Greeting Lake Mills residents,

Please find the bioassessment for your lake below. Our next lake inspection is scheduled for **August 9th, 2017**, weather permitting. Key highlights of this update include:

- Seminole County Fertilizer Ordinance update
- Hydrilla update
- Native Submersed Aquatic Vegetation (SAV)
- Native emergent vegetation
- Invasive emergent vegetation
- Recommendations for your lake

The Seminole County Board of County Commissioners approved a NEW Fertilizer Ordinance, effective February 28, 2017, that regulates fertilizers containing nitrogen and/or phosphorous and provides specific management guidelines for fertilizer application in order to minimize negative impacts to our natural waterbodies. Enforcement of the Fertilizer Ordinance will not begin until October 1, 2017. They key highlights of the Fertilizer Ordinance are:

- Fertilizer containing nitrogen and/or phosphorous cannot be applied to turf during the restricted season from June 1st – September 30th. Fertilizer containing Iron, Manganese and other "micronutrients" also referred to as "summer blends" can be applied during the restricted season to keep lawns healthy and green (as recommended by the Florida Yards & Neighborhoods/Florida Friendly Landscape Program).
- Fertilizer containing nitrogen that is used during the **non**-restricted season (October 1st – May 31st) must contain *at least* 50% or more slow release nitrogen. This slow release nitrogen content requirement will increase to 65%, three (3) years after adoption (March 1, 2020).
- Fertilizer containing phosphorus cannot be applied to turf or plants unless a state certified soil or tissue test verifies that there is a phosphorus deficiency. For more information about soil & tissue testing, contact your local UF/IFAS Extension office at 407-665-5560.
- Deflector shields are required when applying fertilizer if you are using a broadcast or rotary spreader.
- No fertilizer may be applied within 15 feet of any pond, lake, stream, canal, or other waterbody, including wetlands.
- No grass clippings or other landscape debris should be washed, swept or blown into stormwater drains, ditches, canals, lakes, sidewalks or roadways. Grass clippings can be blown back onto lawns or collected for proper disposal.

The overall goal of this ordinance is to minimize excess fertilizer runoff and protect the County's natural water resources. If you would like someone to speak at your Homeowners Association meeting or you would like to attend one of our Fertilizer Workshops, please call 407-665-5575 or visit www.seminolecountyfl.gov/fertilizer.

6/12/2017

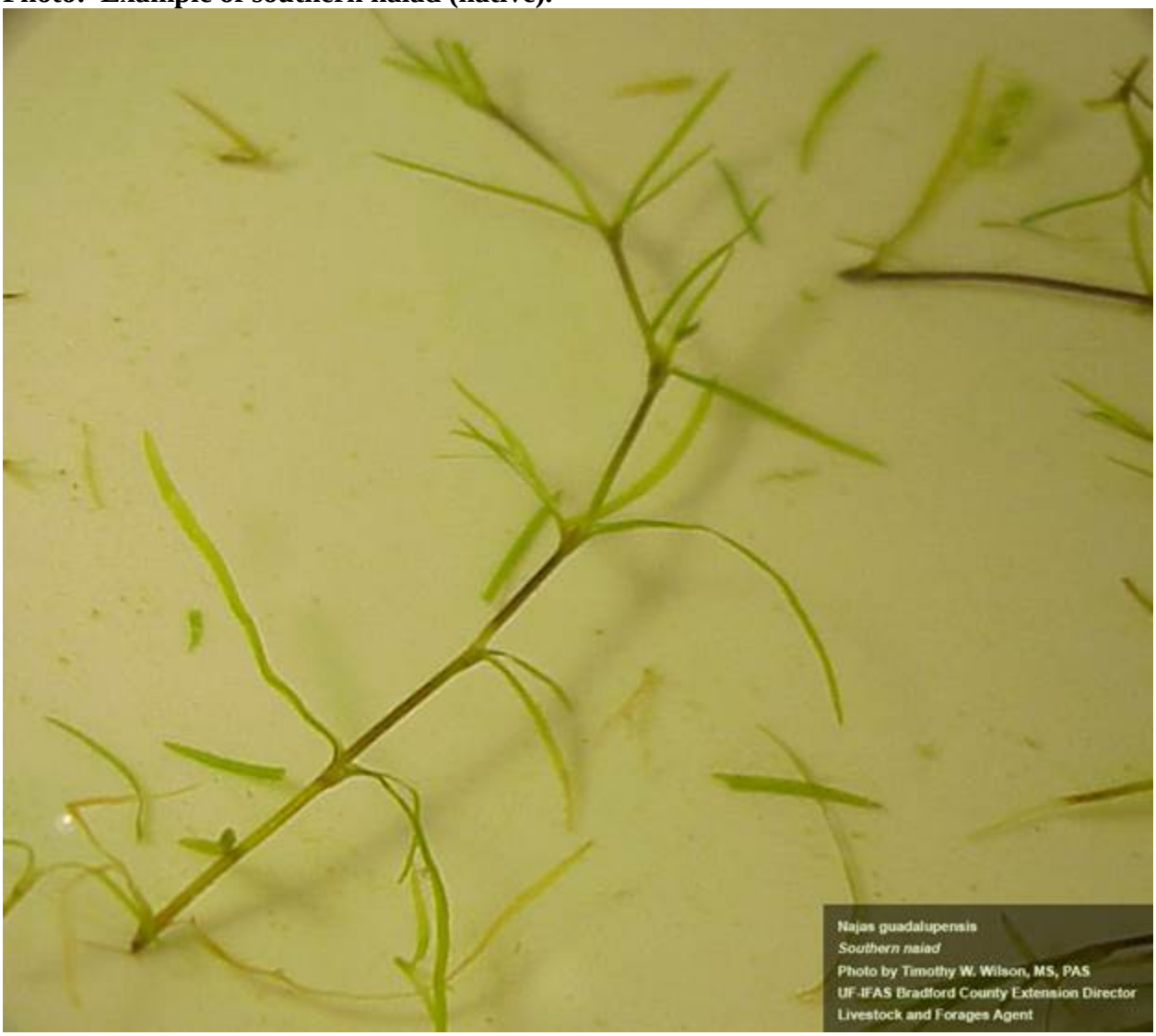
On **June 12th 2017**, Seminole County Lake Management Program biologists, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Lake Mills**.

