

SPRINGWOOD WATERWAY
MAY 2015 - LAKE BIOASSESSMENT

Greetings Springwood Waterway residents,

Please find the latest bioassessment report for your lake below. The next scheduled inspection of your lake will be July 7th, 2015, weather permitting. Key highlights of this update include:

- Hydrilla update
- Status of Submersed Aquatic Vegetation (SAV)
- Status of shoreline emergent vegetation
- Exotic apple snail eggs found in Springwood Waterway
- Lemon Bacopa in Springwood Waterway
- Recommendations for you and your waterbody
- **Aquatic Plant of the Month- Factsheet Attached (may or may not be present in your waterbody)**

Springwood Waterway

On **May 6th, 2015**, Seminole County Lake Management Program (SCLMP) staff, Thomas Calhoun, Joey Cordell, and Sophia Pengra, surveyed the aquatic plants of **Springwood Waterway**.

During the inspection, large patches of hydrilla were found throughout the second half of the waterway; however, there was not enough to require treatment. We will continue to monitor the hydrilla to see if any treatment will be necessary.

Native SAV found during the inspection included lemon bacopa, stonewort, southern naiad and 2 types of bladderwort. Bladderwort was the dominant SAV species observed, followed by southern naiad. Lemon bacopa was visibly reduced within the waterway. The water elevation is high and harvesting is not necessary at this time.

Photo: Hydrilla (Invasive)



Photo: Eastern purple bladderwort (Native) in bloom



Native emergent vegetation continues to be found in good condition, and is expanding. Torpedo grass showed signs of impact as a result of recent treatment.

Photo: Fire flag (Native) expanding along the shoreline.



An increasing amount of exotic apple snail eggs are being found within the waterway, with over 300 egg clutches observed during this inspection. It is recommended that the exotic apple snail eggs are crushed and allowed to fall into the water.

Photo: Example of native apple snail eggs (left) and exotic apple snail eggs (right)



Photo: Attached exotic apple snail eggs



Recommendations for you and your waterbody:

- 1 Work together with other lakefront owners. Have *at least* one annual lake association meeting, invite guest speakers (such as Seminole County or state biologists) and discuss lake-specific issues, especially nutrient/lake management recommendations. SCLMP staff would be glad to present our findings from this and other surveys. Also continue to increase native aquatic plantings along the shoreline (such as pickerelweed, duck potato, and canna).
- 2 Consider increasing street sweeping services during times of peak leaf fall to ensure that this debris does not enter your waterways. Leaf debris contains phosphorous that can negatively impact your waterbody.

3 Take advantage of free educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and presentations on decreasing “pointless personal pollution” by reducing fertilizer use and only using phosphorous-free fertilizers. Contact Seminole County Lake Management Program (407) 665-2439 to inquire about the availability of these programs. You can also visit the Water Atlas (<http://www.seminole.wateratlas.usf.edu/>) to read interesting information about your specific waterway, and our website (http://www.seminolecountyfl.gov/pw/roadstorm/wq_lakemgt.aspx) to watch educational videos and download lake management pamphlets.

4 Share what YOU know with your neighbors! Encourage fellow residents to keep a functional shoreline with beneficial native aquatic plants, and to keep grass clippings out of the stormdrains that lead to the lake. All of these activities aid in protecting your waterbody! Please share this newsletter with any new residents or those not currently on our email list. These assessments contain valuable information!

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Lemon Bacopa (*Bacopa caroliniana*): A Florida Native

Lemon bacopa is one of at least 3 species of *Bacopa* native to the State of Florida.

Identification

Lemon bacopa, also known as blue waterhyssop, is a perennial plant found in both fresh and brackish waters. Lemon bacopa rarely exceeds a height of 0.5 feet above the surface of the water and tends to go dormant in the winter. It has small, round, moderately thick and succulent leaves that grow opposite of each other at the same points along a hairy upper stem. The plant can be distinguished by its small blue flowers and the familiar scent of its crushed leaves, which is described as lemony.

Wildlife Value

Lemon bacopa serves as a host plant for the white peacock butterfly, providing a place for the butterfly to lay eggs and a food source for its larva. The underwater stems also provide shelter and a place for aquatic species to lay eggs.

Native 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 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, lemon bacopa may impede recreational access. For questions concerning control of lemon bacopa 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:

FNPS. (2013). *Bacopa caroliniana*. Retrieved from <http://www.fnps.org/plants/plant/bacopa-caroliniana>

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

UF/IFAS. (2014). *Lemon bacopa*. Retrieved from <http://plants.ifas.ufl.edu/node/60>



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

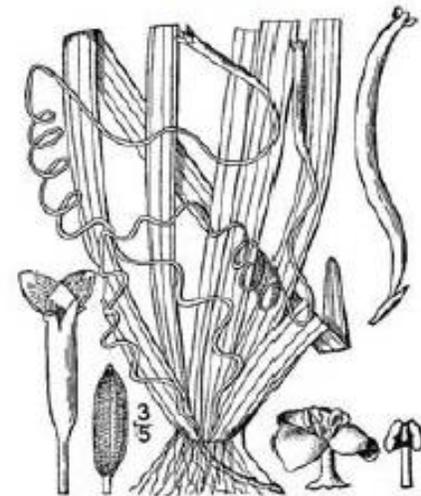
Eelgrass is an important food source for the endangered West Indian manatee (*Trichechus manatus*) and various species of waterfowl. Additionally, eelgrass provides important habitat, protection, and nursery grounds for fish.

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). *Eelgrass, tape-grass*. Retrieved from <http://plants.ifas.ufl.edu/node/465>
- UF/IFAS. (2014). *Algae*. Retrieved from <http://plants.ifas.ufl.edu/manago/why-manage-plants/algae>
- Washington State Department of Ecology. (n.d.). *Vallisneria Americana*. Retrieved from <http://www.ecy.wa.gov/programs/wq/plants/plantid2/descriptions/va.htm>