



Aquatic Plant Identification

Susan Knight
Michelle Nault
Paul Skawinski



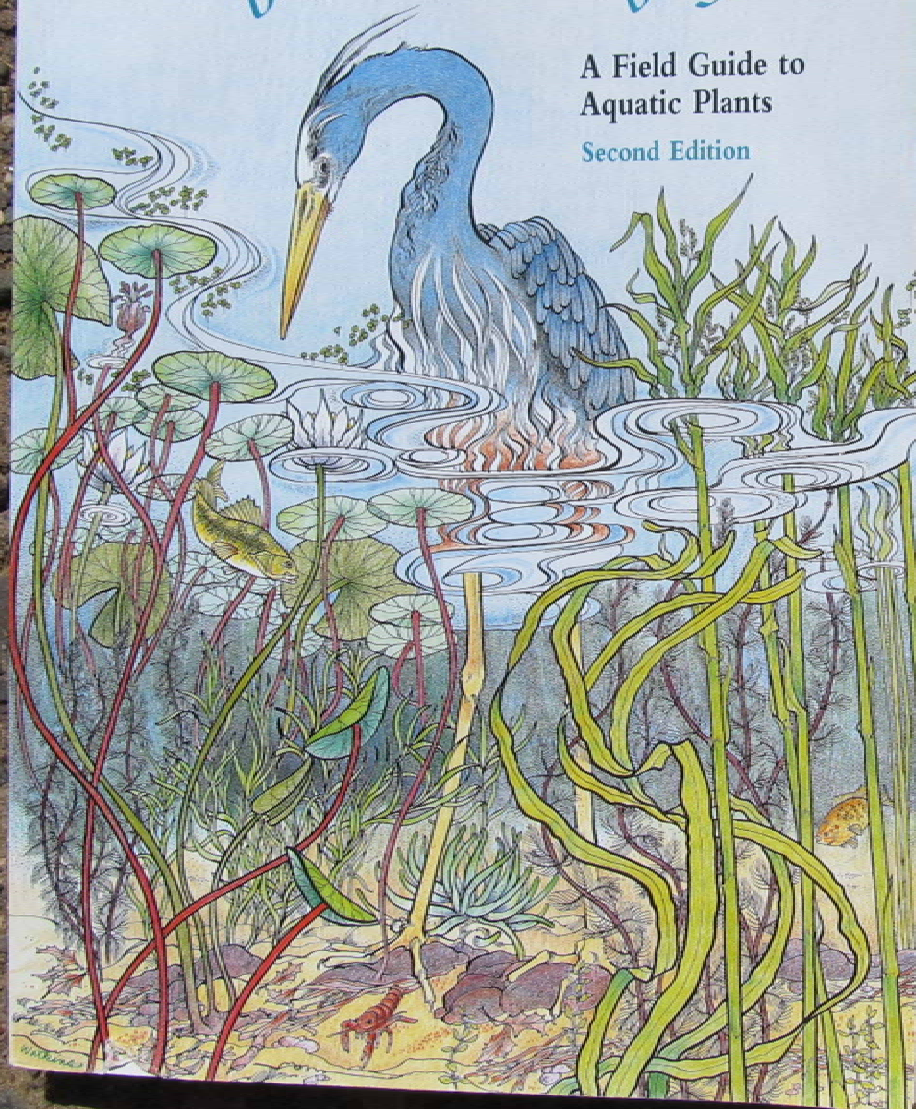
Why do we care so much about aquatic plants?

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.

Through the Looking Glass...

