

QUARTERLY NEWSLETTER

For Lakes Managed by Seminole County with MSBU Funding

April
2018

Seminole County Lake Management Program

Seminole County Fertilizer Ordinance

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 began on October 1, 2017. The key highlights 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.



Goal:

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.

Restoration Fun!

Seminole County Watershed Management & the SERV Program invite you to be part of a shoreline restoration event! Consider volunteering your shoreline for restoration, supporting volunteers, or helping to plant! Contact Thomas Calhoun (tcalhoun@seminolecountyfl.gov, 407-665-2459) if interested.



Lake Spotlight

Lake Asher

Lake Asher is a 5 acre natural lake located in southwestern Seminole County, next to Bear Lake, in the Little Wekiva Watershed. The waterbody began having nuisance levels of aquatic plants in the late 1990's, including: cattail, primrose willow, spatterdock, wild taro and Carolina willow. Several vegetation removal efforts were conducted in Lake Asher over the years. However, by 2010 much of the lake was taken over by these invasive species and residents began to seek help from local government to save their lake.

With support from residents, Lake Asher adopted an ordinance for aquatic management on October 15th, 2016. In July of 2017, the Seminole County Lake Management Program (SCLMP) began oversight of the restoration and long term maintenance of the lake. The restoration included the removal of 2,415 cubic yards of invasive plant material and associated sediments and the planting of native trees and emergent vegetation. Nearly 2,500 plants including: pop-ash, bald cypress, wax myrtle, duck potato, pickerel weed and fire-flag were planted in March 2018. Efforts to improve the shoreline of Lake Asher will continue with the partnerships of SCLMP, lake residents, and community volunteers provided by the SERV Program.



Close-up of newly installed emergent plants (March 2018)



Removal of invasive plant material (August 2017)



Restoration Site Plan



Installation of native trees along shoreline (March 2018)



Alligatorweed (*Alternanthera philoxeroides*): A Non-Native Invasive

Alligatorweed is native to South America and is considered an **invasive exotic** species in the State of Florida.

Identification

Alligatorweed is a perennial plant that can occur in a variety of habitats on land and in water and can most often be found growing along the shorelines of lakes and rivers. It can rapidly grow during warm months, when it displays clusters of small white flowers, and tends to slow its growth during cooler months. The long leaves are elliptical or lance-shaped and grow opposite of each other at the same place along the stem. The plant's stems are smooth and hollow and tend to trail along the ground or sprawl out across the water, forming dense mats.

Environmental Impacts

Uncontrolled growth of invasive alligatorweed can disrupt our native aquatic ecosystem. Due to the formation of dense mats, alligatorweed can block sunlight that is necessary for underwater plants to grow. Additionally, alligatorweed competes for space with beneficial native plants that provide habitat and food for aquatic wildlife species.

Control

Several methods are utilized to control alligatorweed including physical, chemical, and biological. The alligatorweed flea beetle, whose only known host plant is alligatorweed, was studied and subsequently released in Florida for biological control of alligatorweed. More information on the alligatorweed flea beetle can be found at the following link: <http://edis.ifas.ufl.edu/in831>. For questions concerning control of alligatorweed 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.



Sources:

NSW. (n.d.). *Alligator Weed*. Retrieved from <http://weeds.dpi.nsw.gov.au/Weeds/Details/7>

Texas A&M AgriLife Extension. (2015). *Alligator Weed*. Retrieved from <http://aquaplant.tamu.edu/plant-identification/alphabetical-index/alligator-weed/>

UF/IFAS. (2014). *Alligator Weed*. Retrieved from <http://plants.ifas.ufl.edu/node/33>

Bioinspection Notes

SAV: submersed aquatic vegetation, plants live under water.
Emergent vegetation: plants rooted underwater, have leaves/stems that grow above the surface.
Secchi depth: a measurement of water clarity.



