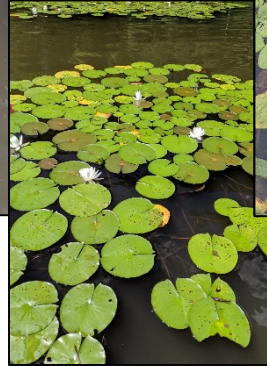
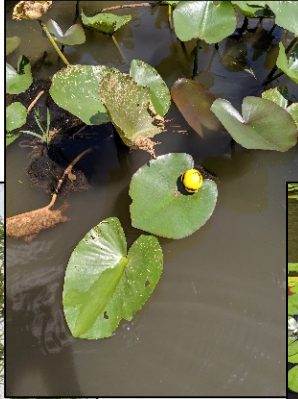


Lake Gaston

Aquatic Plant ID Booklet



North Carolina State University

Department of Crop and Soil Sciences
Aquatic Plant Management Program

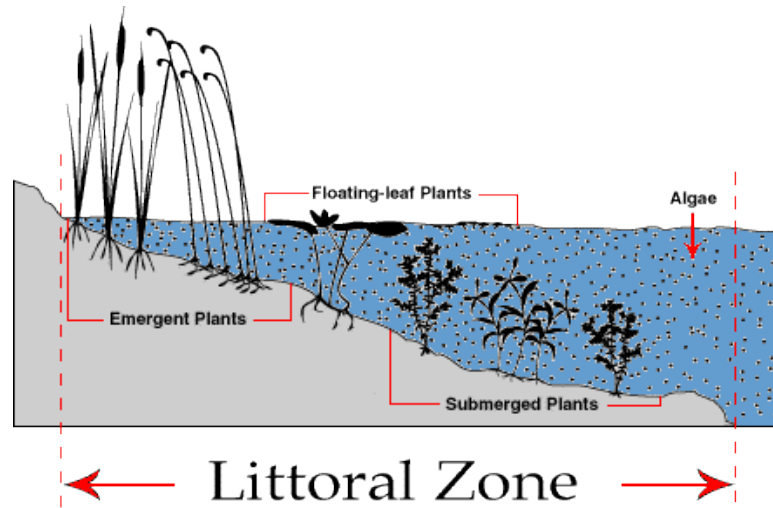
Lake Gaston Association

Lake Environment Committee

Lake Gaston Weed Control Council

Jessica R. Baumann // NCSU Extension Associate, Lake Gaston
aquaticplants@ncsu.edu

All Plants



Emergent	Submergent	Floating Leaf	Algae
Arrowhead	Cabomba	American Lotus	Chara / Nitella
Cattail	Coontail	Spatterdock	Lyngbya
Pickerelweed	Eel Grass	Watershield	
Rush	Egeria	White Waterlilly	
Water Willow	Hydrilla		
	Naiads		
	Pondweeds		
	Spikerush		
	Watermilfoil		



Arrowhead

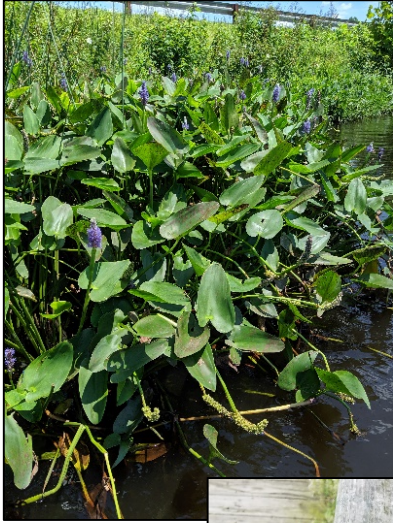
- **Native**
- Arrowhead shaped leaves on long stems
- White flowers arranged in whorls of three
- Veins emerge from single point on leaves
- Can be confused with Pickerelweed but has different vein pattern



Cattails
Typha species
Photo by Thomas Schinder
© 2017 University of Florida

Cattail

- **Native**
- Very tall, flat, ribbonlike leaves
- Can stand 5 – 6 ft in height
- Flower in spring and summer, so may not have brown “cattail” flower spike



Pickerelweed

- **Native**
- Lanceolate to heart shaped leaves attached by long stems
- Purple flowers
 - Flowers from May – October
- Can be confused with Arrowhead but has different vein pattern

