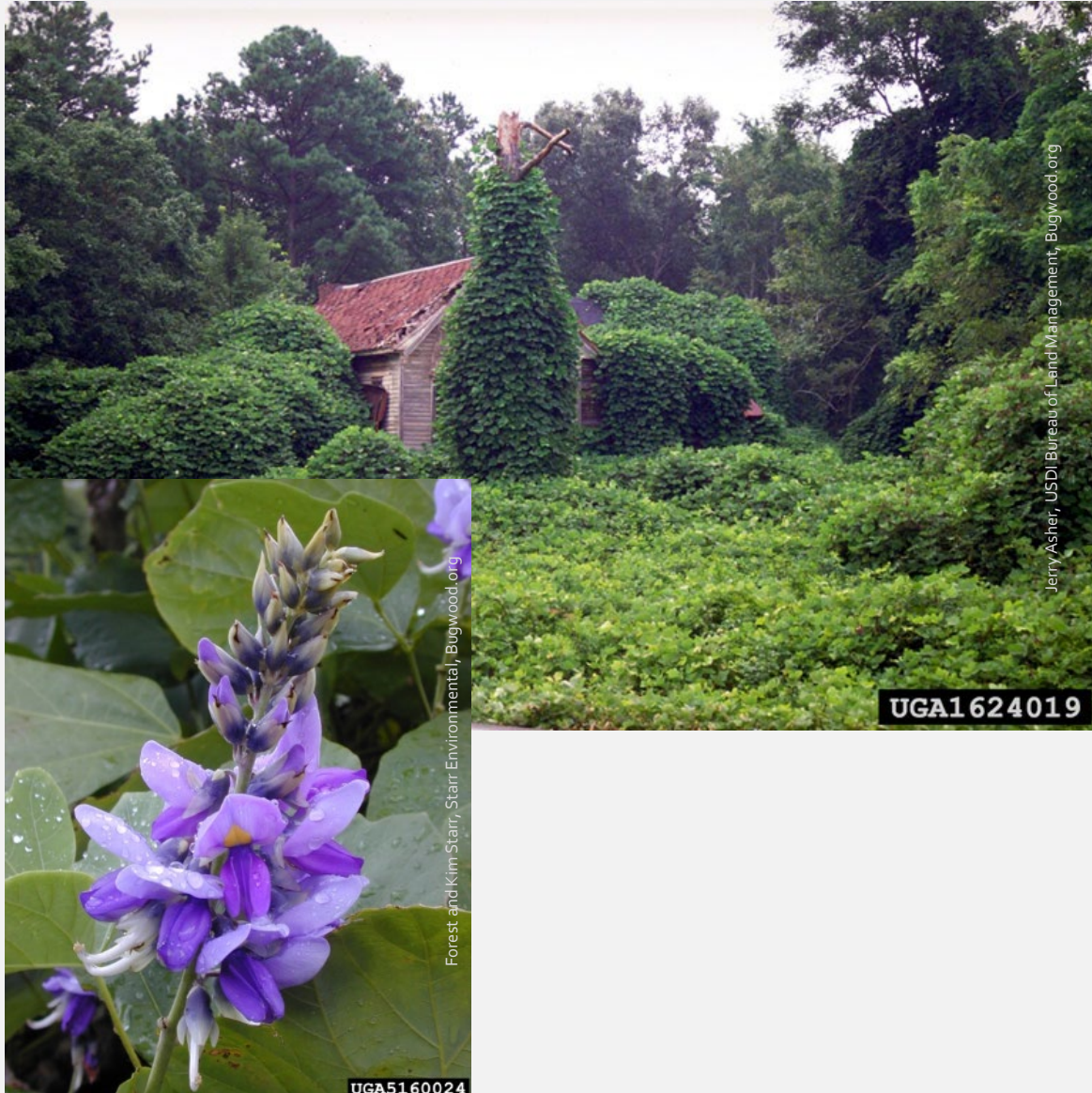


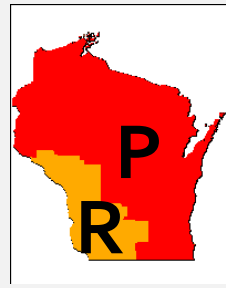
- Already established in state
- No person may transport (import/ move), transfer (buy/ sell) or introduce a restricted species without a permit

PROHIBITED



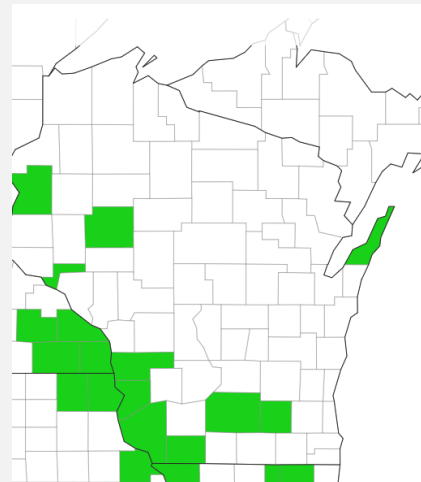
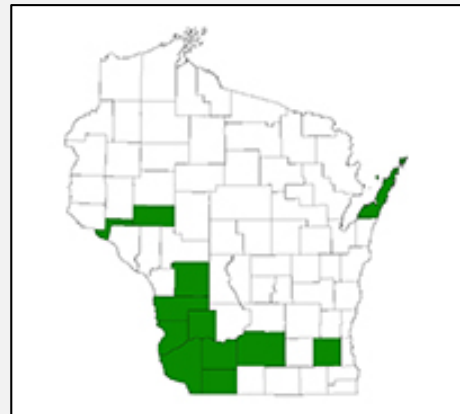
RESTRICTED





