



Working with Stakeholders and Experts to Assess Invasive Plants for Potential Regulation in Wisconsin

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History of WI's Rule - NR 40

- Weed Law Technical Advisory Committee (93-04)
- Statute passed giving DNR authority to classify and regulate invasive species (2001)
- Governor appointed advisory council (created 2004)
- NR 40 Rule (Round 1) authorized and in effect (2009)
- WI DNR and Council started working on Round 2 (2011)
- NR 40 Round 2 anticipated to be in effect spring 2015

Goals of a comprehensive invasive species rule

1. Alert public about and contain/eradicate new invasives
2. Minimize the spread of existing Invasives
3. Minimize hardship the rule may cause

Goals of the Assessment and Rule-making Process

1. Use best science and information available
2. Involve stakeholders throughout process
3. Take socio-economic concerns into account
4. Establish reasonable regulations
5. Transparency

Definition of “Invasive Species”

- **Nonnative species whose introduction causes or is likely to cause economic or environmental harm or harm to human health (Wisconsin Statutes 23.22)**
 - Plants (terrestrial and aquatic)
 - Animals (vertebrates and invertebrates)
 - Disease-causing organisms

WISC Research Committee

-Included researchers in Entomology, Botany, Aquatic Biology, Plant Pathology, Plant Propagator, APHIS Biologist + DNR staff

– Led by Botanist/IPAW board member

- Reviewed existing assessment systems
 - NatureServe I-rank
 - IPSAWG (IN Plant Species Assessmt Wk Grp)
 - Others (New Zealand's, Australia's, etc.)
- Developed assessment criteria
- Developed species assessment process
 - Literature reviews
 - Species Assessment Groups

WISC Regulations Committee

- Included stakeholders representing agriculture, green Industry, landowners, forestry, utilities, Dept. of Ag + DNR staff
 - Led by Nursery/Landscape representative
- Reviewed existing regulations in other states
- Utilized Weed Law Technical Advisory Cmtte plan
- Developed regulatory categories
- Assisted with draft regulations

Regulatory Categories

Prohibited – Not yet in the state, or established in pioneer stands only; still have potential to eradicate and prevent statewide; high potential for environmental damage if widely established.



Restricted – Already established in the state; state-wide eradication unlikely; high environmental impacts.



Regulations by category

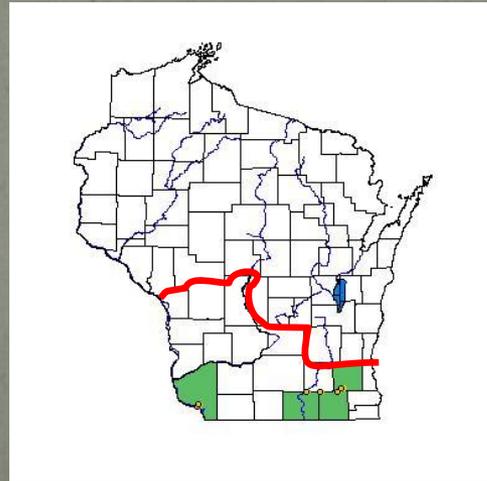
Prohibited – No person may transport (import/move), **possess**, transfer (buy/sell) or introduce a prohibited species without a permit. The department may order or conduct the control effort.

Restricted – No person may transport (import/move), transfer (buy/sell) or introduce a restricted species without a permit. Control encouraged but not required.

Some plants are split-listed

Plants that are only locally or regionally abundant have split classification:

- Restricted where they are more abundant
- Prohibited where they are generally not yet documented



Black swallowwort

Non-regulated Categories

Caution - More information needed, uncertain of level of potential harm

Non-restricted - Socio-economic benefits and regulations unlikely to limit spread

Pending - To be assessed in future rule revisions

Not Invasive - No evidence of ecological harm

Selecting Species to Assess - First Round of NR 40

Focused on species:

- Known to be ecologically invasive species
- Commonly known and locally abundant species
- Known invasive elsewhere, likely to persist
- No significant value to a sector of society

Economically important species put on the pending list to be assessed in NR 40 Round 2

