On Our Pond

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Trash Catcher Giveaway

So far, we have had a strong interest from our readers in our trash catcher giveaway. You may remember our giveaway announcement posted in our winter On Our Pond Newsletter issue. Thanks to funding provided by the Florida Department of Transportation District Seven, the Hillsborough County Stormwater Environmental Programs team is able to provide another 15 free trash catchers.

Does your pond or lake have a big trash issue? The trash catcher works great at capturing trash and preventing it from washing out into the middle of a waterbody. It floats in the water near a stormwater pipe and you just scoop out the trash when you see it. Directions and a video on how to make a trash catcher can be found at www.HillsboroughCounty.org/AdoptAPond.

If you live on a pond or lake in unincorporated Hillsborough County and your property has a stormwater pipe, you may be eligible to receive a free trash catcher. All you have to do is send Jennifer Aragon an email at AragonJ@HillsboroughCounty.org or a letter to 2420 N. Falkenburg Rd., Tampa, FL 33619, with the subject: Trash Catcher Giveaway. Include your name, address, the location of the waterbody, where the trash catcher would be installed, and a brief description of how your pond or lake would benefit from receiving one. Only one trash catcher will be available per qualifying waterbody. They will be given out on a first-come basis, so submit your entry today!

Reminder to Lake Samplers!

Lake sampling volunteers play an important role in the Lake Management Program. Their samples add to the water quality history for a lake.

Regular delivery of lake water samples ensures we get the results as quickly as possible. It also helps Lakewatch ensure the sample is accurate. Long holds have to be tagged by the lab and cannot be used for official records.

Lake samplers, remember to drop your lake samples off EVERY MONTH! We want the results of all of your hard work to be officially recorded. Thank you for all your help!
Duckweed Control

Duckweed is a small, floating plant that covers many of the ponds in our area. We often get calls from people asking how to remove duckweed from their pond. We always refer them to our YouTube video on Duckweed Removal Techniques, found at www.HillsboroughCounty.org/AdoptAPond, but it is important to understand the root cause of the duckweed growth.

The root cause of duckweed growth is nutrients. Nutrients are food for plants. If there are a lot of nutrients in the pond, there will be a lot of weed growth and the pond will become unhealthy. Just like if we eat too much food all of the time. We will get bigger and will be unhealthy.

Skimming and pumping duckweed out of the pond is a good step in the right direction, but you need to do more to help keep the duckweed from coming back. You need to reduce the plant’s food source (nutrients). Every time it rains, more nutrients can wash into the pond. Nutrients are found in fertilizers, pet waste, lawn clippings, leaves, and even dirt. To stop feeding the duckweed, keep these food sources off the streets. This needs to be done on every street in the neighborhood, not just on the streets around the pond.

A completely barren pond does not keep duckweed away. You need other plants to work against the duckweed. A pond that is 30 percent covered in plants (including the shoreline, underwater, and floating islands) has been shown to be effective. Some ponds, however, may need more. Some examples of good plants for ponds include lemon bacopa, pickerelweed, duck potato, blue flag iris, fire flag, and golden canna.

With this combined approach of removing the duckweed, reducing nutrients, and planting good plants, you will be on your way to keeping duckweed out of your pond.
American Coot

Just by looking at the American coot (*Fulica americana*), you can tell this bird is unique. The feet on this bird include wide toes to help them swim in lakes and ponds. If you have had the chance to see them try to take off, you have probably noticed that they struggle to lift off out of the water. Coots have short, rounded wings making it harder for them to become airborne. They flap their wings a lot and appear to walk on the water for a while before finally getting up in the air. Once they are in the air, they fly like other birds.

May to June is mating season for the American coot. Both male and female coots work together to make their nest. Nests are built using pieces of dead plants to create floating platforms anchored to tall vegetation. Both parents share the responsibility of incubating the eggs, too. They take turns sitting on the eggs to keep them warm. Around 23 days after the eggs are laid, they hatch. The parents divide the chicks between them and both work at teaching and feeding the babies.

These birds are interesting to watch, not only because of their unique look, but also because of their impressive co-parenting skills.

Pond Plant Spotlight: Soft-Stem Bulrush

By: Elizabeth Wilkins, University of South Florida, Volunteer

Soft-stem bulrush (*Scirpus/Schoenoplectus tabernaemontani*) is an aquatic plant native to North America. It is a desirable plant for Florida marshes, streams, ponds, and wetlands. It is found in deep or shallow water growing to heights of eight to ten feet tall. It grows best in poorly drained soils such as in the muddy or marshy ground around lakes, ponds, streams, and wooded wetlands. This plant grows in large patches. The stems are triangular, smooth, and spongy. They have a wide base that tapers upwards to a tip with flowers, which produce small fruit.

The soft-stem bulrush provides nesting cover for ducks, water fowl, marsh wrens, fish, raccoons, and otters. The flowers bloom all year and produce fruit which becomes a food source for animals in the area.

They are a desirable plant to have in local ponds or lakes due to their slow growing nature and requirements for little maintenance. This is a great plant to add to a pond to help filter the water, feed surrounding animals, and restore the pond to a healthy state.
The Edge of the Lake

The edge of the lake may seem like an obvious thing. We can all tell where the water is, right? But that water line moves depending on many factors. Rainfall, groundwater (including pumping), development, climate, and even vegetation can all influence where that water line is. So where is the actual edge of the lake?

With so many factors affecting it, there is no single answer. Engineers often use the term Mean High Water. This is the average high water line over a period of years. This water line is actually the elevation of water in the ground. It just becomes visible as a lake when the ground dips below that elevation. If you dug a hole in your yard down to that elevation, it would fill with water too.

