# Aquatic Plants of MESSER POND



State Contact: Amy P. Smagula Limnologist/Exotic Aquatic Plant Program Coordinator 603-271-2248 or Amy.Smagula@des.nh.gov

#### Overview

- This slideshow includes four sections aimed at helping you effectively Weed Watch on your waterbody:
  - The first section shows photos of NATIVE aquatic plants that have been documented in your waterbody to date. Learn these and ignore them! *They are fine.*
  - The second section shows photos of algae you may encounter during your survey. Some are good, some are of concern.
  - The third section shows photos of INVASIVE aquatic plants you <u>do not</u> want in your waterbody. *Search for these and report immediately!*
  - The final section shows photos of INVASIVE aquatic animals you <u>do not</u> want in your waterbody. *Search for these and report immediately!*

#### **Types of Aquatic Plants**

#### Emergent



#### Submergent





Plant Refresher Native plants of

MESSER POND

#### **Floating-leaved plants**

#### Includes both rooted and unrooted here

## Yellow water lily

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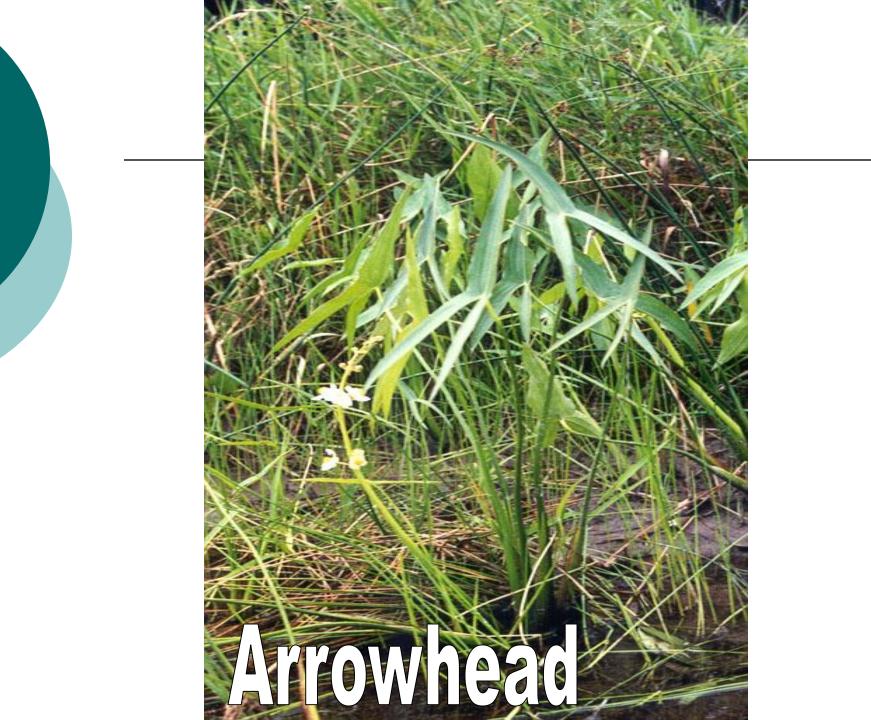
# White water lily

# Water shield

# Floating heart

### **Emergent plants**

 Plants that are rooted and have most of their biomass as erect vegetation above the water



# **Bur-reed**

Thelcoa.org

### Pipewort

# Spike rush

# Water Lobelia

http://upload.wikimedia.org/wikipedia/commons/0/02/Water\_Lobelia\_,\_Angle\_Tarn\_-\_geograph.org.uk\_=\_203062.jpg



# Three-way sedge

#### Swamp Loosestrife

Robsplants.com



### **Cotton Grass**



### Submergent plants

- Rooted or unrooted
- Vegetative portion wholly underwater
- Flowers may be emergent

# Native Milfoil

Myriophyllum humile (reddish/brownish stems, usually 6 inches tall or less)

# Bladderwort

#### Pondweed



schmalblättrige Wasserpest (Elodea nuttallii)

# Tape grass

#### Algae (also important to look at)

Single celled to colonial
Simple plants
Base of the food chain



Cyanobacteria often form scums at the surface. Scums often wash up close to shore due to wind or water current. Scums can be greenish, bluegreenish or bluish.

