

## MYRTLE LAKE BIOASSESSMENT/INSPECTION

June 2015

Greetings, Lake Myrtle Residents!

Please find the latest bioassessment for your lake below. Our next lake inspection is scheduled for **July 15<sup>th</sup>, 2015**, weather permitting. Key highlights of this update include:

- Invasive emergent vegetation update
- Restoration event update
- Access corridor update
- Crowder canal update

On **June 10<sup>th</sup>, 2015**, Seminole County Lake Management Program biologist, Thomas Calhoun, with student intern, Sophia Pengra, surveyed **Lake Myrtle's** south pool and Crowder Canal.

Invasive species present during the inspection included alligatorweed, torpedo grass, and water primrose. Native species present included: canna, yellow cow lily, maidencane, American cupscale-grass, soft rush, buttonbush, pennywort, pickerelweed, duck potato, fire flag and cordgrass. The native vegetation planted during the recent SERV event is establishing well and expanding along the shoreline. The canal and access corridors appeared to be open and in good condition. Lily rhizomes (root part of the plant) were observed floating due to recent treatment. No submersed aquatic vegetation (SAV) was observed. Invasive apple snail shells and eggs were present during the inspection. Monthly herbicide treatments will continue at the end of each month, weather permitting, through September 2015.

**Photo: Torpedo grass (invasive)**



**Photo: SERV event plantings.**



**Photo: Clear access corridor.**



**Photo: Lily rhizome.**



The native vegetation planted along the shoreline of Crowder Canal during the SERV event have also established well. Native submersed aquatic vegetation observed in Crowder Canal included southern naiad, roadgrass, and muskgrass. Invasive species observed included torpedo grass and alligatorweed. Invasive apple snail shells and eggs were also present. It is recommended that the invasive torpedo grass and alligatorweed present along the shoreline of Crowder Canal be treated.

**Photo: Crowder Canal SERV event plantings**



Water quality samples are collected quarterly by Seminole County Water Quality section staff. The results of these collections and much more information can be found on the Seminole County Watershed Atlas:

<http://www.seminole.wateratlas.usf.edu/lake/waterquality.asp?wbodyid=7624&wbodyatlas=lake>

During the survey the water level was observed at 46.08 feet above sea level, which was slightly lower than the previous reading of 46.49. A Secchi disk (water clarity) reading was not taken during this inspection. No triploid grass carp were observed during this inspection.

### **Lake Recommendations:**

1 Work together to establish a lake association with other lakefront owners. Have at least one annual lake association meeting, invite guest speakers (such as county or state biologists), and discuss lake specific issues, especially lake management recommendations. Seminole County Lake Management staff would be glad to present findings from this and other surveys to the community. Contact Gloria Eby at (407) 665-2439 if interested.

2 Increase native aquatic plantings along the shoreline (such as pickerelweed, duck potato, and canna). Native shoreline plants help absorb nutrients from rainfall/run-off, improve habitat and water quality, and reduce shoreline erosion which transfers sediments and other organic matter into the lake. Over time, this process will fill the lake, creating more of a wetland-like habitat (formally known as eutrophication). Planting native species now can assist in slowing down this process. In addition, native plantings can reduce your herbicide costs/needs, providing a savings to you!

3 Increase educational outreach programs, i.e. Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of personal pollution by: decreasing fertilizer usage, using only phosphorous free and slow release nitrogen types of fertilizers, keeping a functional shoreline with beneficial native aquatic plants, and by keeping grass clippings out of your lake and the stormdrains that lead to the lake. All of these activities aid in protecting your lake! Contact Seminole County Lake Management Program (407) 665-2439 for more information regarding the free educational programs available.

4 Help spread the word! Obtain email addresses from neighbors not currently on the distribution list, in order to share these reports. Valuable information is contained within these assessments.

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**Seminole Education, Restoration & Volunteer (SERV) Program  
Follow prior & upcoming events now on facebook!!**



## Bladderwort (*Utricularia* species) : A Florida Native

14 Species of Bladderwort exist in Florida, all of which are native.

### Identification

Bladderworts are annual or perennial plants which lack roots and are free floating. The entire free-floating plant is typically 8 inches tall with yellow, purple, or white flowers that rise above the water's surface. Underwater, the plant has fleshy, inflated stems that are filled with air and allow it to float. The leaves are forked and often have a very fine capillary appearance.

This unique carnivorous plant utilizes small oval "bladders" on its underwater leaves to trap and digest small aquatic organisms. Hairs at the edge of the bladder act as a trigger, causing the trap to spring open and draw in water (and organisms) when contacted.

