LAKE MILLS LAKE BIOASSESSMENTS

JULY – AUGUST 2015

Greeting Lake Mills residents,

Please find the bioassessment for your lake below. Our next lake inspection is scheduled for **August 26th, 2015**, weather permitting. Key highlights of this update include:

- Hydrilla treatment update
- Native Submersed Aquatic Vegetation (SAV)
- Emergent vegetation
- Recommendations for your lake

On **July 14th, July 30th and August 13th, 2015**, Seminole County Lake Management Program biologists (Thomas Calhoun, Joey Cordell, and Gloria Eby) surveyed the aquatic plants in **Lake Mills**.

During the assessment we searched for the highly invasive hydrilla. Three patches of hydrilla were found, one at the start of both canals and one at the adjacent boat ramp. These locations were sent to an MSBU funded herbicide contractor to be spot treated. Hydrilla was also observed along the north shoreline. We are currently developing a treatment plan for this area and will update you on treatment date.

Photo: Hydrilla (invasive) and milfoil (native)

Nine species of SAV were observed during the inspection. These species included: lemon bacopa to a depth of 6 feet, coontail to 3 feet, baby's tears to 7 feet, muskgrass to 2 feet, milfoil to 7 feet, stonewort to 7 feet, roadgrass to 7 feet, eelgrass to 7 feet, and bladderwort to 7 feet. Bladderwort is the dominant SAV and has increased since last inspection.

Photo: Bladderwort

Ten species of native emergent vegetation were observed during the inspection. These species included: rush fuirena, pennywort, yellow cow lily, water grass, maidencane, swamp lily, pickerelweed, buttonbush, cordgrass, and duck potato.

Five species of invasive emergent vegetation were observed during the inspection. These species included: wild taro, torpedo grass, creeping oxeye, alligator weed, and water spangle.

Photo: Pickerelweed

The Secchi (water clarity) value was 9 feet out of a total depth of 12.5 feet. The grass carp barrier was operational and free from debris. No grass carp were observed during the inspection. The water elevation at the time of inspection was 40.95 feet above sea level.

Recommendations for your lake:

1. Work together and establish a lake association with other lakefront owners to increase native aquatic plantings along the shoreline (such as pickerelweed, canna, and duck potato). Have at least one annual lake association meeting to discuss lake-specific issues.

2. Utilize the valuable educational outreach programs that are available, such as Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN) interactive presentations, and Lake Management Video mail-outs. Implement a media campaign within the community about reducing 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 stormdrains 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. Help spread the word! Obtain email addresses from neighbors not currently on the distribution list in order to share this information with others. Valuable information is contained within these reports.

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Seminole Education, Restoration & Volunteer (SERV) Program
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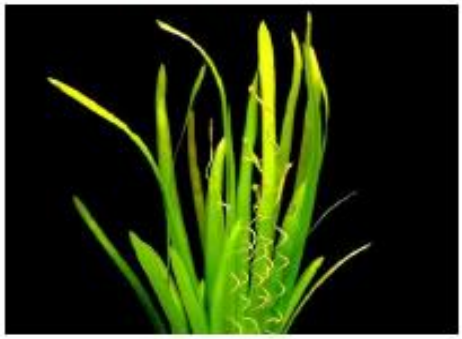
SEMINOLE COUNTY WATERSHED MANAGEMENT DIVISION

Aquatic Plant of the Month

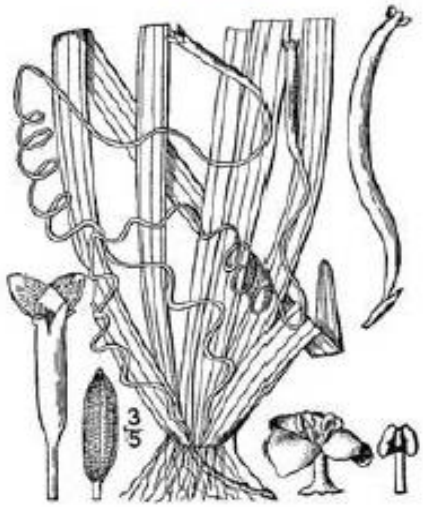
Eelgrass (*Vallisneria americana*): A Florida Native

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.

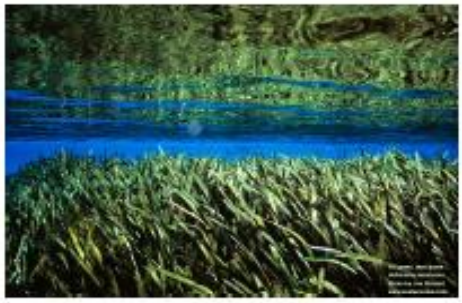


Wildlife Value

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.

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Sources:

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