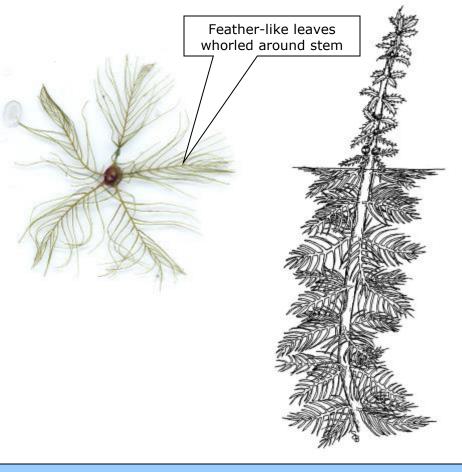
Cyanobacteria (Blue-green algae)-Call us! These could produce toxins.

#### The Exotic Plants (aka- plants you <u>don't</u> want)

Use these pictures to help you identify any new growth that may come in.

Report any sightings of these to: Amy P. Smagula NH DES 29 Hazen Drive Concord, NH 03301 Amy.Smagula@des.nh.gov 603-271-2248





- Variable milfoil- *Myriophyllum heterophyllum*
- Native to southern and central U.S., not to NH
- In several waterbodies in NH

Thick whorls of leaves along entire stem, with a squirrel-tail or garland-like appearance.





Feather-like leaves whorled around stem, at least 12 or more pairs of small leaflets along one leaf

Whorls of leaves arranged along stem, with gaps of 1/2in to a couple inches between whorls. Eurasian milfoil- *Myriophyllum spicatum*Native to Asia
In 5 waterbodies in NH

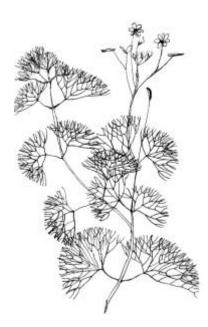




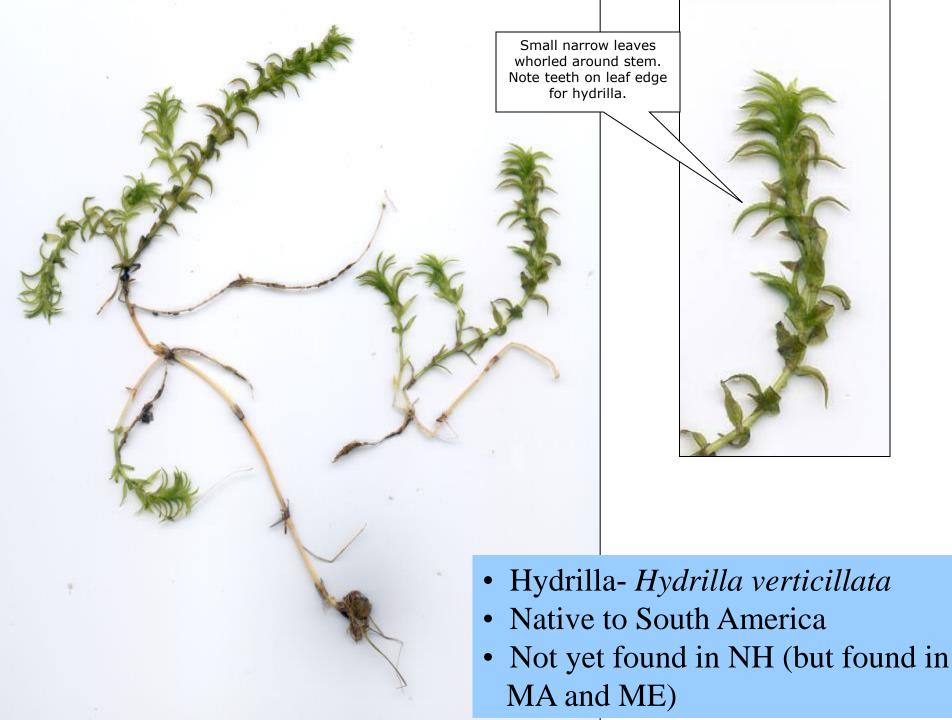
Branching leaves arranged oppose along stem. Note leaf is attached by a short stem to main stem of plant.