Lake Amory

Bladderwort has decreased in the lake. Native emergent vegetation has been recovering nicely from winter senescence. An increase in salvinia and water fern was noted and treated as well as invasive species in the bird island area.



Lake Asher

The Seminole County herbicide contractor began maintenance treatments in December, focusing on the shoreline invasive species torpedo grass, alligator weed, and wild taro. The shoreline and stockpile area that was disturbed during the harvesting process was replanted in March and will continue to be maintained.



Lake Burkett

No hydrilla was found during the most recent inspection. Native emergent vegetation planted during last year's restoration event has slowly begun to establish in both lakes Martha and Burkett. There was a healthy and diverse amount of SAV observed.



Buttonwood Pond

A SERV volunteer planting event was held on March 24th. 30 volunteers helped plant over 2,000 native emergent plants around the pond.



Grace Lake

Hydrilla was noticeably breaking down (decaying) lake wide. Additionally, there was an increase in localized algae bloom along the perimeter of the lake, which was produced from the hydrilla plant decaying. This was as expected, given the amount of hydrilla in your lake. As communicated previously, it will get worse before it gets better. Torpedo grass was showing signs from treatment around the lake.



Horseshoe Lake

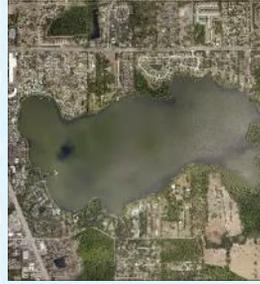
Hydrilla and hydrilla tubers were not observed inside the lake or canal. An increase in the native SAV roadgrass was observed. Water hyacinth and alligator weed were the main targets during recent treatments.

Bioinspection Notes



Howell Creek

Hydrilla in Howell Creek was impacted very well by the City of Winter Park's treatment of Lake Waumpi. No follow up treatments in the creek are needed at this time. The City of Winter Park intends to set up an upstream hydrilla treatment system to help prevent hydrilla translocating downstream.



Lake Howell

Hydrilla was found sporadically around the lake, but in small amounts. No treatments are necessary at this time. Native emergent vegetation planted during last year's restoration event have established and are doing well. Hygrophila and parrot-feather were found at the mouth of creeks and ditches. They are being treated when observed.



Lake Mills

Hydrilla was found expanding in several areas of the lake. Hydrilla treatment in these areas took place March 27th. We will continue to monitor the impact of the treatment.



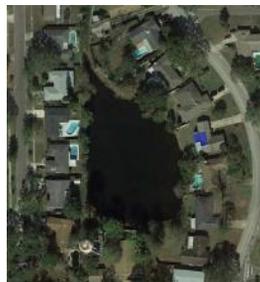
Mirror Lake

The diversity of SAV has remained very good in Mirror Lake, with bladderwort as the dominant species. No hydrilla was found. The lily pad corridors have remained open and will continue to be treated lake wide.



Myrtle Lake

Treatments for invasive emergent vegetation were successful, leaving the spoil banks clean. Trouble areas in the north canal and southern lobe continue to be treated opening up more access. Hydrilla was found in the north canal and treated the last week of March.



English Estates Pond

Monthly emergent treatments by the Seminole County aquatic herbicide contractor have begun and some impacts are noticeable around the lake.

Bioinspection Notes



Lake Pickett

Hydrilla was consistently present in low density around most of the perimeter of Lake Pickett. Some areas along the North and West shores of the East lobe had denser patches. No treatment for hydrilla is warranted at this time and will be reevaluated after spring. Winter temperatures kept the bogmoss under control; there were no areas where bogmoss was topping out.



Spring Lake

One small sprig of unhealthy hydrilla was found at the Spring Valley Club ramp. Eelgrass was the dominant species and was found at a maximum depth of 4 ft. Eelgrass access corridor treatments will be conducted in the next herbicide application. Native shoreline plants were thin around the lake, but new spring growth has popped up in areas otherwise devoid of vegetation.