Japanese Hops (*Humulus japonicus*)

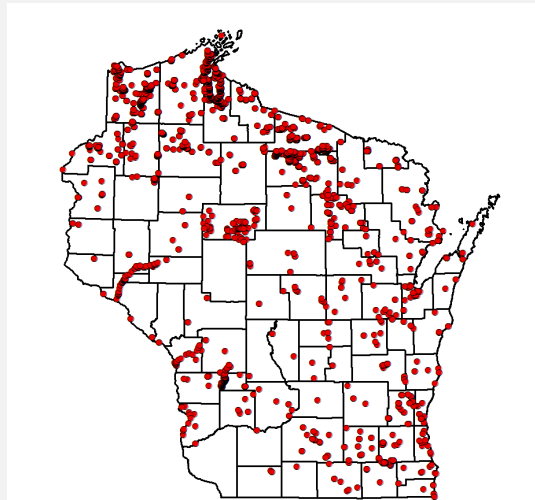
- Annual herbaceous vine
- Grows up to 35 ft long
- Wet areas
- Leaves with 5+ lobes
 - Native hops with 3 lobes
- Downward pointing prickly hairs





Purple Loosestrife (*Lythrum salicaria*)

- Wetland perennial
- Woody, 4-6 sided stems
- Grows 3-7' tall
- Moist to wet sites
- Full sun to part shade



- Opposite leaves (sometimes whorl of 3 leaves)
- Blooms July – September
- Flowers with 5-7 petals



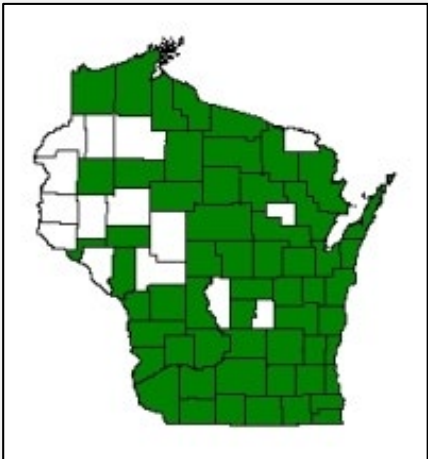


Japanese Knotweed (*Fallopia japonica*)

- Perennial, bamboo-like
- Arching stems, grow to 10+ ft tall
- Alternate, spade-shaped leaves, 3-4 in wide, 4-6 in long
- Plume-like clusters of tiny green to white flowers, August - September



Elizabeth J. Czarapata





Nisa Karimi, WI DNR



Peter M. Dziuk, minnesotawildflowers.info

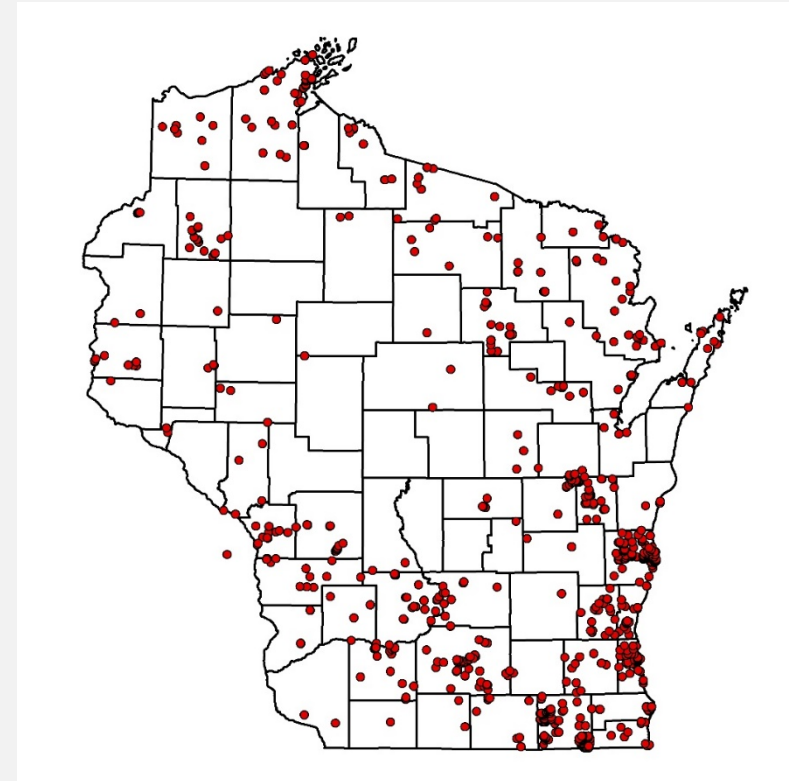


Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

Several perennial knotweeds are regulated plants in Wisconsin

- Giant knotweed
 - *Fallopia sachalinensis*
 - **Prohibited**
- Japanese knotweed
 - *Fallopia japonica*
 - **Restricted**
- Bohemian knotweed
 - *Fallopia x bohemica*
 - **Prohibited**

986 known infestations
(2017)



Tips to identify

1. Plant size

- > 10 ft giant or bohemian
- < 10 ft Japanese

2. Leaf size/shape

- > 8 inches long = Giant

3. Hairs on underside of leaves

4. Flowers

- color/arrangement
- Male/female parts of flowers

May need to evaluate DNA!

