Aquatic Plant Identification

Susan Knight
Michelle Nault
Paul Skawinski
Why do we care so much about aquatic plants?

A diverse native aquatic plant community is the foundation for healthy, balanced lakes. They provide many benefits including food, shelter and nurseries for fish, wildlife and insects.
• **Emergent, Floating, Submersed**
• Floating
• Submersed:
  • Plants with Smooth Leaf Edges
  • Pondweeds
    • Broad or narrow leaves
    • With or without floating leaves
  • Glands
  • Stipules
  • Other common plants
• Plants with Finely Dissected or Thread-like leaves
• Rosettes
• Reproduction
  • Vegetative
  • Sexual

*Bob Korth Photo*
Emergent Plants with Broad or Narrow Leaves

Arrowhead

Pickerelweed

Cattail

Three-way Sedge

Soft stem bulrush
Floating-leaf Plants:
Rooted and not rooted

Watershield
Spatterdock
Small duckweed
Water smartweed
Fragrant water lily
Submersed Plants: Opposite and Whorled Leaves

Whorled Leaves
- Elodea

Whorled Leaves
- Eurasian water-milfoil

Opposite Leaves
- Golden pert
Submersed Plants with Smooth-edged Leaves

Elodea

Wild Celery

Pondweeds
Alternate Leaves: Pondweeds

White-stem pondweed  
*P. praelongis*

Fern-leaf pondweed  
*P. robbinsii*
**Pondweeds**
Leaves broad to narrow

Leafy pondweed  
*P. foliosus*

Large-leaf pondweed  
*P. amplifolius*
Pondweeds
With and without floating leaves
Pondweeds
D. Stipules: Leafy bits near leaves and stems

Fibrous, shreddy stipules

Large, stiff stipules

Large-leaf pondweed
_**P. amplifolius**_

Stiff pondweed
_**P. strictifolius**_
Submersed Plants with Finely Divided Leaves

Coontail

Water marigold

Common bladderwort

Whorled water-milfoil
Submersed plants with finely-divided leaves: Water-milfoils

Eurasian water-milfoil

Northern water-milfoil
Common bladderwort
*Utricularia vulgaris*
Common bladderwort
*Utricularia vulgaris*

Bladders on leaf

Bladder with prey inside
Rosettes:
Stiff, tough, often evergreen
Leaves come from base of plant
Sandy or wave-swept shores
Low nutrient waters
Unrelated to each other
Mostly northern WI

Water lobelia
Dwarf water-milfoil
Quillwort
Reproduction:
Vegetative
  Clonal growth: runners, branching, fragments
  Turions
Sexual
  Flowers/Fruits

Dwarf water-milfoil
Eurasian water-milfoil
Wild celery

Large-leaf pondweed
Reproduction:
Vegetative
  Clonal growth: runners, branching, fragments
  Turions: resting organs, usually to overwinter
Sexual
  Flowers/Fruits
Reproduction:
Vegetative
   Clonal growth: runners, branching, fragments
   Turions
Sexual
   Flowers/Fruits

Common bladderwort
Water marigold
Purple bladderwort
Reproduction: Sexual Flowers/Fruits

Pondweed: Flowers and Nutlets (Magnified)

Water-milfoil: Flowers and Fruits (Magnified)
Aquatic Invasive Plants Threatening WI

*Nymphoides peltata*, Yellow floating heart
*Nitellopsis obtusa*, Starry stonewort
*Eichhornia crassipes*, Water hyacinth
*Pistia stratiotes*, Water lettuce
Freshwater Sponge
Not a plant
But an animal