### Wildlife Value

Common bladderwort is used by several insects, waterfowl, and mammals as a food source. The stems also provide shelter and a place for wildlife to lay eggs.

Native submersed aquatic plants provide habitat for several micro- and macroinvertebrate species, which in turn provide a source of food for fish and other aquatic wildlife species including reptiles, amphibians, and waterfowl. Once aquatic plants die, their decomposing parts provide food (referred to as "detritus") for several aquatic invertebrates.

Additionally, native submersed plants play an important role in the aquatic ecosystem by reducing nutrients within the waterbody and by competing with invasive species for space.

### Control

Although native, bladderwort may impede recreational access. For questions concerning control of bladderwort or to apply for a free aquatic plant removal permit, please contact your state agency, the Florida Fish and Wildlife Conservation Commission, online at: <http://myfwc.com/license/aquatic-plants> or by calling 863-534-7074.



#### Sources:

Texas A&M AgriLife Extension. (2015). *Bladderwort*. Retrieved from <http://aquaplant.tamu.edu/plant-identification/alpha/b/index/bladderwort/>

Stitch, L. (n.d.). *Common Bladderwort*. U.S. Forest Service. Retrieved from [http://www.fs.fed.us/wildflowers/plant-of-the-week/utricularia\\_macroloba.shtml](http://www.fs.fed.us/wildflowers/plant-of-the-week/utricularia_macroloba.shtml)

Wellendorf, N. (2011, April 27). *How to Distinguish the Aquatic Bladderworts* [PDF]. Retrieved from <http://www.dep.state.fl.us/water/business/docs/plants/field-id-utricularia-species.pdf>



## Eelgrass (*Vallisneria americana*): A Florida Native

Eelgrass, also known as tapegrass, is native to the state of Florida.

### Identification

Eelgrass is a submersed, perennial plant that can be found throughout the state in both still and flowing waters. Eelgrass leaves often resemble tape or ribbon. They are about an inch wide with raised veins and rounded tips. The leaves can grow several feet in length and their upper parts can often be found floating along the water surface. Eelgrass produces both male and female flowers, however, the small, white female flowers are most often seen, as their long, corkscrew-like flower stalks reach the surface of the water.

### Wildlife Value

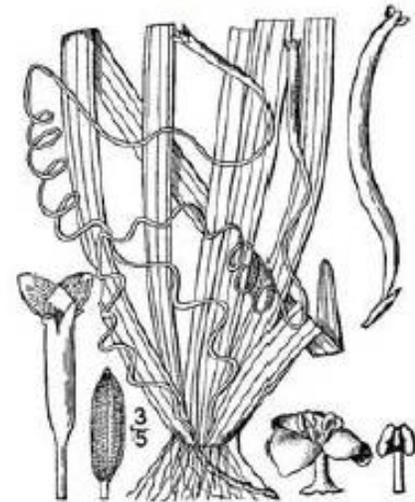
Eelgrass is an important food source for the endangered West Indian manatee (*Trichechus manatus*) and various species of waterfowl. Additionally, eelgrass provides important habitat, protection, and nursery grounds for fish.

Native submersed aquatic plants provide habitat for several micro- and macroinvertebrate species, which in turn provide a source of food for fish and other aquatic wildlife species including reptiles, amphibians, and waterfowl. Once aquatic plants die, their decomposing parts provide food (referred to as "detritus") for several aquatic invertebrates.

Additionally, native submersed plants play an important role in the aquatic ecosystem by reducing nutrients within the waterbody and by competing with invasive species for space.

### Control

Although native, eelgrass may impede recreational access. For questions concerning control of eelgrass or to apply for a free aquatic plant removal permit, please contact your state agency, the Florida Fish and Wildlife Conservation Commission, online at: <http://myfwc.com/license/aquatic-plants> or by calling 407-858-6170.



#### Sources:

- NOAA. (2012, October 22). *Eelgrass-Habitat of the Month*. Retrieved from <http://www.habitat.noaa.gov/about/habitat/eelgrass.html>
- UF/IFAS. (2014). *Eel-grass, tape-grass*. Retrieved from <http://plants.ifas.ufl.edu/node/465>
- UF/IFAS. (2014). *Algae*. Retrieved from <http://plants.ifas.ufl.edu/manage/why-manage-plants/algae>
- Washington State Department of Ecology. (n.d.). *Vallisneria Americana*. Retrieved from <http://www.ecy.wa.gov/programs/wq/plants/plant2/descriptions/va/naive.html>