MANAGEMENT OF
INVASIVE PLANTS
IN WISCONSIN

A3924-11

Japanese knotweed

(*Polygonum cuspidatum*)

Brendon Panke and Mark Renz

Invasive plants can thrive and aggressively spread beyond their natural range, disrupting ecosystems. The *Management of Invasive Plants in Wisconsin* series explains how to identify invasive plants and provides common management options. Management methods recommend specific timings for treatment, as well as expected effectiveness. For more

Japanese knotweed is an herbaceous perennial, growing up to 10' tall. Hollow, reddish, arching, bamboo-like stems are smooth and stout, and they can persist after plant dies back each year. The base of the stem above each joint is swollen and surrounded by a membranous sheath (ocrea).

Legal classification in Wisconsin:
Restricted

Leaves: Alternate, egg-shaped to almost triangular, 4–6" long, 3–4" wide. Dark green on upper surface and pale green on lower surface.

Flowers: Blooms in late summer. Flowers are numerous, highly branched, tiny, creamy white or greenish, and found where the leaf attaches to the stem (axils), near the tips of stems.

Fruits and seeds: Small, winged, triangular fruits carry very small, shiny seeds.

Roots: Plants arising from seed have a taproot up to 6' deep. Stout rhizomes can reach 65' or more from parent plants and give rise to new stalks. Plants arising from seed and rhizome also have

Similar species: Giant knotweed (*P. sachalinense*) is also invasive, but grows up to 13' tall with larger leaves. The two species are known to hybridize.

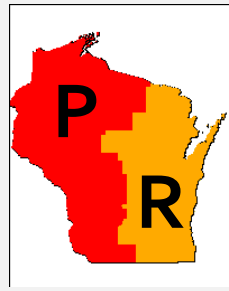
Ecological threat:

- Invades upland and lowland sites that are disturbed and undisturbed.
- Poses a significant threat to riparian areas, where it can rapidly spread.
- It tolerates shade, high temperatures, high salinity, and drought.
- It can be transported to new sites as a contaminant in fill dirt or on equipment. During floods, it spreads downstream by shoot fragments, rhizomes, or occasionally by seeds. Escapees from neglected gardens and discarded cuttings are common routes of dispersal from urban areas.
- Although reported to not produce viable seed, several studies have shown that populations of knotweed in the United States can produce viable seed that readily germinate and survive in field conditions.

Key to Identification of Invasive Knotweeds in British Columbia

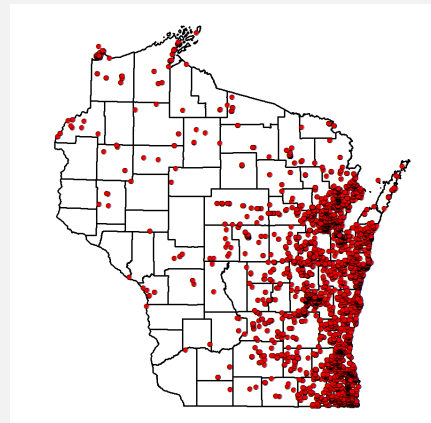
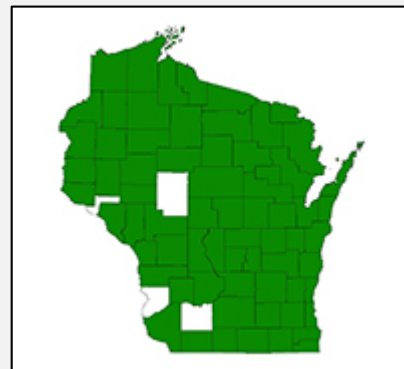


Photo: L. Wilson



Phragmites (*Phragmites australis*)

- Perennial wetland grass
- Grows 3-20 feet tall
- Dull, rigid, hollow stems
- Large, feathery plumes of flowers, 5-16" long
- Dense network of roots and rhizomes



Native Phragmites (*Phragmites australis*)

- Similar height
- Yellowish color
- Smooth flexible stems, often with **shiny black ink-like spots**
- Less dense inflorescences
- **Leaves drop at end of growing season**

<http://mnfi.anr.msu.edu/phragmites/native-or-not.cfm>



Native,
fungal spots,
round dark dots



Non-Native,
may have mildew,
but not 'dots'