Emergent Plants



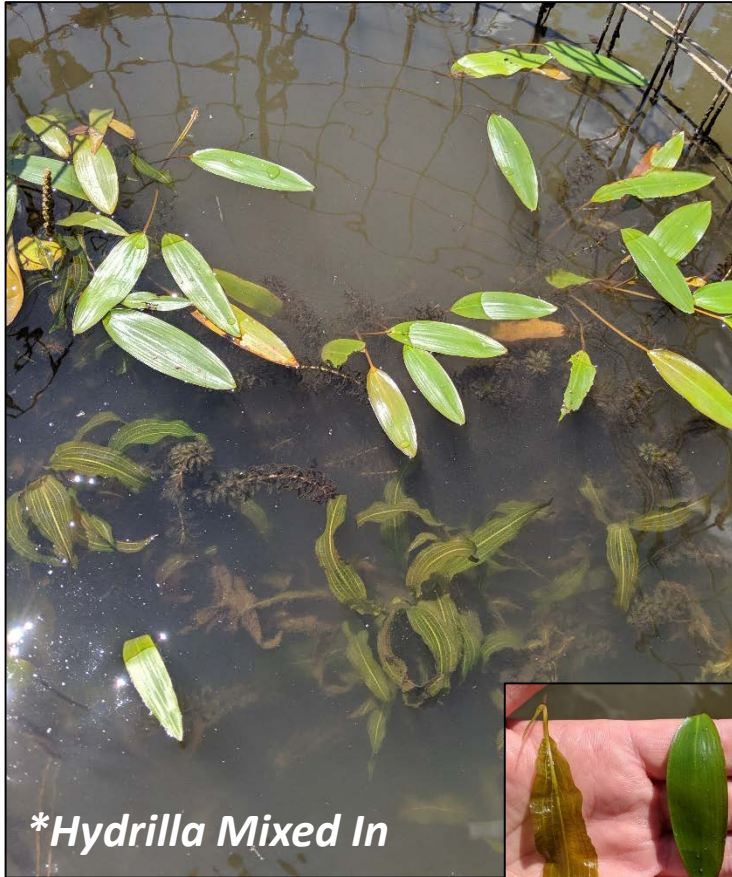
Rush

- **Native**
- Stems are elongated, round, with sharp tips
- Can stand up to 4 ft tall
- Creates clumps or stands along the shoreline

Water Willow

- **Native**
- Elongated leaves that are attached oppositely along the stem
- Round, solid, and pithy stem
- Creates large stands along shoreline

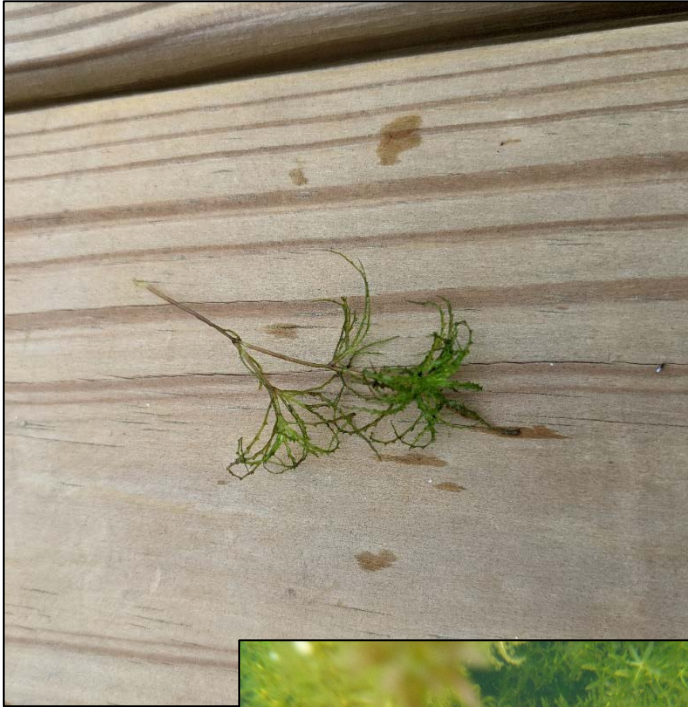




American Pondweed

- Native
- Leaves are elliptic
- Leaves can be submersed or floating and therefore can have different appearances





Brittle Naiad

- Invasive
- Shoots are brittle and readily fragmented
- Leaves are linear and opposite
- Leaves are “bumpy”
- Leaves are in a “Feather Duster” type formation



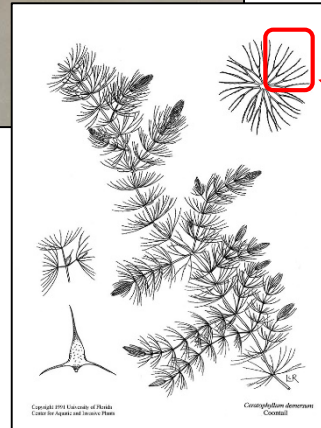
Cabomba

- **Native**
- Fan-shaped leaves
- Leaves are not ridged and are oppositely arranged



Coontail

- **Native**
- Submersed or Free-Floating
- Bushy Feathery Leaves can resemble raccoon's tail
- Leaves have "Lobster Claws"
- Can be confused with Watermilfoil





Eel Grass

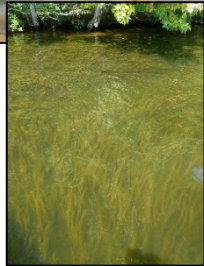
- **Native**
- Long, thin, and ribbonlike leaves
- Can grow up to 4 ft in length
- Grows in dense stands





Egeria

- **Invasive**
- Linear and soft leaves
- Easily confused with Hydrilla, but Egeria is more robust and feels soft to the touch
- No jagged serrations along edge of leaves