Hydrilla was found at the northern boat ramp and at the entrance to each canal. These spots will be monitored to see if treatment will be necessary. Otherwise, only a few scattered sprigs of hydrilla were found around the lake.

Photo: Hydrilla (invasive).

Five species of SAV were observed during the inspection: lemon bacopa to a maximum depth of 5 feet, southern naiad to 5 feet, baby's tears to 6 feet, bladderwort to 6 feet, and eelgrass to 3 feet. Southern naiad was noted as expanding throughout the lake. Baby's tears was the dominant species and was reaching the surface in water depths of less than two feet.

Photo: Example of southern naiad (native).



Native emergent vegetation observed during the inspection included: button bush, swamp lily, rush fuirena, pennywort, spatterdock, fragrant water lily, maidencane, pickerelweed, duck potato, cordgrass, fire flag, and cattail.

Photo: Swamp lily (native).

Four species of invasive emergent vegetation were observed during the inspection: wild taro, torpedograss, Brazilian pepper and creeping oxeye. Alligatorweed and water hyacinth were not observed during the inspection. Invasive species were not abundant.

The Secchi (water clarity) value was 8.2 feet in a total depth of 13.8 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 39.8 feet above sea level.

Photo: Mills Creek grass carp barrier.

7/10/2017

On **July 10th 2017**, Seminole County Lake Management Program biologists, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Lake Mills**.

Hydrilla was found in the usual places; these spots will be scheduled for herbicide treatment. Scattered sprigs of hydrilla were also still found around the lake.

Photo: Hydrilla (invasive) right and southern naiad (native) left.

Five species of SAV were observed during the inspection. These species included: lemon bacopa to a maximum depth of 4 feet, southern naiad to 8 feet, baby's tears to 8 feet, bladderwort to 3 feet, and eelgrass to 3 feet. Overall, SAV was expanding in all areas of the lake. Baby's tears had expanded and reached the surface in several areas of the lake in water depths less than 3 feet.

Photo: Baby's tears (native).

Native emergent vegetation observed during the inspection included: button bush, swamp lily, rush fuirena, pennywort, spatterdock, fragrant water lily, maidencane, pickerelweed, duck potato, cordgrass, fire flag, and cattail.

Photo: Maidencane (native).

Four species of invasive emergent vegetation were observed during the inspection: alligatorweed, wild taro, torpedograss, Brazilian pepper and creeping oxeye. Water hyacinth was not observed during the inspection. Invasive species were in low abundance.

The Secchi (water clarity) value was 11.7 feet in a total depth of 12.7 feet. The grass carp barrier was operational and free from debris. One grass carp were observed during the inspection. The water elevation at the time of inspection was 30.08 feet above sea level.

Photo: Baby's tears reaching the surface along the shoreline.

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. New Fertilizer Ordinance presentations can now also be scheduled! 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.