Photo credits:
R.E. Meadows, K.
Saltonstall, B.
Blossey



Native, stems lose sheaths in
winter, are smooth and shiny



Non-Native, holds
sheaths, stems have slight
ridged feel, duller color



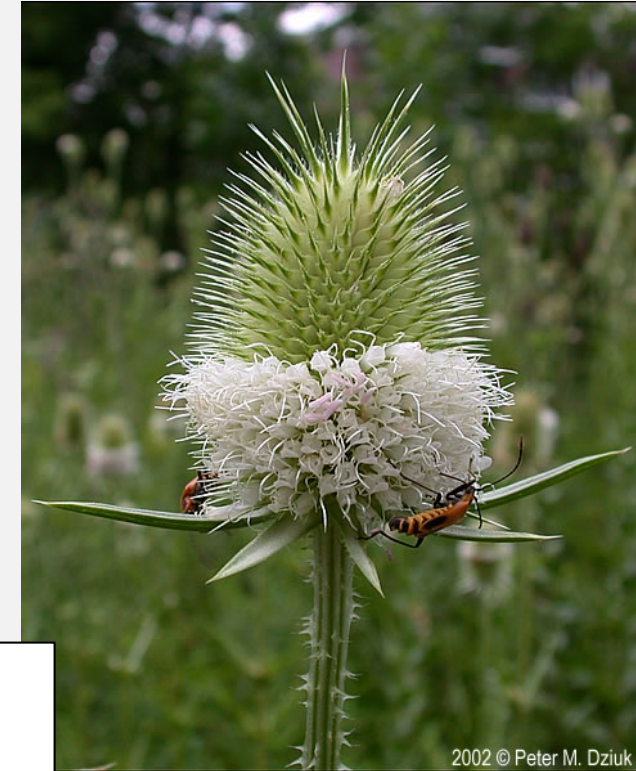
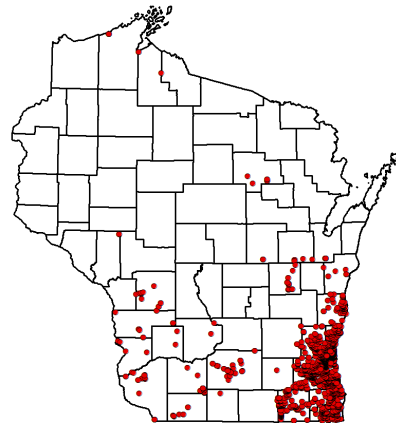
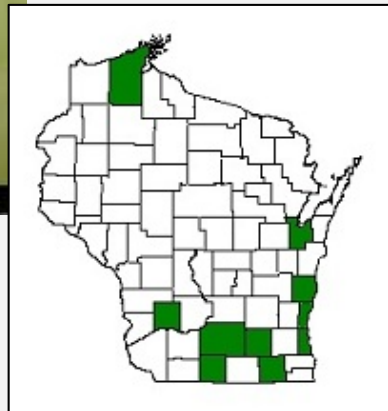
Teasels (*Dipsacus fullonum*, *D. laciniatus*)

- Monocarpic perennial
- Prickly, angled stem, 2-6 ft tall
- Opposite leaves, join to form cup at stem
- Egg-shaped flower heads
- Spiny bracts at base of flower head



Common Teasel

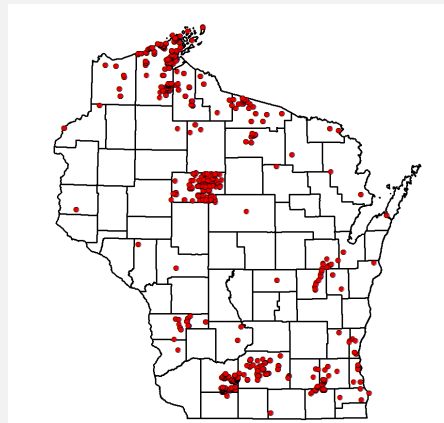
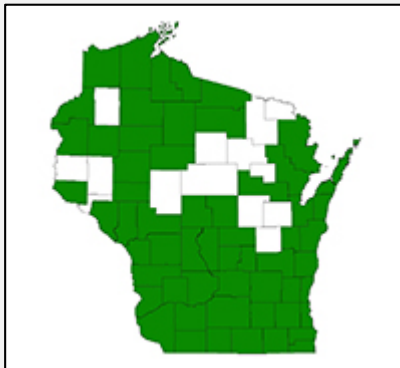
Cut-leaf Teasel





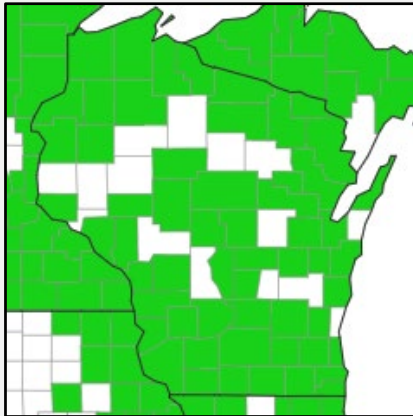
Crown-vetch (*Securigera varia*)

- Herbaceous perennial
- Creeping stems, 2-6 ft long
- Full to partial sun
- Pinnately compound leaves, 11-25 leaflets
- Clusters of 14-20 white to lavender flowers



Bird's-foot Trefoil (*Lotus corniculatus*)

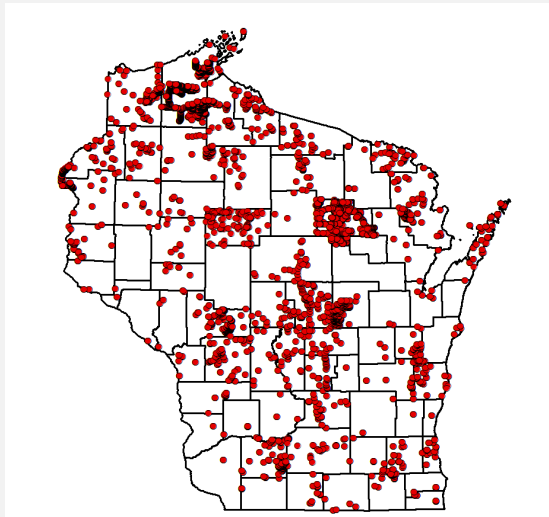
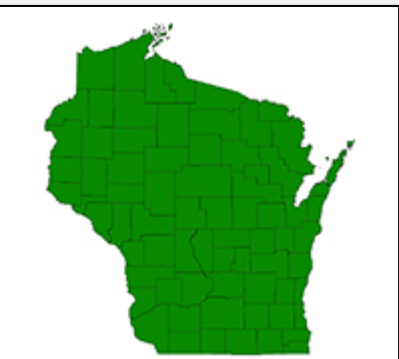
- Herbaceous perennial
- Sprawling growth, 6-24" tall
- Sun, edge habitats
- Alternate, clover-like leaves
- Bright yellow, pea-like flowers in clusters; June through first frost





Spotted Knapweed (*Centaurea stoebe*)