- Fanwort- Cabomba caroliniana
- Native to Europe/Asia
- In 9 waterbodies in NH



# Hydrilla (EXOTIC)



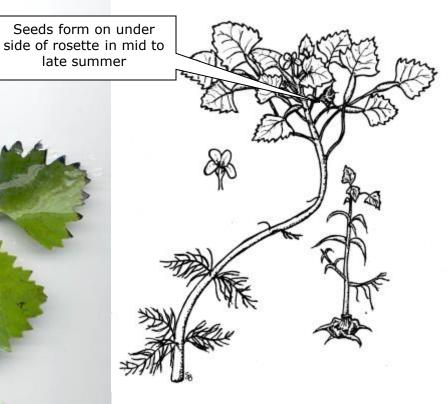
# Brazilian elodea (EXOTIC

Narrow leaves whorled around stem. Teeth present on leaf edges but need magnifying lens to see.

- Brazilian elodea- Egeria densa
- Native to Asia and South America
- In 1 waterbody in NH

## Water chestnut- EXOTIC





- Water chestnut- *Trapa natans*
- Native to Asia
- In 1 waterbody in NH

Floating rosette of triangular shaped leaves on surface of water, connected to seed in sediment with a long stem/petiole

### **Curly-leaf Pondweed**

Leaves are narrow with wavy (lasagna noodle) like edges to them, crisp like lettuce



Leaves narrow with teeth on edges, very brittle and low growing plant



Stalks of small purple flowers form in July and persist until September. One plant can produce up to 2.5 million seeds.

Leaves opposite or whorled on a square stiff stem, rooted in moist, not wet or standing water soils

# Purple loosestrife (EXOTIC)

### Common reed (Phragmites) EXOTIC

Large brown seed stalk forms in late summer/early fall.

Tall (several feet) stems with blade-like leaves that are silvery green in color. Plants found in moist roadside/shoreline areas.

Yellow iris (EXOTIC)

### Invasive Aquatic Animals (aka- critters you <u>don't</u> want)

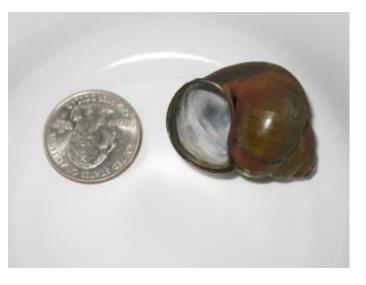
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### Asian Clam



Roughly the diameter of a dime, sometimes a quarter

### **Chinese Mystery Snail**





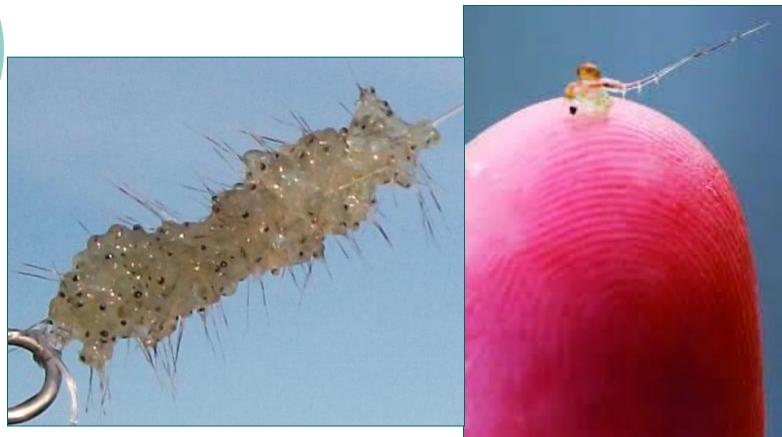
### Zebra Mussel



Ohio Sea Grant

Roughly the size of a pistachio nut

### **Spiny Water Flea**



Several spiny water fleas on fishing line

Spiny water flea on fingertip



When in doubt about an identification, please send in voucher specimens or email photos of what you have to <u>Amy.Smagula@des.nh.gov</u> for proper identification.