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

- Hydrilla observations
- Submersed Aquatic Vegetation (SAV)
- Emergent vegetation
- Recommendations for you and your lake
- Restoration Event May 20th 2017

# JOIN THE **LAKE MARTHA & LAKE BURKETT** RESTORATION!



us plant shoreline vegetation to improve ecosystem function, habitat, and water quality! There will be 3 fun ways to participate:



## HOST

Sign up as a site host, and receive free plants!



# SUPPORT

Help with event logistical support.



#### PLANTING

Assist in shoreline planting during the event.

# KICK OFF LOCATION:

Trinity Preparatory School 5700 Trinity Prep Ln., Winter Park

## CONTACT:

Thomas Calhoun tcalhoun@seminolecountyfl.gov 407-665-2459



On March 17<sup>th</sup>, 2017, Seminole County Lake Management Program (SCLMP) staff Joey Cordell and Orange County Environmental Protection Division staff Jordan Bentley surveyed the aquatic plants in Lakes Martha and Burkett.

No hydrilla was found during this inspection.

Five species of native submersed aquatic vegetation (SAV) were observed during the inspection including: lemon bacopa found to a depth of 3 feet, roadgrass to 3 feet, loose water milfoil to 4 feet, bladderwort to a 10 feet, and eelgrass to 5 feet. Bladderwort is the dominant species of SAV found in both lakes followed by eelgrass.

If bladderwort or other SAV is impeding boat access to the lake you can apply for an aquatic plant control permit from Florida Fish and Wildlife Conservation Commission (FWC). To apply for this permit contact Kristine Campbell at (321) 246-0682 or <a href="mailto:Kristine.com">Kristine.com</a>.



Exotic emergent vegetation observed during the inspection included: alligatorweed, wild taro, dwarf papyrus, primrose willow, torpedograss, salvinia, cuban burhead sedge, and creeping oxeye.

Photo: Cuban burhead sedge (invasive).



Native emergent vegetation included: buttonbush, sawgrass, flatsedge, spikerush, pennywort, hempvine, yellow cow lily, fragrant water lily, banana lily, pickerelweed, duck potato, canna lily, carolina willow, bulrush, and cattail.

Photo: Spikerush (native).



The secchi reading (measurement for water clarity) was 4.8 feet in a depth of 10.3 feet. No grass carp fish were observed during the inspection. All of this information can be found online at either County's Water Atlas website:

http://www.seminole.wateratlas.usf.edu/lake/waterquality.asp?wbodyid=7521&wbodyatlas=lake http://www.orange.wateratlas.usf.edu/lake/?wbodvatlas=lake&wbodvid=7521

#### **Lake Recommendations:**

- Work together or establish a lake association with other lakefront owners to control invasive plants and increase native aquatic plantings along shoreline (such as pickerelweed and duck potato). Have at least one annual lake association meeting, invite guest speakers (such as county or state biologists) and discuss lake specific issues.
- 2 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 overall fertilizer use and only using phosphorous-free fertilizers. You can also visit the Water Atlas (http://www.seminole.wateratlas.usf.edu/) to read interesting information about your specific

waterbody, and our website (<a href="http://www.seminolecountyfl.gov/pw/roadstorm/wq\_lakemgt.aspx">http://www.seminolecountyfl.gov/pw/roadstorm/wq\_lakemgt.aspx</a>) to watch educational videos and download lake management pamphlets. Please contact Seminole County Lake Management Program, at (407) 665-2439 or Orange County Lake Management Program at (407) 836-1409 for further assistance.

#### 4/12/2017

Greetings Lakes Martha and Burkett Residents!

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

- Nutrient study and seepage meters
- Hydrilla update
- Submersed Aquatic Vegetation (SAV)
- Emergent vegetation
- SERV event
- Recommendations for you and your lake

On **April 12<sup>th</sup>**, **2017**, Seminole County Lake Management Program (SCLMP) staff, Joey Cordell and Taina Torres, surveyed the aquatic plants in **Lakes Martha and Burkett**.