- Short-lived perennial
- Rosette for 1-4 yrs
- Flowering stem 2-4 ft tall
- Dry and disturbed habitats
- Leaves gray-green, deeply divided



- Thistle-like flower heads
 - Purple, pink, sometimes white
- Blooms mid-summer to fall
- Black-tipped bracts at base of flower heads



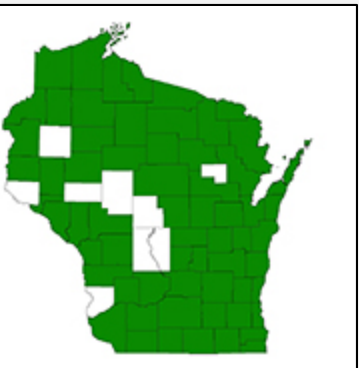
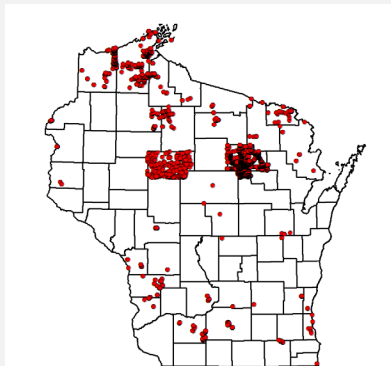


Canada thistle (*Cirsium arvense*)

- Perennial
- Grows 1-5' tall
- Shade intolerant
- Often on edges of wet habitats
- Spreads by rhizomes and seeds



Rob Routledge, Sault College, Bugwood.org



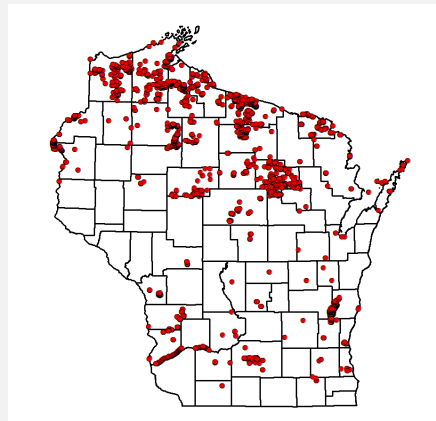


- Flowers ~ 1½ inch wide
- Blooms June – September
- No spines on flowers, stems



Bush Honeysuckles (*Lonicera* species)

- Dense, multi-stemmed shrubs
- Grow 6-12' tall
- Opposite, toothless leaves
- Fragrant pairs of flowers at leaf axils
- Shaggy, peeling bark
- Hollow pith

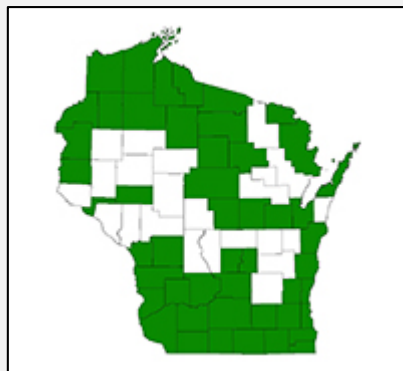




Morrow's honeysuckle (*Lonicera morrowii*)



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Tartarian honeysuckle (*Lonicera tatarica*)



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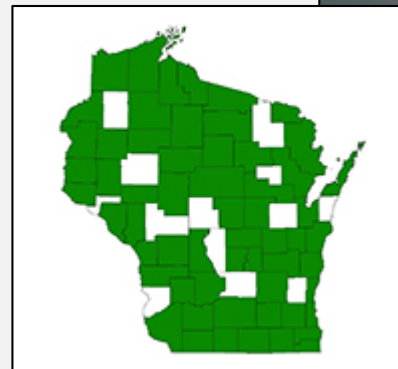


Patrick Breen, Oregon State University, Bugwood.org

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Bell's honeysuckle (*Lonicera x bella*)

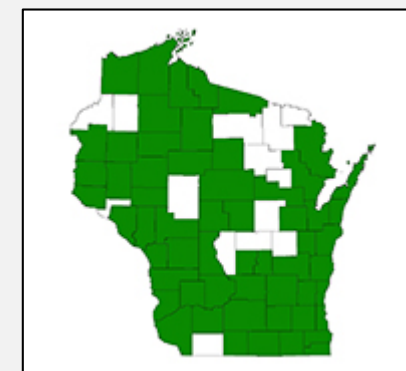


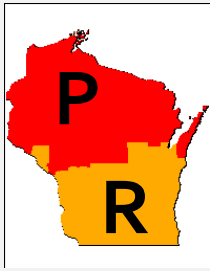
©2002, Gary Fewless



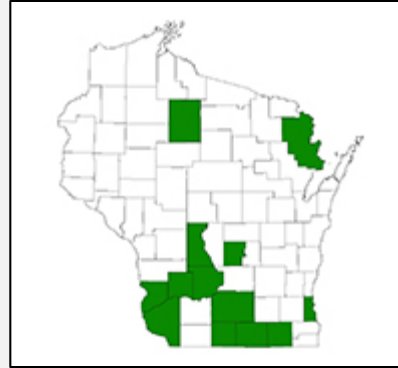
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Amur honeysuckle (*Lonicera maackii*)

