



Shaun Winterton, Aquarium and Pond Plants of the World, Edition 3, USDA APHIS PPQ, Bugwood.org



Rachel Woodfield, Merkel & Associates, Inc., Bugwood.org

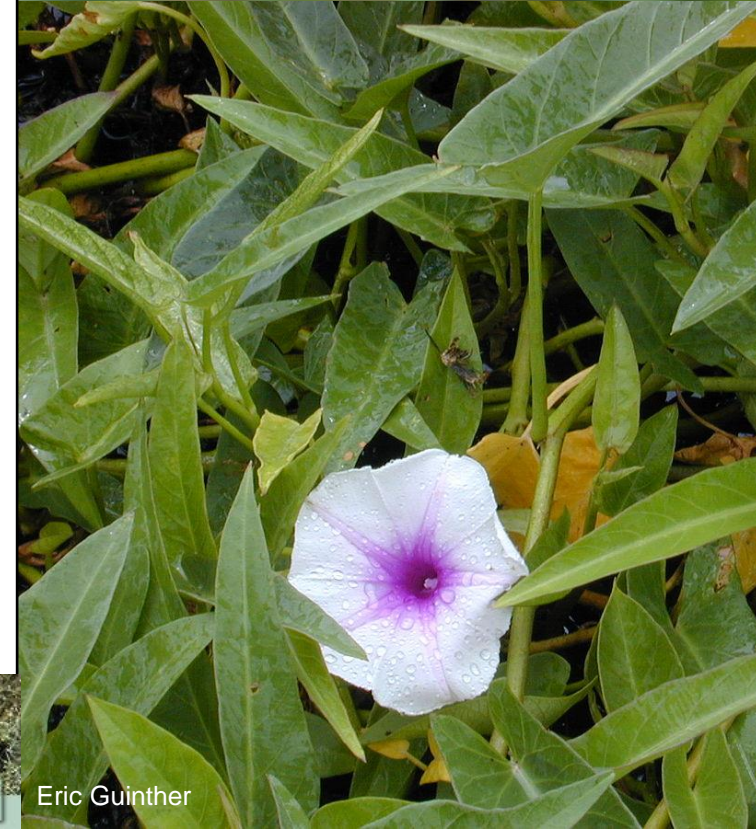
# Aquatic Plants

## Species Assessment Group

Coordinator: Michelle Nault, WDNR



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Eric Guinther



WISCONSIN INVASIVE SPECIES COUNCIL

# SAG Composition



# Overview of SAG

- Potentially invasive aquatic and wetland plants that may negatively impact Wisconsin's waters.



# Changes to Currently Regulated Species

## Reed mannagrass (*Glyceria maxima*)

- Current Status: Split-listed
- Proposed Status: Restricted
- Justification:
  - Widespread population recently verified in western portion of state
    - Buffalo Co. population estimated to occupy several square miles and has likely been established for decades
  - Limited effective control methods
    - Control of populations in eastern portion of state has not been very successful



# Changes to Currently Regulated Species

## **Spiny naiad (*Najas marina*)**

- Current Status: Restricted
- Proposed Status: Unregulated
- Justification:
  - Uncertainty on if species is actually non-native
    - Previously assumed to be non-native to WI since herbarium collections prior to 1941 do not exist
    - However, sediment core fossil records from the Midwest indicate that the species was present in North America prior to glaciation
  - Does not tend to exhibit dense growth in Wisconsin



# Changes to Currently Regulated Species

## **Water spinach (*Ipomea aquatica*)**

- Current Status: Prohibited
- Proposed Status: Unregulated
- Justification:
  - Cold intolerant and unlikely to establish in WI
  - Cultivated as a vegetable for consumption
  - Unregulated status would allow for USDA and DATCP to issue permits for importation of non-viable plant materials for consumption



# Changes to Currently Regulated Species



## Federal Noxious Weed List Species (FNWL)

- Current Status: Prohibited
  - Several FNWL aquatic plants are individually listed
- Proposed Status: Prohibited<sup>‡</sup>
  - Propose to remove individual FNWL species and add language during rule-making which would designate all FNWL aquatic plant species (except water spinach) as 'Prohibited' under NR40
- Justification:
  - Low likelihood of establishment of FNWL species in Wisconsin given climatic requirements
  - Would allow the department to maintain some regulatory authority if FNWL aquatic plants were ever found in the state

