

Greetings Mirror Lake Residents,

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

- Hydrilla status
- Carp stocking
- Expansion of submersed aquatic vegetation (SAV)
- Emergent vegetation
- Recommendations for you and your waterbody

6/16/2016

On **March 16th, 2016**, Seminole County Lake Management staff, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Mirror Lake**.

Hydrilla was not found during the survey.

Five species of native submersed aquatic vegetation (SAV) were found during the inspection. These native species included: lemon bacopa to 3 feet, eelgrass to 4 feet, and three species of bladderwort to 7 feet. Eelgrass has increased around the boat ramp and the canal. Also lemon bacopa was noted as expanding in the shallow areas around the lake. In the southern lobe of the lake bladderwort is returning from last year's treatment. Access corridors remain open. We will continue to monitor to see if any submersed treatments will be needed in this area.

Photo: Eelgrass.



Native emergent vegetation found during the survey included: golden canna, spike-rush, yellow cow lily, fragrant water lily, banana lily, maidencane, pickerelweed, duck potato, carolina willow, cordgrass, fire flag, cattail, and climbing aster. The lilies are contained and out of the access corridors.

Photo: Sandhill crane in spike-rush.



Invasive emergent vegetation included: alligator weed, wild taro, primrose willow, torpedo grass, brazilian pepper tree, cuban bur-head sedge, and creeping oxeye.

Photo: Southeast corridor.



The water elevation at the time of inspection was 59.15 feet above sea level. The secchi reading (measurement for water clarity) was visible on bottom in a depth of 9.0 feet. Eight sterile grass carp were observed during this inspection.

4/19/2016

On **April 19th, 2016**, Seminole County Lake Management staff, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Mirror Lake**.

Hydrilla was found at the community boat ramp in small amounts during the survey. Triploid (sterile) grass carp were stocked April 14th.

Photo: Triploid (Sterile) grass carp being released into Mirror Lake.



Native species of submersed aquatic vegetation (SAV) have increased around the lake. Eight species of (SAV) were found during the inspection. These native species included: lemon bacopa to 3 feet, stone wort to 6 feet, southern naiad to 6 feet, road grass to 2 feet, eelgrass to 4 feet, and three species of bladderwort to 9 feet. The recent stocking of grass carp will help manage the expansion of these species. Herbicide treatments for SAV in the access corridors will be used as needed.

Photo: Bladderwort.



Native emergent vegetation found during the survey included: golden canna, spike-rush, yellow cow lily, fragrant water lily, American lotus, banana lily, maidencane, pickerelweed, duck potato, carolina willow, cordgrass, fire flag, cattail, and climbing aster. The water lilies are expanding in the shallow areas of the lake. Water lilies will be targeted during the next herbicide treatment to keep access corridors open.

Invasive emergent vegetation included: alligator weed, wild taro, primrose willow, torpedo grass, brazilian pepper tree, cuban bur-head sedge, and creeping oxeye. Alligator weed was found expanding in the southern lobe of the lake. This species will also be targeted during the next herbicide treatment.

Photo: Water lilies and alligator weed expanding in the southern lobe.



The water elevation at the time of inspection was 58.85 feet above sea level. The secchi reading (measurement for water clarity) was visible on bottom in a depth of 9.2 feet. One sterile grass carp was observed during this inspection.

Photo: Mirror Lake Resident blue heron.



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 will be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along shorelines (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 waterways. Leaf debris contains high levels of phosphorous that can negatively impact your lakes.
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 so that these reports can be shared with everyone. Valuable information is contained within these assessments.