Spring Wood Lake

The recent hydrilla treatment was successful. Southern naiad in the treatment zone was also impacted. Lily pads were thinned out to open up more boating area. Some sensitive native plants, like spikerush, were expanding. This is an indication of good water quality. Small quantities of alligator weed and torpedograss were observed.



Sweetwater Lakes

Lyngbya has decreased due to recent treatments. Large patches of stonewort, native SAV, were found in Lower Cove. Native emergent vegetation rebounded from winter senescence and was beginning to expand. Torpedo grass was thick in patches of native vegetation. We suggest hand-pulling torpedo grass in these areas to prevent its impact on native species. The mechanical removal of lyngbya will begin in May using a specialized harvester.



Springwood Waterway

Native emergent vegetation was very healthy. Fireflag, duck potato, and pickerelweed continue to expand along the shorelines. Native SAV species included nitella, bladderwort, and roadgrass, none of which were impeding boat access. Hydrilla was observed in the North third of the waterway.



Lake of the Woods

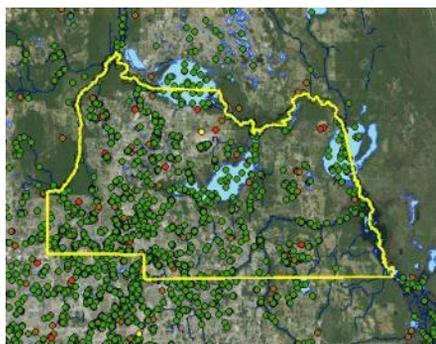
The secchi depth was 9.6 ft, the second best clarity since data collection began in 1999. Coontail and eelgrass were the dominant species of SAV. Coontail was observed at a maximum depth of 14 ft. Hydrilla was found scattered throughout shallow areas with some new growth. Invasive emergent populations were low while native plants, like maidencane, were expanding.

Recommendations & Additional Info



➤ 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 (Kristine.Campbell@myfwc.com, 321-246-0682).

➤ 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. Seminole County Lake Management Program staff would be glad to present their findings from their Bioinspections. Also continue to increase native aquatic plantings along the shoreline (such as pickerelweed, duck potato, and canna).



➤ Water quality and biological information, such as the Lake Vegetation Index (LVI) for each lake, can be found on the Seminole County 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.

➤ For individual Lake Management Plans: Click on Active MSBUs at www.seminolecountyfl.gov/msbu

LakeWatch

Consider joining Florida LAKEWATCH, a citizen volunteer lake monitoring program that facilitates "hands-on" citizen participation in the management of Florida lakes, rivers and coastal sites through monthly monitoring activities. For more information, visit the website (<http://lakewatch.ifas.ufl.edu/>), or contact Jason "Mo" Bennett (jpb@ufl.edu, 352-273-3639).



Events & Contacts

Events

Myrtle Lake Restoration 4/14/18 (9am - noon):
1000 Twin Lakes Road, Longwood, FL 32750 <http://bit.ly/Myrtle2018>

Sweetwater Lakes Restoration 4/21/18 (9am - noon):
Riverbend Park, 830 Cove Park Place, Longwood, FL 32779 <http://bit.ly/Sweetwater2018>

Lake Howell Restoration 5/19/18 (9am - noon):
Casselberry, specific address TBA <http://bit.ly/Howell2018>

Lake Jesup Restoration 6/2/18 (9am - noon):
2356 Black Hammock Fish Camp Road, Oviedo, FL 32765 <http://bit.ly/Jesup2018>



Contacts

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Help eliminate mosquitoes breeding in tires!



**Seminole County Solid Waste Management is Holding
Waste Tire Collection Events**

**Saturday, April 21st & October 20th, 2018
8:00 a.m. to 2:00 p.m.**

Free Waste Tire Collection Events offer residential households **FREE** disposal of up to five (5) tires. Only two (2) customers from different households per vehicle for a maximum of ten (10) tires per vehicle.