## Federal Noxious Weed List

Effective as of December 10, 2010

### Aquatic

Latin Name	Author(s)	Common Name(s)
<i>Azolla pinnata</i>	R. Brown	Mosquito fern, water velvet
<i>Caulerpa taxifolia</i> (Mediterranean strain)	(Vahl) C. Agardh	Killer algae
<i>Eichhornia azurea</i>	(Swartz) Kunth	Anchored water hyacinth, rooted
<i>Hydrilla verticillata</i>	(L.) Royle	Hydrilla
<i>Hygrophila polysperma</i>	T. Anderson	Miramar weed
<i>Ipomoea aquatica</i>	Forsskal	Water-spinach, swamp morning
<i>Lagarosiphon major</i>	(Ridley) Moss	African elodea
<i>Limnophila sessiliflora</i>	(Vahl) Blume	Ambulia
<i>Melaleuca quinquenervia</i>	(Cavanilles) S.T. Blake	Broadleaf paper bark tree
<i>Monochoria hastata</i>	(Linnaeus) Solms-Laubach	Arrowleaf false pickerelweed
<i>Monochoria vaginalis</i>	(N.L. Burm.) K. Presl	Heartshape false pickerelweed
<i>Ottelia alismoides</i>	(L.) Pers.	Duck lettuce
<i>Sagittaria sagittifolia</i>	Linnaeus	Arrowhead
<i>Salvinia auriculata</i>	Aublet	Giant salvinia
<i>Salvinia biloba</i>	Raddi	Giant salvinia
<i>Salvinia herzogii</i>	de la Sota	Giant salvinia
<i>Salvinia molesta</i>	D.S. Mitchell	Giant salvinia
<i>Solanum tampicense</i>	Dunal	Wetland nightshade
<i>Sparganium erectum</i>	Linnaeus	Exotic bur-reed

<sup>‡</sup>Excluding water spinach

# Changes to Currently Regulated Species

## Federal Noxious Weed List Species (FNWL)

Scientific Name	Common Name	Current NR 40 Regulation	Proposed Regulation
<i>Azolla pinnata</i>	Mosquito fern	Prohibited	Prohibited (FNWL Clause)
<i>Caulerpa taxifolia</i>	Killer algae	Prohibited	Prohibited (FNWL Clause)
<i>Eichhornia azurea</i>	Anchored water hyacinth	Prohibited	Prohibited (FNWL Clause)
<i>Hydrilla verticillata</i>	Hydrilla	Prohibited	Prohibited
<i>Hygrophila polysperma</i>	Indian swampweed	Prohibited	Prohibited (FNWL Clause)
<i>Ipomea aquatica</i>	Water spinach	Prohibited	Unregulated*
<i>Lagarosiphon major</i>	African elodea	Prohibited	Prohibited (FNWL Clause)
<i>Limnophila sessiliflora</i>	Asian marshweed	Prohibited	Prohibited (FNWL Clause)
<i>Ottelia alismoides</i>	Duck Lettuce	Prohibited	Prohibited (FNWL Clause)
<i>Sagittaria sagittifolia</i>	Hawaii arrowhead	Prohibited	Prohibited (FNWL Clause)
<i>Salvinia herzogii</i>	Giant salvinia	Prohibited	Prohibited (FNWL Clause)
<i>Salvinia molesta</i>	Giant salvinia	Prohibited	Prohibited (FNWL Clause)

\*Would allow USDA to issue permits for non-viable plant materials imported for consumption

Scientific Name	Common Name	Current NR 40 Regulation	Proposed Regulation
<i>Melaleuca quinquenervia</i>	Broadleaf paper bark tree	Unregulated	Prohibited (FNWL Clause)
<i>Monochoria hastata</i>	Arrowleaf false pickerelweed	Unregulated	Prohibited (FNWL Clause)
<i>Monochoria vaginalis</i>	Heartshape false pickerelweed	Unregulated	Prohibited (FNWL Clause)
<i>Salvinia auriculata</i>	Giant salvinia	Unregulated	Prohibited (FNWL Clause)
<i>Salvinia biloba</i>	Giant salvinia	Unregulated	Prohibited (FNWL Clause)
<i>Solanum tampicense</i>	Wetland nightshade	Unregulated	Prohibited (FNWL Clause)
<i>Sparganium erectum</i>	Exotic bur-reed	Unregulated	Prohibited (FNWL Clause)