A Field Guide to
Aquatic Plants

Second Edition



Aquatic Plants of the Upper Midwest

A photographic field guide to our underwater forests

Second Edition



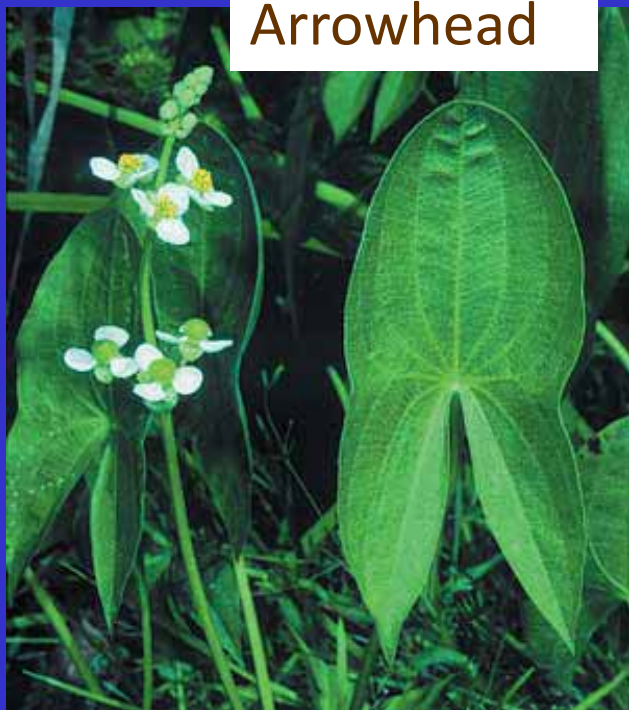
Paul M. Skawinski

- **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

Arrowhead



Pickerelweed



Emergent Plants
with Broad or
Narrow Leaves

Cattail

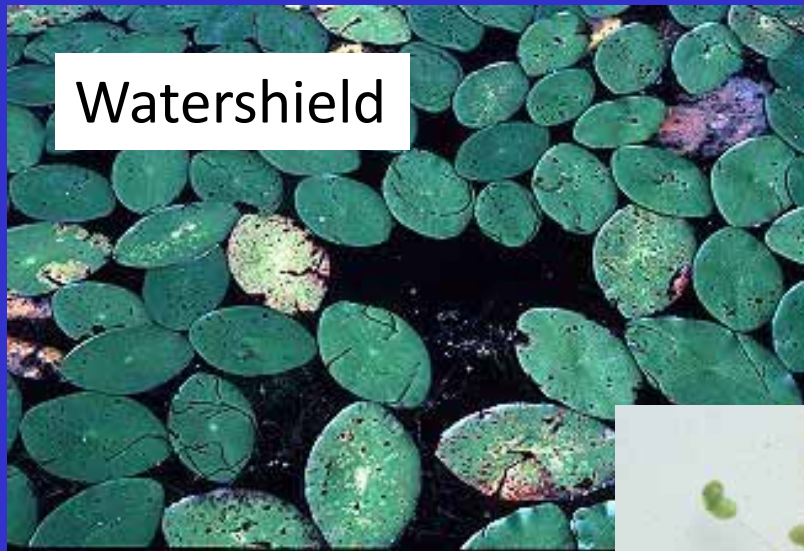


Three-way Sedge



Soft stem bulrush





Watershield