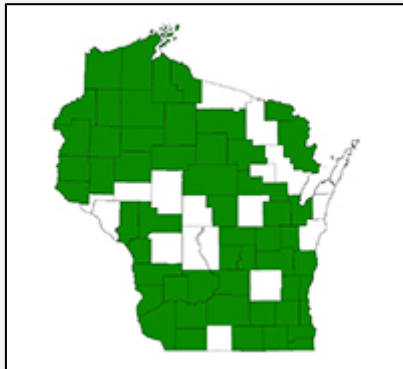
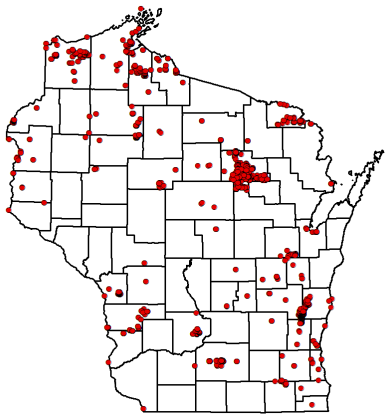




Buckthorns

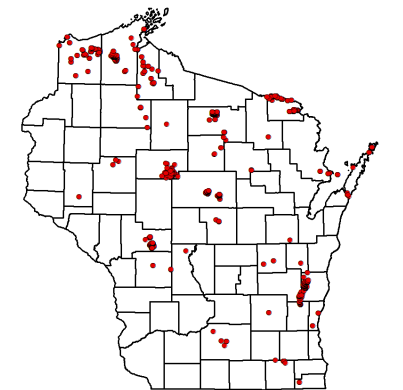
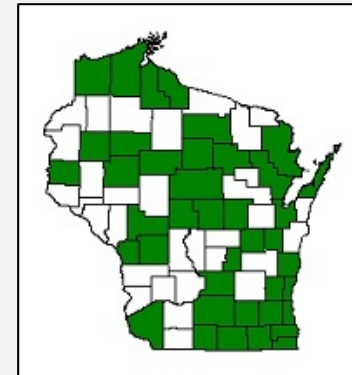
Common Buckthorn (*Rhamnus cathartica*)

- Opposite leaves (mostly)
- 4-petaled flowers (May – June)
- Most aggressive in well-drained soils



Glossy Buckthorn (*Frangula alnus*)

- Alternate leaves
- 5-petaled flowers (May – frost)
- Most aggressive in wet soils



Common Buckthorn



Glossy Buckthorn



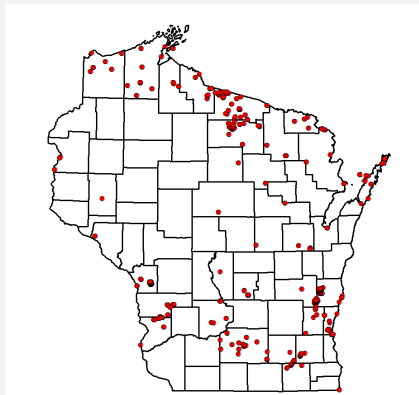
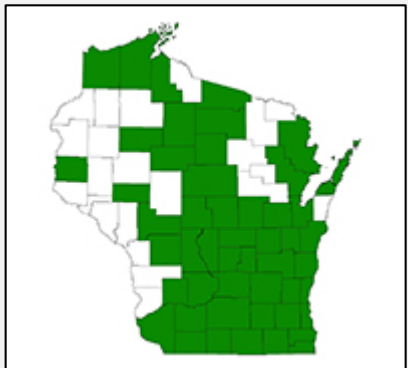


Japanese barberry (*Berberis thunbergii*)

- Dense, spiny shrub
- Typically 2-3' tall, can grow to 6'
- Reddish brown branches, deeply grooved, zig-zag form
- Inner bark fluorescent yellow



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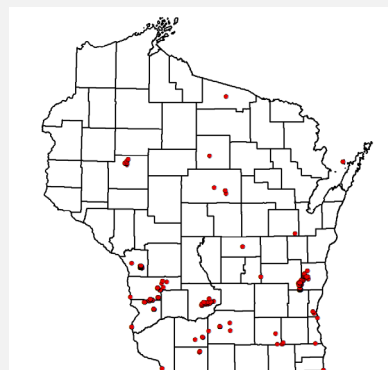
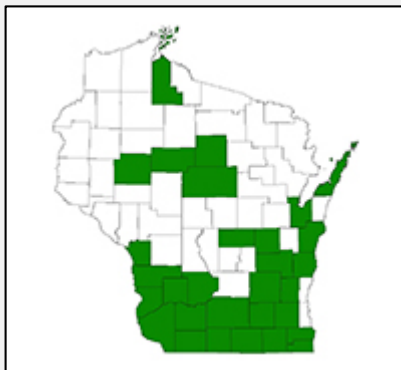


Multiflora Rose (*Rosa multiflora*)

- Perennial, thorny, thicket-forming shrub
- Grows up to 10 – 15 ft
- Full to partial sun
- Alternate, pinnately compound leaves with 5 – 11 leaflets
- Fringed stipules at base of leaf



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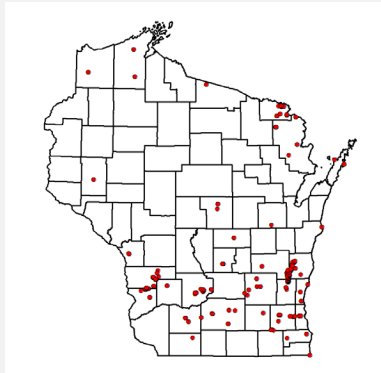
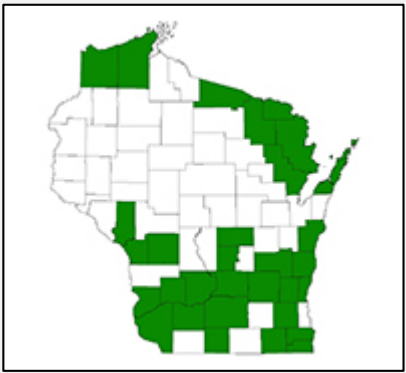
- Abundant flowers in loose clusters
- $\frac{1}{2}$ " – $1\frac{1}{2}$ " , white to pink
- Blooms mid to late spring
- Bright red fruits