Ornamentals included in Round 1

- Minimal use in trade

Lonicera japonica
Photo by Fred Nation

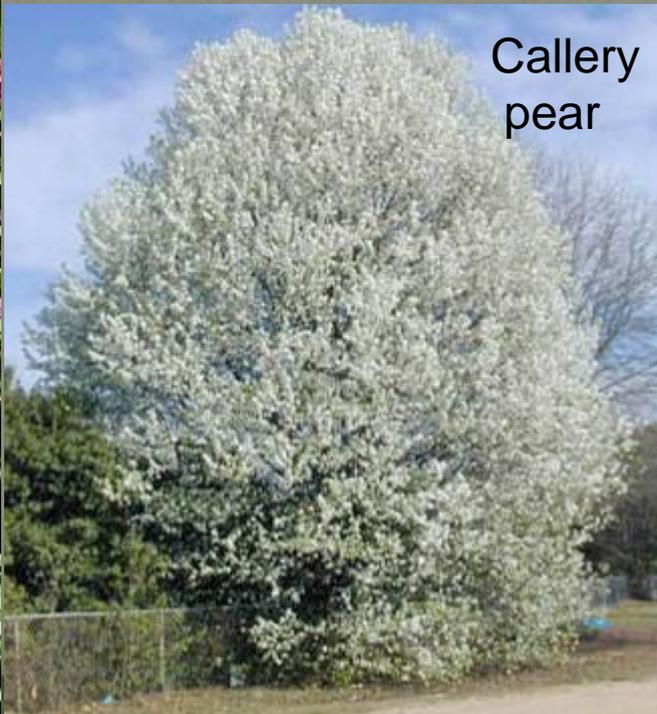


Species not assessed initially

- Only locally invasive. Not likely to be significant problem.
- No evidence of invasiveness in WI
- Insufficient information on impacts, weediness, cultivars, etc.



Money plant



Callery pear



English ivy

Species not assessed initially, though known invasive

- Species important for use as ornamentals, forage, or other uses were put on pending list