Spatterdock



Small duckweed



Water smartweed

**Floating-leaf Plants:
Rooted and not rooted**



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



Floating-leaf
pondweed
P. natans

Floating leaves only

Submersed
Leaves only



Fries pondweed
P. friesii

Pondweeds
With and without floating leaves



Variable pondweed
P. gramineus

Both floating and
submersed leaves

Pondweeds

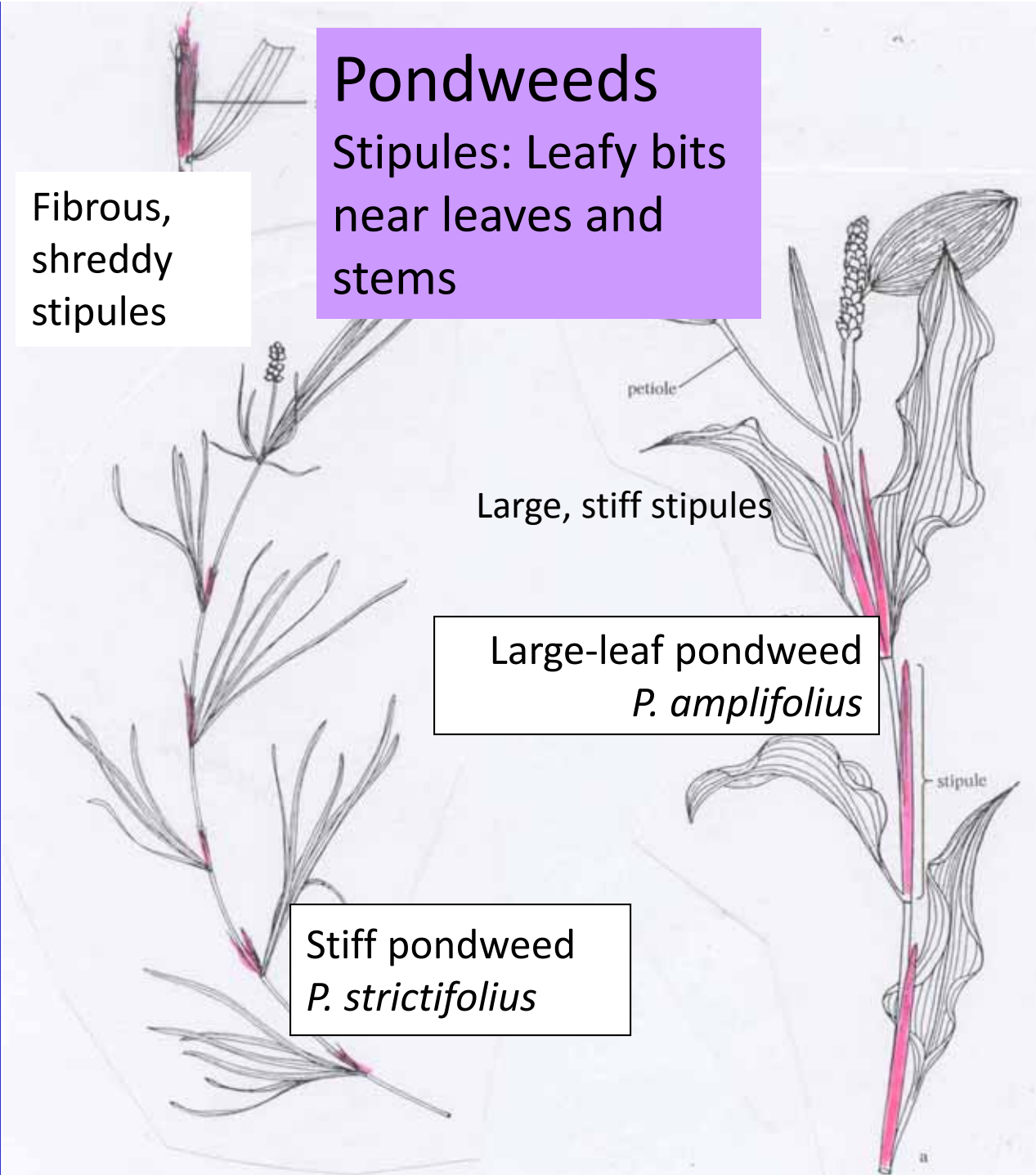
Stipules: Leafy bits near leaves and stems