Hydrilla

- Invasive
- Leaves are whorled in groups of 4 to 8 around stem
- Leaf edges are serrated
- Can be confused with Egeria, but Hydrilla is more coarse to the touch



Spikerush

- **Native**
- Thin, unbranched stems
- Branched spikelets may or may not be present at stem tips
- Resembles terrestrial grasses in appearance
- Clumps can be attached together by root runners



Photo Credit:
NaturalWaterScapes.com



Southern Naiad

- **Native**
- Leaves are slender and occur opposite of each other
- Leaves can be up to 1 inch long
- Can be confused with Submersed Pondweed
- Pondweed leaves occur alternate of each other while naiads occur opposite



Photo Credit: IllinoisWildflowers.info

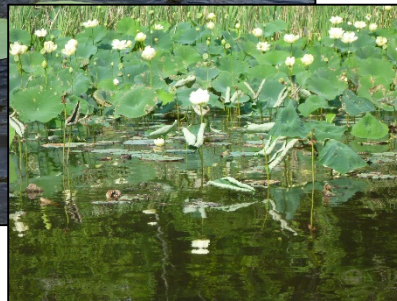
Submersed Pondweed

- **Native**
- Leaves are slender and occur alternate of each other
- Leaves can be up to 2 inches long
- Can be confused with Southern Naiad
- Pondweed leaves occur alternate of each other while naiads occur opposite



Watermilfoil

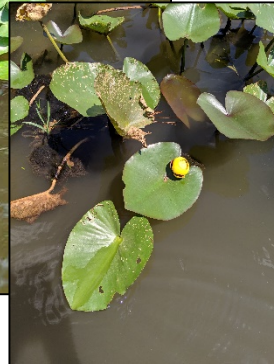
- **Invasive**
- Leaves are whorled, thin, and divided into delicate segments
- Leaves are flimsy and have no form out of water
- Leaves have a feather-like shape
- Can be confused with Coontail



American Lotus

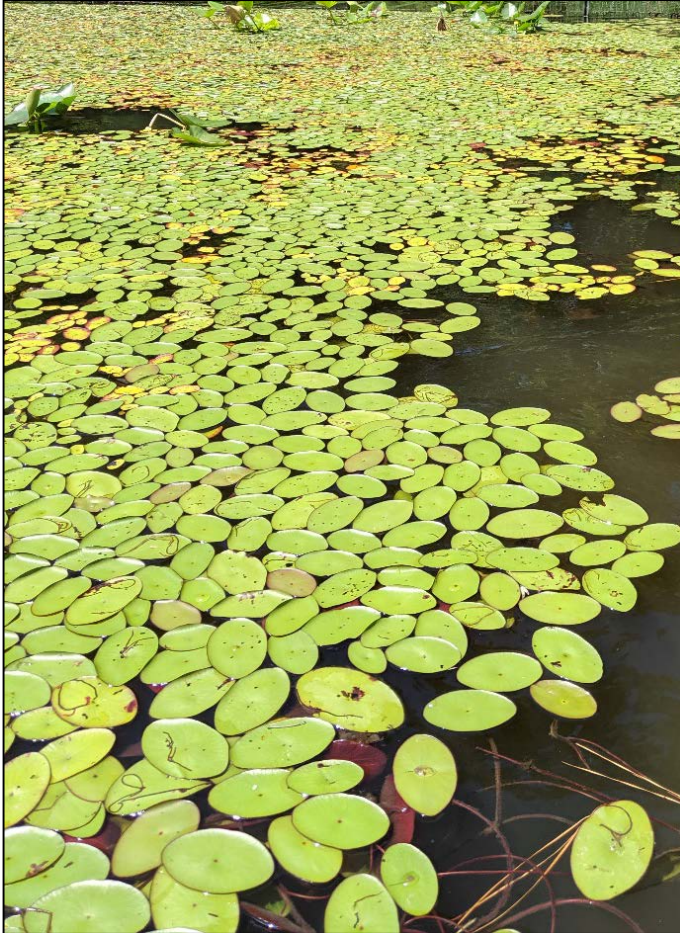
- **Native**
- Very Large Round Leaves
- Leaves could be floating or standing slightly above water surface
- White Flower
- Large Seed Pods

Floating Leaf Plants



Spatterdock

- **Native**
- Heart shaped leaves
- Leaves could be floating or standing slightly above water surface
- Yellow round flower



Watershield

- **Native**
- Oval shaped leaves
- Smooth on Top
- Underneath usually covered in jelly-like coating
- Leaves grow from single stem
- Small red flowers

Floating Leaf Plants



White water lily

- **Native**
- Pac-Man shaped leaves
- White Flower
- Leaves grow from single stem



Chara / Nitella

- Native
- Coarse alga that resembles a vascular plant
- Segmented
- Distinctive musky/garlic odor

Algae



Lyngbya

- Noxious
- Black / dark green mats
- Filamentous alga/cyanobacteria that resembles human hair
- Foul odor
- Has both benthic and surface mat forms