Orange County has placed seepage meters around both lakes as part of a yearlong nutrient study. These meters consist of a metal structure buried in the sediment, a bag for water collection, and a marking buoy. Please do not disturb these seepage meters.





One sprig of hydrilla was observed in Lake Burkett by the canal. No hydrilla was observed in Lake Martha.

Five species of native submersed aquatic vegetation (SAV) were observed during the inspection including: lemon bacopa, loose water-milfoil, stonewort to 9 feet, bladderwort to 7 feet, and eelgrass to 5 feet. Bladderwort was the dominant SAV.

Photos: Close-up of bladderwort.

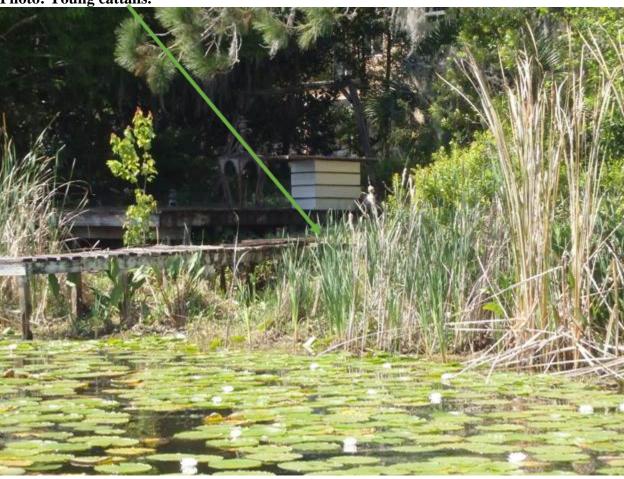


Exotic emergent vegetation observed during the inspection included: wild taro, dwarf papyrus, primrose willow, torpedograss, cuban burhead sedge, creeping oxeye, and papyrus.

Native emergent vegetation included: buttonbush, sawgrass, spikerush, pennywort, softrush, spatterdock, fragrant water lily, banana lily, maidencane, pickerelweed, duck potato, carolina willow, bulrush, and cattail.

The low water level has exposed bare soil where vegetation is not established. These areas are showing signs of erosion. Having a wider band of vegetation around the lake would help protect the shoreline from erosion during periods of low water.

Photo: Young cattails.



Another SERV planting event will be held on May 20<sup>th</sup>, 2017. During this event volunteers with plant native vegetation at properties that sign up in advance. To have your shoreline planted at no expense contact Thomas Calhoun at 407-665-2459.

The secchi reading (measurement for water clarity) was 5.1 feet in a depth of 16.6 feet. One grass carp fish was observed during the inspection. All of this information can be found online at either County's Water Atlas website:

http://www.seminole.wateratlas.usf.edu/lake/waterquality.asp?wbodyid=7521&wbodyatlas=lakehttp://www.orange.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7521

### **Lake Recommendations:**

1 Work together or establish a lake association with other lakefront owners to control invasive plants and increase native aquatic plantings along shoreline (such as pickerelweed and duck

potato). Have at least one annual lake association meeting, invite guest speakers (such as county or state biologists) and discuss lake specific issues.

2 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 overall fertilizer use and only using phosphorous-free fertilizers. You can also visit the Water Atlas (<a href="http://www.seminole.wateratlas.usf.edu/">http://www.seminole.wateratlas.usf.edu/</a>) to read interesting information about your specific waterbody, and our website (<a href="http://www.seminolecountyfl.gov/pw/roadstorm/wq\_lakemgt.aspx">http://www.seminolecountyfl.gov/pw/roadstorm/wq\_lakemgt.aspx</a>) to watch educational videos and download lake management pamphlets. Please contact Seminole County Lake Management Program, at (407) 665-2439 or Orange County Lake Management Program at (407) 836-1409 for further assistance.