Accepted at two locations:

Central Transfer Station - 1950 SR 419, Longwood

Seminole County Landfill - 1930 E. Osceola Rd, Geneva

**Available only to residents of Seminole County, City of Maitland &
City of Winter Park.**



**For more information, please call Seminole County
Solid Waste Management at 407-665-2260 or
Seminole County Mosquito Control at 407-665-5542.**

Protect Yourself From Mosquito Bites and Disease

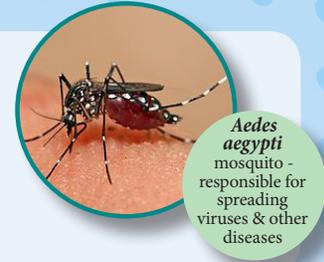
Eliminate Mosquito Breeding Areas Around Your Home



The Seminole County Mosquito Control Program is asking for your help to prevent the following diseases transmitted by mosquitoes:

**Zika Virus (2016) * Chikungunya (2013) * Dengue Fever
* West Nile Virus * Eastern Equine Encephalitis**

You can help by eliminating standing water from any containers, and by protecting yourself and your family from mosquito bites. See below for more information.



Help Prevent Mosquito Diseases Drain and Cover

DRAIN standing water from any container where sprinkler or rainwater has collected. See the picture below to find places where water may collect around the outside of your home.

COVER your bare skin and clothing with repellent if you must be outside when mosquitoes are most active during the hours of dusk and dawn. Several disease-carrying mosquitoes are daytime biters and usually do not fly far from the containers where they spend their immature life stages. Wear shoes, socks, long pants, and long sleeves.

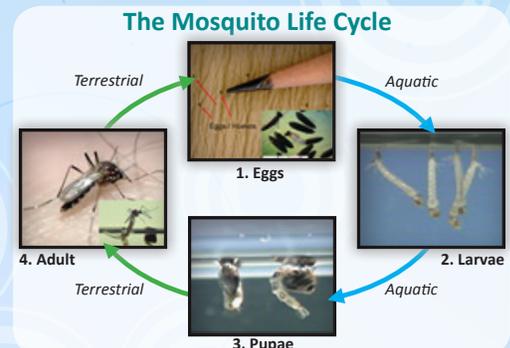
Always use repellents according to the label. Repellents with DEET, Picaridin, Oil of Lemon Eucalyptus, and IR3535 are effective. Use mosquito netting to protect children younger than 2 months. Using repellents that are combined with sunscreen is not recommended. Apply sunscreen first, then apply repellent to make sure that each product works as intended.



Mosquito Facts & Biology

Did you know that mosquitoes must have water to develop, that only female mosquitoes bite (take a blood meal), and can live for several weeks and lay hundreds of eggs? Check out the mosquito life cycle below to learn more about these insects.

1. Eggs are laid on water, on the side of containers, or on moist soil that may flood.
2. Larvae hatch from the eggs and live, feed, and grow in the water.
3. Larvae become pupae, then after 2 or 3 days adult mosquitoes emerge from the pupae.
4. Adult female mosquitoes fly off in search of a blood meal, lay eggs a few days later, and then the cycle begins again.



MOSQUITO BREEDING AREAS FOUND ON YOUR PROPERTY



OTHER TIPS TO PREVENT MOSQUITOES

- Repair screening on windows, doors, porches & patios.
- Keep gutters clear so they will drain properly.
- Check & empty:
 - Children's toys
 - Trash cans & lids
 - Untreated swimming pools
 - Uncovered boats/watercrafts that are not draining water
- Change water in birdbaths & flush bromeliads once or twice a week.
- Do not allow water to accumulate in flower pots or dishes for more than 2 days.
- Check around faucets & air conditioner units, repair leaks & eliminate puddles that remain for several days.
- Fill tree holes & rotten tree stumps with spray foam insulation.
- Irrigate lawns & gardens carefully to prevent water from standing for several days.