Fibrous, shreddy stipules

Large, stiff stipules

Large-leaf pondweed
P. amplifolius

Stiff pondweed
P. strictifolius



**Submersed
Plants with
Finely Divided
Leaves**

Coontail

Common bladderwort

Water
marigold

Whorled
water-milfoil

**Submersed
plants with
finely-
divided
leaves:
Water-
milfoils**



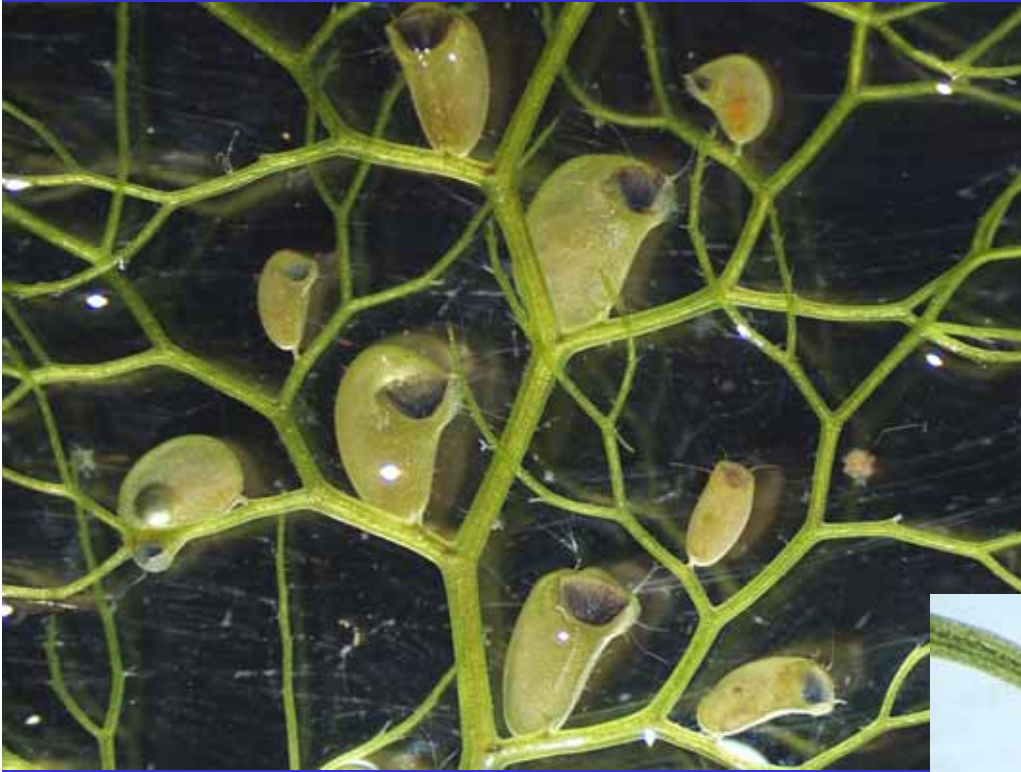
Eurasian water-milfoil



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

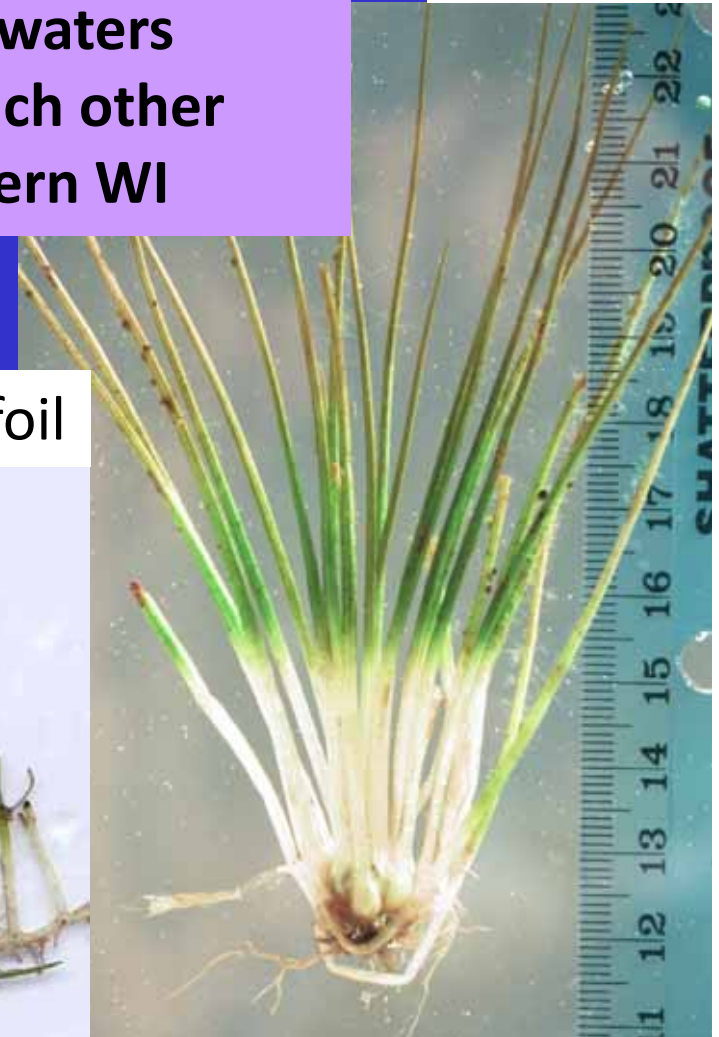
Quillwort



Water lobelia



Dwarf water-milfoil



Reproduction:

Vegetative

Clonal growth: runners, branching,
fragments

Turions

Sexual

Flowers/Fruits



Reproduction:

Vegetative

Clonal growth: runners, branching, fragments

Turions: resting organs, usually to overwinter

Sexual

Flowers/Fruits



Bladderworts



Pondweeds

Curly-leaf pondweed

Reproduction:

Vegetative

Clonal growth: runners, branching, fragments
Turions

Sexual

Flowers/Fruits



Common bladderwort



Water marigold



Purple bladderwort



Aquatic

Reproduction: Sexual Flowers/Fruits

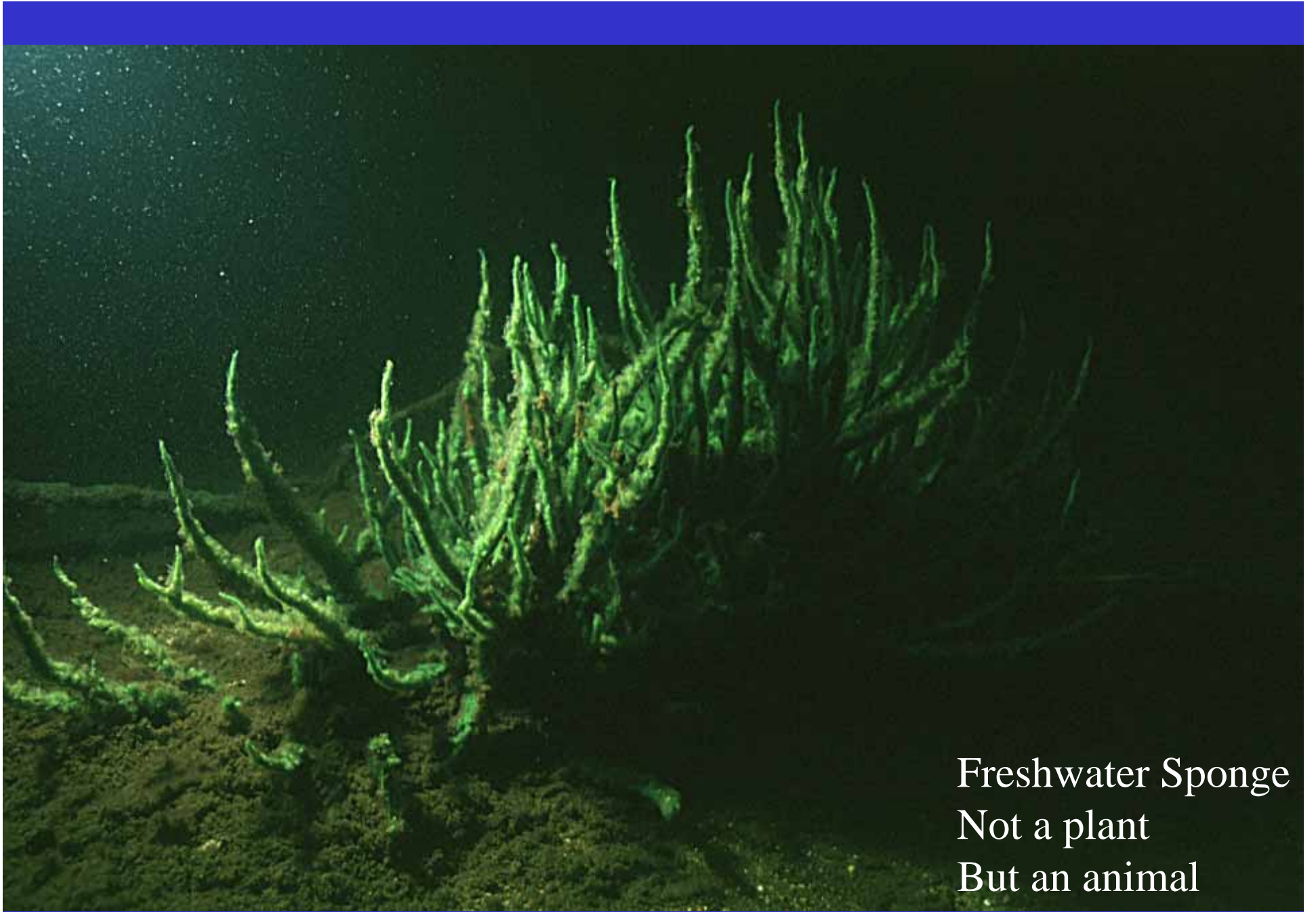


Pondweed:
Flowers and
Nutlets
(Magnified)



Water-milfoil:
Flowers and
Fruits
(Magnified)





Freshwater Sponge
Not a plant
But an animal