

LAKE OF THE WOODS

BIOASSESSMENT/INSPECTION REPORT

JULY 2015

Greetings Lake of the Woods residents! Below please find the latest bioassessment for your lake below. Key highlights of this update will include:

- Hydrilla update
- Submersed aquatic vegetation (SAV)
- Native SAV
- Emergent vegetation
- Algae bloom
- Recommendations for you and your lake

On **July 7th, 2015**, Seminole County Lake Management Program (SCLMP) staff, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Lake of the Woods**.

Hydrilla was found in low quantities at the west side boat ramp. Always make sure to clean boats and trailers of any plants before and after using a boat ramp to prevent the spread of nuisance species. A sprig of hydrilla was also found on the east side of the lake and the northeast cove.

Photo: Hydrilla (invasive)



Native SAV was very healthy and was expanding around the lake. This beneficial vegetation continues to compete for space with hydrilla. Native species found during the inspection

included coontail to 6 ft, southern naiad to 2 ft, bladderwort to 3 ft, and eelgrass to 8 ft. We found many boat docks with restricted access due to topped out eelgrass. As previously mentioned, if SAV is blocking access to your boat dock you can apply for an aquatic plant removal permit through the Florida Wildlife Conservation Commission at <http://www.myfwc.com/license/aquatic-plants> or contact FWC regional biologist Kristine Campbell at 321-246-0682 to obtain your free permit.

Photo: Coontail and eelgrass (natives)



Native emergent vegetation observed during the survey included: canna, water hemlock, flat sedge, pennywort, duckweed, primrose willow, hempvine, yellow cow lily, fragrant water lily, morning glory, blue flag iris, pickerelweed, duck potato, arrow arum, carolina willow, bulrush, burhead sedge, fireflag, and cattail.

Invasive emergent vegetation observed included: alligator weed, elephant ear, umbrella grass, creeping oxeye, and torpedo grass. Torpedo grass has increased slightly since last month.

An algae bloom was observed along the south shoreline of the lake. Large algae blooms will deplete the lake's dissolved oxygen levels, which can kill fish. Algae blooms are caused by high levels of phosphates. The most common sources for excess phosphates are fertilizer runoff and yard clippings. To help prevent algae blooms, residents can reduce overall fertilizer use, only use

phosphorus-free slow release nitrogen fertilizer brands when fertilizers are needed, and prevent yard clippings from falling in the lake.

Photo: Algae bloom



Photo: Otter



Secchi disk (water clarity) reading was 5.9 ft in a depth of 12.0 ft. The lake gauge level was 74.35 ft above sea level. One triploid grass carp fish was observed.

Recommendations for your waterbody:

1 Work together 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 nutrients/lake management recommendations. SCLMP staff would be glad to present findings from this and other surveys. Continue to increase native aquatic plantings along the shoreline (such as pickerelweed, duck potato, and canna).

2 Utilize the valuable educational outreach programs that are available, i.e. Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN) interactive presentations, and Lake Management Video mail-outs. Implement a media campaign within the community to reduce personal pollution by: decreasing overall fertilizer usage, **using only phosphorous free and slow-release nitrogen fertilizers**, keeping a functional shoreline with beneficial native aquatic plants, and keeping grass clippings out of your lake and the storm drains that lead to the lakes. 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.

3. Control of aquatic and wetland plants could require a Florida Fish and Wildlife Conservation Commission (FWC) aquatic plant control permit (such as eelgrass). Contact Kristine Campbell at Kristine.Campbell@MyFWC.com or 321-246-0682 for permit and recommendations.

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Seminole Education, Restoration & Volunteer (SERV) Program



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

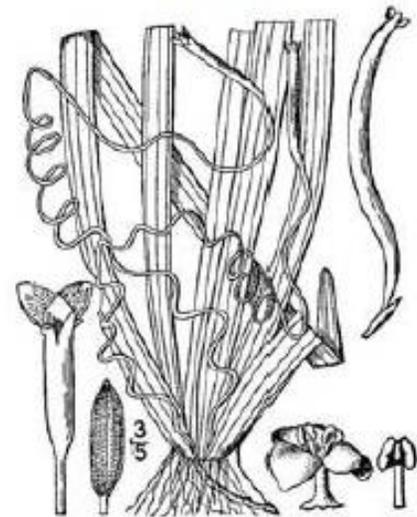
Eelgrass is an important food source for the endangered West Indian manatee (*Trichechus manatus*) and various species of waterfowl. Additionally, eelgrass provides important habitat, protection, and nursery grounds for fish.

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.



Source:

NOAA. (2012, October 22). *Eelgrass-Habitat of the Month*. Retrieved from <http://www.habitat.noaa.gov/about/habitat/eelgrass.html>

USFWS. (2014). *Eelgrass: tape-grass*. Retrieved from <http://plants.ifa.usf.edu/node/465>

USFWS. (2014). *Algae*. Retrieved from <http://plants.ifa.usf.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/land2/descriptions/va/ame.html>