Autumn olive (*Elaeagnus umbellata*)



- Multi-stemmed shrub
- Grows to 20'
- Alternate leaves, silver-gray on underside, wavy edges
- Fragrant flowers, late spring
- Reddish fruits with silver scales





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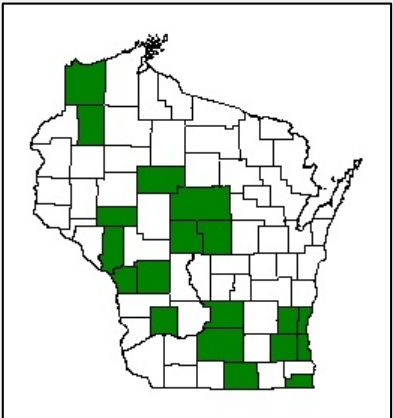
Chris Evans, University of Illinois, Bugwood.org

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Amur Maple (*Acer ginnala*)

- Deciduous shrub/tree
- Grows 15-20 ft tall
- Opposite leaves with 3 lobes
- Bright red fall foliage



Paul Wray, Iowa State University, Bugwood.org

UGA0008223



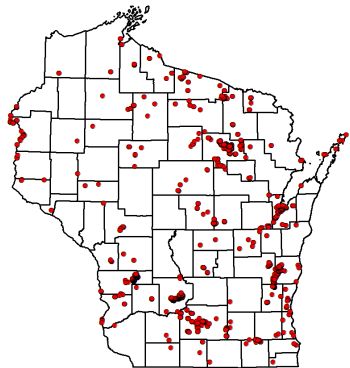
Rob Routledge, Sault College, Bugwood.org

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Garlic Mustard (*Alliaria petiolata*)

- Biennial
- Grows 2-4 ft tall
- 4-petaled white flowers
- Smells like garlic when crushed

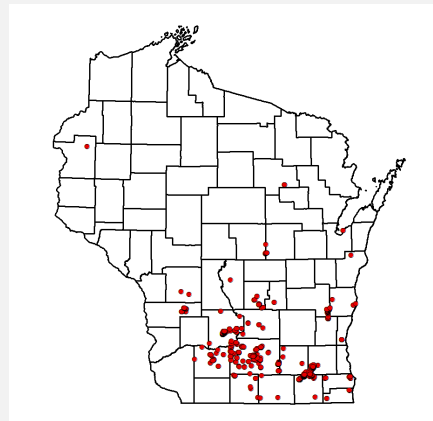
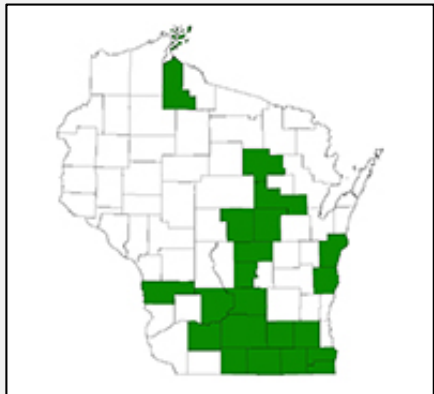






Japanese Hedgeparsley (*Torilis japonica*)

- Biennial
- Grows 2-6 ft tall
- Alternate, fern-like leaves
- Flat-topped umbels of tiny, white flowers bloom July – Aug
- Hooked hairs on fruits



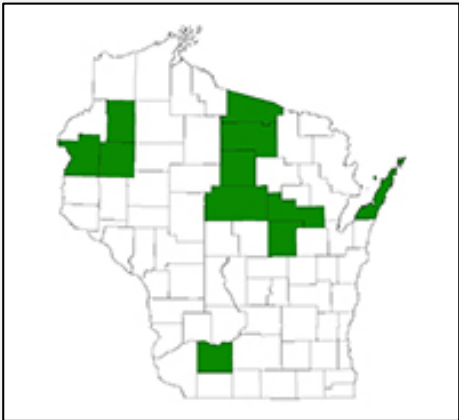


Scarlet Pimpernel (*Pimpinella saxifraga*)

- Perennial
- Grows 2-3 ft tall
- Shade to sun
- Clusters of small white flowers, bloom June - August



2014 © Peter M. Dziuk



- Lowest leaves up to 1 ft long, pinnately compound
- Upper leaves more divided



Biennial thistles

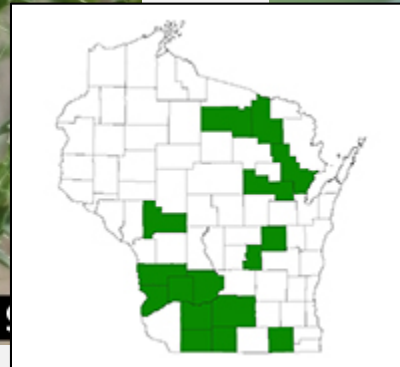
- Biennial, first year leaves grow up to 1.5 ft long
- Flowering stems grow 1-7 ft tall
- Sun to partial sun
- Alternate leaves