Crown vetch



Reed canary grass



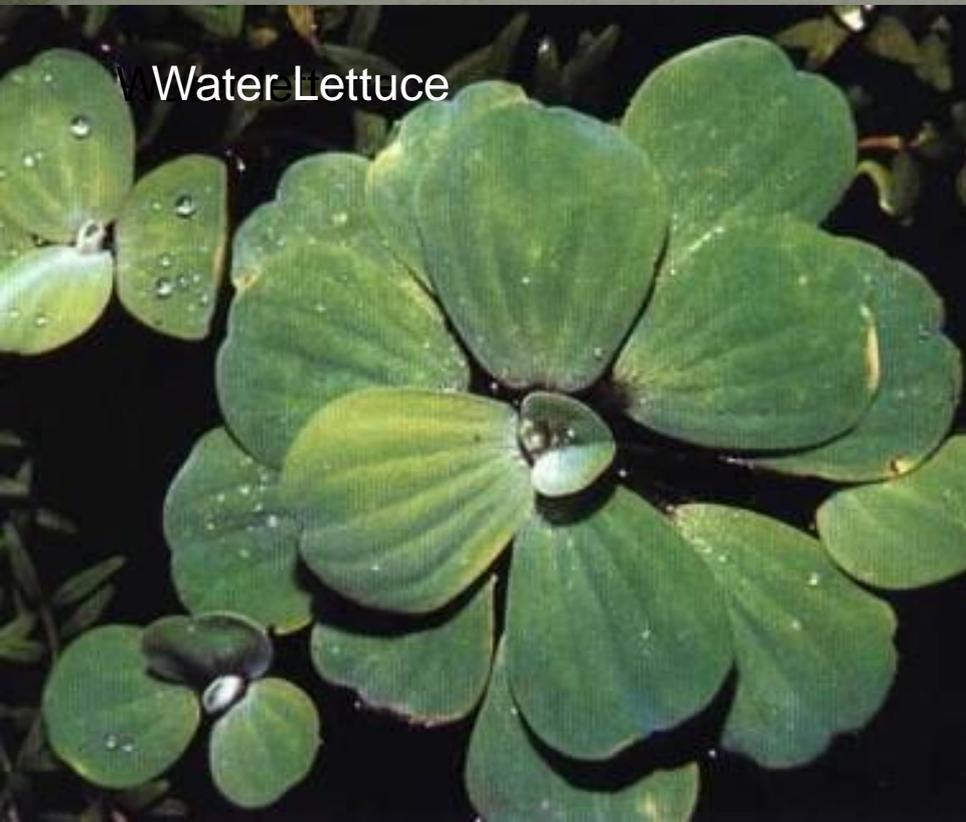
Japanese barberry

Foto: Anna-Lena Ånderberg

Species assessed but not regulated

- No evidence of possible over-winter survival in WI - YET!

Currently on “Pending” or “Caution” list



Water Lettuce



Eichhornia crassipes

photo by Dennis Woodland
University of Wisconsin

Water hyacinth

Assessment Criteria*

- Current status and distribution (in WI and similar environments)
- Establishment potential and life history traits
- Damage potential
- Socio-economic impacts (of the species invasiveness and of potential restrictions)
- Control and prevention potential

*Criteria are included in the state statute authorizing rule development

Species Assessment Groups (SAG) for NR 40 Round 1

- Advisory to the WI Invasive Species Council
- Made up of taxonomic specialists, industry representatives, land managers
- 3 separate groups for plants:
 - Woody plants
 - Herbaceous plants
 - Aquatic plants

Stepped Enforcement

Outreach First

- Direct mailings
- Newsletter articles
- News releases/Public awareness

Nursery Inspectors Role

- Identified regulated species
- Asked for removal and destruction

Informal notice

Formal Notice of Non-compliance

Citation



Permitting

- Permits to “transport, transfer, introduce” may be granted
- Applicants submit necessary information
- Staff visit facility
- Site specific permit developed

Species Assessment Groups (SAG) for NR 40 Round 2

- Ornamental woody plants
- Ornamental herbaceous plants
- Plants used for forage, turf, erosion control
- Other terrestrial herbaceous plants
- Aquatic plants + algae

Wisconsin Nursery Association Survey

- All licensed nursery growers + dealers asked about ornamental plants likely to be assessed.
- If grown or sold
- Approximate annual sales
- Relative importance to their business
- Cultivars grown/sold

Round 2 - Species Pre-assessment

- Any species recommended was included on list
- Brief summaries given to SAG members
- Determined:
 - Is it known to be ecologically invasive?
 - If yes → Is regulation likely to limit spread?
 - If yes → Is it currently found in Wisconsin?
 - If yes → Is it showing evidence of invasiveness in WI?



Terrestrial Plant Breakdown – Round 2

assessed **133** plant species

50

recommended for
regulation

83

recommended
for non-regulation

20 prohibited/ **28** restricted/ **2** split

Also 22 aquatic plants and alga recommended

Dealing with cultivars, varieties, etc.

- NR 40 says all var, cv, hybrids regulated like the parent species unless specifically exempted
- SAGs discussed hybrids separately (Miscanthus)
- SAGs discussed cultivars and made recommendations based on literature + observations of viable seed production

Cultivar exemptions :

- Burning bush– exempt all cultivars except Nordine
- Japanese barberry – exempt all cultivars except Brand's top 25 seed producers
- Amur corktree – exempt male cultivars + seedlings for rootstock

Nursery Stock Phase-out

- No allowance for prohibited plants
- Agreement for nurseries to sell off existing stock of **restricted** species.
- 5 years for restricted trees and shrubs
- 3 years for restricted all other plants
- No further propagation or importation

What worked in Wisconsin

- Taking it slow – input from stakeholders
- SAG process – schedule in winter
- Round 1 – focusing on the obvious invasives and the less commercially important species
- Informal public listening sessions
- Stepped enforcement

Challenges in Wisconsin

- Lack of legal authority – had to wait for legislature to pass a bill
- SAG members not showing up (early burn season in 2012)
- Some decisions made on concern for public perception rather than science (reed canary grass, sweet clover, earthworms)