# Newly Proposed for Regulation

## **Bog bulrush**

*(Schoenoplectiella mucronata)*

- Proposed Status: Prohibited
- Justification:
  - Not yet present in the state
    - Records of populations in nearby states
  - Likely to increase with climate change
  - Challenging to control



# Newly Proposed for Regulation

## **Butterweed (*Packera glabella*)**

- Proposed Status: Prohibited
- Justification:
  - Recently verified in the state
  - Aggressive seed set and spread
  - Noxious, could cause harm to livestock health



# Newly Proposed for Regulation

## Dwarf cattail (*Typha minima*)

- Proposed Status: Prohibited
- Justification:
  - Not yet present in the state
  - Other species in this genus are known to exhibit dense monotypic growth and aggressive spread
  - May hybridize with other cattail species



Kurt Stüber, Wikimedia Commons



Ettore Balocchi, flickr.com

# Newly Proposed for Regulation

## **Eurasian waxy mannagrass** *(Glyceria declinata)*

- Proposed Status: Prohibited
- Justification:
  - Only two verified populations in the state
  - Difficult to differentiate from similar species
  - High rate of spread
  - Populations likely underreported



John Zaborsky, UW-Madison Botany

# Newly Proposed for Regulation

## **Fine-leaf water dropwort** (*Oenanthe aquatica*)

- Proposed Status: Prohibited
- Justification:
  - Not yet present in the state
  - Impacts unknown
  - Forms dense stands
  - Human health hazard – all parts are poisonous



Alex Lockton, July 2021.  
[https://commons.wikimedia.org/wiki/File:Oenanthe\\_aquatica\\_at\\_Willesborough.jpg](https://commons.wikimedia.org/wiki/File:Oenanthe_aquatica_at_Willesborough.jpg)

# Newly Proposed for Regulation

## **Floating primrose-willow** (*Ludwigia peploides*)

- Proposed Status: Prohibited
- Justification:
  - Not yet present in the state
  - Aggressive spread
  - May negatively impact native species
  - Difficult to distinguish from similar species



# Newly Proposed for Regulation

## **Pendulous sedge (*Carex pendula*)**

- Proposed Status: Prohibited
- Justification:
  - Not yet present in the state
  - High rate of spread
  - Has ability to displace native species
  - Likely to establish in Wisconsin if introduced



# Newly Proposed for Regulation

## **Small carpet-grass (*Arthraxon hispidus*)**

- Proposed Status: Prohibited
- Justification:
  - High rate of spread and can form monotypic stands
  - Has established in similar climates
  - Difficult to monitor
  - Potential negative impacts to streams, shorelines, and wet areas





# Newly Proposed for Regulation

## Two horn water chestnut (*Trapa bispinosa*)

- Proposed Status: Prohibited
- Justification:
  - Not yet present in the state
  - Highly invasive and spreading
  - Very difficult to distinguish from similar species
    - Recent taxonomic split from *Trapa natans*
    - *T. natans* is currently Prohibited in Wisconsin



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# Newly Proposed for Regulation

## **Water primrose (*Ludwigia grandiflora*)**

- Proposed Status: Prohibited
- Justification:
  - Presence increasing across the U.S.
    - Newly reported populations in the northeast and northwest U.S.
  - Currently regulated in Canada
  - High risk of monoculture
  - Difficult to distinguish from similar species



# We want to hear from you!

- You can leave questions or feedback online via the survey on the council webpage, by emailing [DNRIvasiveSpecies@wisconsin.gov](mailto:DNRIvasiveSpecies@wisconsin.gov) (include NR40 in subject line), or by calling Mackenzie Manicki (WDNR) at 608-206-4561.
- Questions and feedback will be addressed in a document and posted on the council webpage. You will receive an email notification when this document is posted.
- Thank you for your participation!