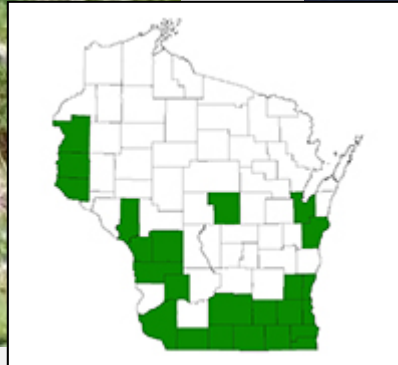
Bull Thistle (*Cirsium vulgare*)



Spiny Plumeless Thistle (*Carduus acanthoides*)



Musk Thistle (*Carduus nutans*)

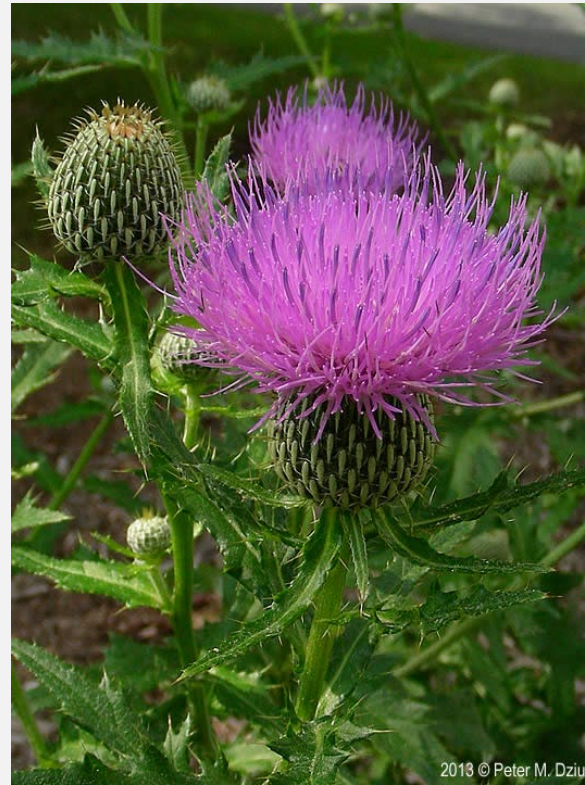


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Native Thistles



Field Thistle (*Cirsium discolor*)

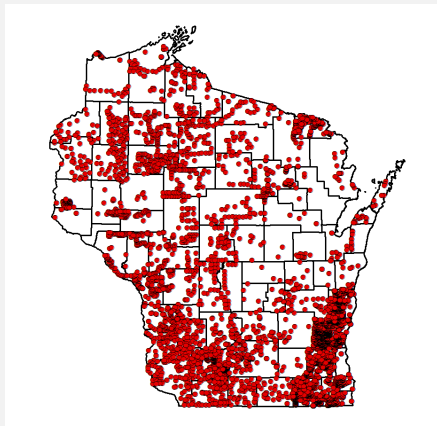


Tall Thistle (*Cirsium altissimum*)



Wild Parsnip (*Pastinaca sativa*)

- Monocarpic perennial
- Flowering stem up to 5'
- Shade intolerant
- Variety of habitats
- Blooms June – July+



- Basal rosette
- Grooved, hollow stems
- CAUTION! Contact with sap causes phytophotodermatitis



Wild Parsnip Look Alikes



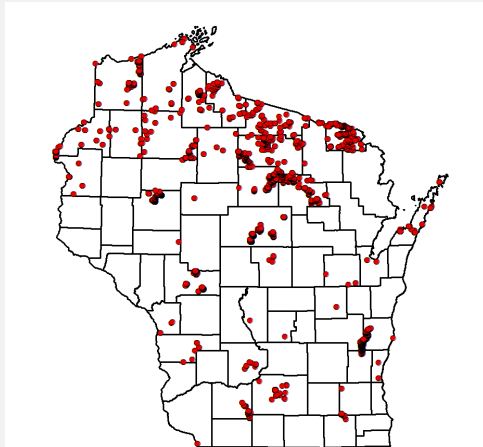
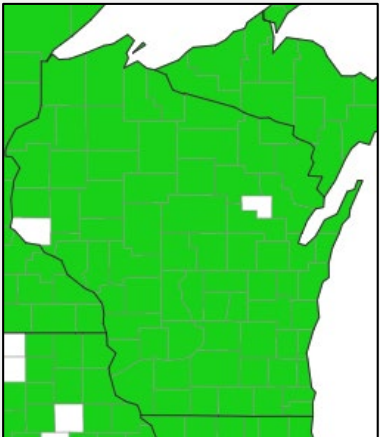
Cow Parsnip



Golden Alexanders

Reed Canary Grass (*Phalaris arundinacea*)

- Perennial, cool season grass
- Wetlands + other habitats
- Monotypic stands with DENSE root mats
- Blooms May – June





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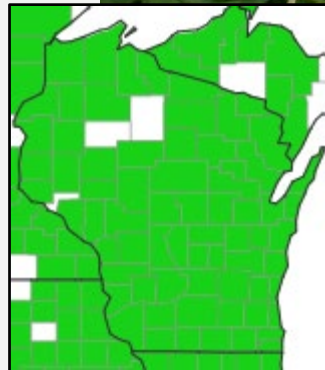


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Bouncing Bet (*Saponaria officinalis*)

- Herbaceous perennial, 1 -3 ft tall
- Full to partial sun
- Opposite, oval shaped leaves with 3 prominent parallel veins
- Cluster of white to pink flowers with 5 notched petals
- Light green to reddish at base of flower
- Blooms July - September



Wild Blue Phlox (*Phlox divaricata*)

- Grows 1 – 1.5 feet tall in shade to part shade
- Leaves 1-2 inches long, finely hairy
- Blooms April – June
- Purplish calyx at base of flower with narrow spreading teeth