Sometimes we are interested in more than hydrology. Many lakes in Florida have a very gradual slope. That means the ground gets wet before it breaks the surface and then stays so shallow that a lot of plants grow. We call these wetlands. Sometimes we include the surrounding wetlands in the boundary of the lake. This is especially important if you live in a neighborhood where cypress trees are in the front yards. Guess what? Those houses are inside the lake! When the water is at its highest that is probably going to be a very wet piece of land. This does not mean this land is useless. People live in wetlands all over the world. Property owners just need to be prepared because flooding on private property is the owner’s responsibility.

Another way to define a lake is by the watershed. A watershed is all the area of land that drains to one point. Think of it like a bowl or a valley. Around here, these can be hard to see because the land is so flat. But each lake is actually the lowest point in an area of land. We can show you right where those tiny ridgelines sit on the ground. Since most of the water that enters a lake comes from its watershed, it is important to consider the surrounding watershed as part of the lake. Of course, we don’t think of it in the same way as the wet pool of the lake. But it is a part that cannot be separated. What happens in the watershed directly affects the lake.

So, how we define the lake usually depends on the context we are discussing. Obviously, the size of the watershed does not make any difference when we are talking about water skiing. But it makes all the difference when we are talking about flooding or pollution. Thinking only about the wet part is just as ridiculous as trying to keep your neighbors lake water from mixing with yours.

How to Name a Lake or Pond

To name a lake or pond, just start calling it something. Yep, that is all it takes.

Seriously, we get asked this question several times a year. Unlike some other places, Hillsborough County has no official naming process. Names are assigned to a waterbody simply because a large enough group of people call it that. At some point a legal document may be filed, such as a plat. The plat might list the name, but the name could be changed at any point. A waterbody can also have more than one name. We have several lakes in Hillsborough County that are called different things depending on who you talk to.

If you have a lake that you want to name, feel free. The only trick is getting enough people to agree with you.
Setting Limits on Pollution

Is your lake, pond, or stream polluted? What does polluted really mean? There are a lot of ways to use the term, but the State of Florida has defined polluted or ‘impaired’ for us. Waterbodies are impaired if pollution has harmed the plants and animals living there or made the water dangerous for humans. This could mean too much algae because of high nutrients or too little oxygen for fish.

To support this definition, the Florida Department of Environmental Protection (the State) studied varying levels of pollution and its effects on plants and animals in waterbodies. They used the information to set limits on a wide range of chemicals and other water pollutants. These limits are called water quality criteria. If pollution levels do not meet the water quality criteria, then the waterbody is legally polluted. The County and other agencies can then focus on impaired areas and work to find and remove sources of pollution.

Recently, the State finished a multi-year study to update water quality criteria for nutrients, oxygen, and bacteria. They used the latest science to develop limits that better identify lakes and streams in need of help. These changes include:

**Numeric Nutrient Criteria** – High nutrients are one of the biggest problems in Florida waters. The State has set limits on nitrogen and phosphorus pollution in lakes and streams.

**Dissolved Oxygen Criteria** – Oxygen levels in your lake are highest during the day and lowest at night. The new State criteria takes this daily cycle into account and helps us ensure local waterbodies are able to have healthy populations of fish.

**E. Coli Bacteria** – *Escherichia coli (E. Coli)* can be a dangerous bacteria and gets into our waterways from broken septic tanks and animal waste. The State is creating limits on *E. Coli* bacteria for lakes and streams. This helps our waterbodies stay safe for humans to fish and swim.

These water quality criteria changes should help us better protect our local waters.
Sun City Center Medians Now Florida-Friendly

By: Elizabeth Wilkins, University of South Florida, Volunteer

Florida-Friendly planting is the phrase that is sweeping neighborhoods and making a difference to the landscapes across Hillsborough County. Florida-Friendly landscaping means using plants and trees that are good for Florida. Sun City Center, located in the southern part of Hillsborough County, became the first community volunteer group to collaborate with county officials to create Florida-Friendly medians. This is a perfect example of what a community can do to change their current surroundings into a Florida-Friendly environment.

The community and county had a chance to work together and gain knowledge and feedback from each other. Keep Tampa Bay Beautiful, a nonprofit organization, also stepped in to guide them through the proper steps for soil preparation and plant establishment. There are four main steps to a project like this - sod removal and soil preparation, the installation of Florida-Friendly plants, replacing the old irrigation system with a low-volume drip irrigation system, and the continued maintenance afterwards. By comparison, the continued maintenance is substantially less with Florida-Friendly landscaping than with other methods. The before and after pictures are remarkable and the best part - it did not cost the volunteers a dime! All of the funding came from different foundations and grant programs.

Sun City Center was selected to be the pilot town for this type of landscaping because of the community interest and involvement. In part, this is due to the community’s awareness of the importance of Florida-Friendly landscapes around Hillsborough County. These landscapes include planting drought tolerant plants that hold water and prevent erosion. They provide food and shelter for native wildlife, but most important of all, this type of landscaping minimizes the use of fertilizers and pesticides. This means your family is not exposed to as many harmful toxins and other pollutants.

Getting your neighbors involved in Florida-Friendly projects is a great way to beautify your community and save resources, time and money. Let nature do its work. Find out more about Florida-Friendly landscaping by visiting www.FloridaYards.org. For more information on neighborhood grant opportunities, visit the Hillsborough County Office of Neighborhood Relations website at HillsboroughCounty.org/ONR.
Photo Scramble

Here is a scrambled photo of a pond shoreline. Unscramble the photo to see what the shoreline looks like. If your neighbor’s shoreline looked like this, what would you think? Email your comments to Jennifer Aragon at AragonJ@HillsboroughCounty.org.