

Aquatic Invasive Species Found in RI Lakes

Find more information @ http://www.dem.ri.gov/programs/water/quality/surface-water/aisplant.php Pictures taken at various scales to show basic shape and form of plant parts. See text or items for size reference (fingers, pen, ruler etc.)

Floating-leaved Invasive Plants - Rooted in Sediment

Water Chestnut (Trapa natans)

Floating Leaves

- **Triangle-shaped**
- Many arranged in circular rosette
- **▼** Toothed edges
- Shiny finish
- **■** Feathery leaves are underwater on stem

Flowers (July)

- Colored white
- Size of pencil eraser
- **≉** 4 petals
- Center of rosette

Yellow Floating Heart (Nymphoides peltata)

Floating Leaves

- Circular shape with clef
- Multiple leaves per stem
- Scalloped edges
- Shiny finish

Flowers (July-August)

- Colored vellow
- *****1-1.5 inches
- **≉**5 petals
- Frilly edges



Sacred Lotus (Nelumbo nucifera)

Seeds



Floating Leaves

- One per stem
- Stem is in center
- Velvet texture
- **■** Up to 3 feet wide

Flowers (August)

- Colored pink
- About 18 petals
- Yellow cone center

American Lotus (Nelumbo lutea)

Floating Leaves

- Repels water
- **■** 1-2 feet wide

Flowers (August)

- **Colored** white
- *At least 20 petals
- ★Yellow cone center



seed pods

Free-Floating Invasive Plants (NOT Rooted in Sediment)



Floating Leaves

- Pringle (TM) Shaped
- Glossy finish
- Wide, buoyant float at base of stem

Flowers (July)

- Colored purple
- **❖** 5 petals
- Spike with many flowers

Inflated Bladderwort (Utricularia inflata)

Underwater Leaves

- Thread-like, finely branched
- **■** Look like free-floating roots
- Have carnivorous bladders

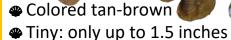
Flowers (May-June)

- Snapdragon shape
- **Colored yellow, dime-size ⇔**
 - - **★**Stem sits atop snowflake-like float

Underwater Invasive Invertebrates

Asian Clam

(Corbicula fluminea)



- Self-fertilize, multiply exponentially
- Larvae are microscopic and free-swimming

Mystery Snail (Cipangopaludina chinesis)

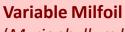


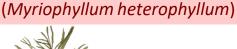
- Colored brown black
- Large: up to 2 inches
- Can spread parasites
- Can reproduce quickly



Aquatic Invasive Species Found in RI Lakes

Underwater, Rooted Plants with Thin, Feather-like Leaves







Leaves

- Densely packed along stem
- 4-6 leaves attach to stem at same spot ("whorl")



Emergent Flower Spike

- Bracts are blade shaped
- Leaf-bracts are jagged
- **❖** White, miniscule flowers
- **❖** Stick 2-4 inches above water

Eurasian Milfoil

(Myriophylum spicatum)

Leaves

- Openly spaced along stem
- 4 leaves attach to stem at same spot in "whorl"



- **❖** Spike is 1-2 inches long
- * Many tiny flowers, 1-3 mm
- ❖ Flowers colored pink-purple
- **❖** Stick 1-2 inches above water



(Myriophyllum aquaticum)



Leaves

- Muted pea green
- Rubbery texture
- Whorls of 4-6 leaves
- **■** Leaf looks like a feather
- Maintains shape out of water
- Grows above the water surface

Fanwort

(Cabomba caroliniana)

Leaves

- Bright green
- **☞** Fan shape
- Pairs of 2 leaves

Flowers (July-Sept)

- **≉** 6 petals
- * Colored white
- **❖** Size of pencil eraser
- * Yellow center
- Stick out ~1 inch above water

Underwater, Rooted Plants with Whole, Blade-like Leaves

Brazillian Elodea (Egeria densa)



- **■** Leaves 1-3 cm long
- Linear, blade shape
- **■** Jagged edges
- Densely packed whorls along stem
- Whorls (4-6 leaves)

Flowers

- ★ 3 petals
- Colored white
- *Yellow center
- Pencil eraser-sized

Mudmat

(Glosostigma cleistanthum)

Leaves

- **∅** 0.5-1.5 inches long
- 2 leaves opposite on stem
- **■** Look like rabbit ears
- terrestrial

Flowers

- Colored white
- **☆**5 petals

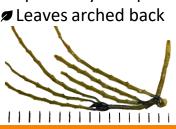


Spiny Naiad (Najas minor)



Leaves

- **■** 1-1.5 inches long
- Jagged edges, stiff
- Leaves opposite
- of water
- profusely at top



Curly-leaf Pondweed (Potamogeton crispus)

Leaves

- **1.5 2 inches long**
- Leaves have wavy edges like bacon
- Veins have stained glass-like appearance
- Alternate attachment of leaves along stem



