

Greetings Lake Brantley residents!

Please find the latest bioassessment for your lake below. Key highlights of this update include:

- Submersed Aquatic Vegetation (SAV)
- LVI
- Hydrilla status: none present
- Emergent vegetation
- FWC permit for vegetation removal
- Restoration event accomplishments

On **September 23rd, 2015**, Seminole County Lake Management personnel, Thomas Calhoun, Gloria Eby, and Joey Cordell, surveyed the aquatic plants in **Lake Brantley** and conducted a Lake Vegetation Index (LVI).

The LVI was created by the Florida Department of Environmental Protection as a rapid screening tool (bioassessment) for ecological condition; it determines how closely a lake's flora (aquatic plants) resembles that of an undisturbed lake.

At the time of inspection, water levels were very high.

Six species of native submersed aquatic vegetation (SAV) were observed during the inspection. This is an increase from last year's inspection when two species of SAV were observed. These present species include: lemon bacopa, coontail, roadgrass to a maximum depth of 7 feet, southern naiad to 6 feet, stonewort to 6 feet, and eelgrass to 5 feet. Native SAV plays an important role within the ecosystem of Lake Brantley by providing habitat for wildlife, reducing nutrients from run-off, and competing for space with hydrilla. No hydrilla was present during this inspection.

Photo: Lemon Bacopa.



Native emergent vegetation observed during the inspection included: sawgrass, flat sedge, spikerush, yellow cow lily, fragrant water lily, duck potato, Carolina willow, and cattail. Emergent vegetation has expanded since the last inspection.

Photo: Duck potato.



Exotic emergent plants observed included alligatorweed, elephant ear, primrose willow, creeping oxeye, melaleuca, and torpedo grass.

Photo: Alligatorweed.



Please remember that in order to alter your shoreline or treat exotic vegetation with an herbicide, you must apply for a free aquatic plant removal permit through the Florida Wildlife Conservation Commission <http://www.myfwc.com/license/aquatic-plants> or contact FWC Regional Biologist Kristine Campbell at Kristine.Campbell@myfwc.com or 321-246-0682.

The Secchi (water clarity) reading was 7.5 feet at a depth of 22.3 feet. Water elevation above sea level was 45.80 feet at the time of inspection. The Secchi range for 354 samples taken between 1973 and 2015 has been 0.5 to 17.1 feet. Two triploid sterile grass carp were observed during the inspection. More information about your lake is available on the Seminole County Water Atlas.

<http://www.seminole.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7503>

Recommendations for your waterbody:

1. Continue to work with other lakefront owners to control (and if possible eliminate) invasive plants observed during this survey and increase native aquatic plantings along shoreline (such as pickerelweed, maidencane, and duck potato). Support your Lake Association- **Lake Brantley Lake Management Association** (<http://mylakebrantley.org/>) by attending their highly informative meetings to discuss lake-specific issues, especially lake management recommendations.
2. Treat invasive torpedo grass, melaleuca, and other invasive aquatic plants along your waterfront. Either do it yourself by hand removal or obtain the necessary aquatic herbicide (we can provide some sources) or hire a contracted aquatic herbicide application company (we can provide a list of vendors from the state). Control of aquatic and wetland plants will in most cases requires a free Florida Fish and Wildlife Conservation Commission (FWC) aquatic plant control permit. Contact Kristine.Campbell@myfwc.com or 407-858-6170 for a permit.
3. Utilize the valuable educational outreach programs that are available to you: Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN) interactive presentations, and Lake Management Video mail-outs. Implement a media campaign within the community to promote the reduction of personal pollution; encourage residents to decrease their overall fertilizer usage, use only phosphorous-free and slow-release nitrogen fertilizers, keep a functional shoreline with beneficial native aquatic plants, and keep grass clippings out of your lake and the storm drains 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.