Rain, Rain, Go Away

see page 3 for details
Controlling Midge Flies

By: Lea Vargas, University of South Florida, Volunteer

Struggling to enjoy your pond, lake, or stream because it has been swarmed with bugs that look an awful lot like mosquitoes? Well, there is a good possibility that those pesky bugs are actually midge flies. Midges are short-nosed, long-bodied, non-biting flies that like to live in wet areas. The eggs are lain on the top of the water and in aquatic plants before they sink to the bottom, where they will hatch soon after. The worm-like larvae will then live in the muck and water before they emerge as adults to mate.

During this short mating period, typically in the spring and early fall, midges will swarm in cool and shady areas around sundown. This, of course, makes them quite a nuisance when you are looking to enjoy an outdoor activity. But fear not, there is a solution to tame them.

Midge flies are a great food source for animals that live around your waterbody. However, like other animals, an overabundance of midges can tell you a lot about the health of the environment. When midge flies become out of control, it can indicate issues such as:

- **Poor water quality**
  - Low oxygen content
  - High nutrient levels
  - The presence of bottom muck

- **Lack of animals that eat midge flies**
  - Dragonflies
  - Native fish

While you do not want to completely get rid of the midges in your waterbody because of their value to other species, there are steps that you can take to help manage them:

- Midges are attracted to light, so try to keep outdoor lights off for roughly 45 minutes after sundown, when they are most active.
- Keep your pond clean and free of excess organic material, like leaves and lawn clippings, that would contribute to the muck.
- Stock your waterbody with native fish species and attract dragonflies that will eat the midge larvae.

If you have questions about pond management, contact Jennifer Aragon at AragonJ@HillsboroughCounty.org

Citizen Science: Gopher Tortoise Mortality

The Florida Fish and Wildlife Conservation Commission (FWC) has an opportunity for citizen scientists. To better protect gopher tortoises, the FWC is collecting data on locations where these tortoises are frequently found dead. They will use this information to minimize the deaths from causes such as disease and vehicle collisions.

To help in these efforts, you can report sightings of dead gopher tortoises on their website at [https://public.myfwc.com/HSC/GopherTortoise/GTMortality.aspx](https://public.myfwc.com/HSC/GopherTortoise/GTMortality.aspx). There is also the Florida Gopher Tortoise app available for both Android and iOS smartphones.
On Our Pond

Rain, Rain, Go Away

Many of you were probably singing this tune over the summer: “Rain, rain, go away. Come again some other day.” Our area had an unusually large amount of rain in a short period of time. Flooded streets, yards, and houses were a problem for many. And the rain is expected to continue through a wet winter season. Although we can not control mother nature, we can have some control over where a portion of this water goes.

Hillsborough County goes through cycles of heavy rain, followed by times of drought. So it is smart to use this rain wisely. Instead of allowing all of it to wash into the street, some of this rain water could be saved for use on a dry day.

Rain barrels are used to collect rain water that washes off your roof. You can set-up one at all of your roof gutter downspouts. If you have a large area of roof draining to one spot, you can also put several connected rain barrels in a row. For more information on rain barrels, visit the Hillsborough County UF/IFAS Extension’s website at Hillsborough.ifas.ufl.edu/fyn/rain_barrels.shtml. They also offer rain barrel workshops throughout the year.

Cisterns are similar to rain barrels, but much larger. They can be installed above or below ground. The Hillsborough County UF/IFAS Extension office, located at 5339 County Road 579 in Seffner, has a 275 gallon cistern in their Bette S. Walker Discovery Garden. They are open Monday through Friday from 8:00am to 5:00pm.

Rain gardens are another way to be rain wise in your yard. They are gardens that help rain water filter into the ground. They are planted in spots in your yard where your roof or gutters will drain. The water that flows into the rain garden drains into the ground within a day or two. No mosquito breeding ground here. They are also planted with a variety of beautiful flowering plants that provide food and shelter for birds and butterflies. To learn how to add a rain wise garden to your yard, check out the publication “Rain Gardens: A Manual for Central Florida Residents” by Marina D’Abreau found at Hillsborough.ifas.ufl.edu/Documents/pdf/lawn_garden/2010_Rain_Garden_Manual.pdf.

Although these may seem like small steps, several small steps add up to a big difference. Help make a difference by adding these to your yard. You will be amazed by how much water you can collect and keep off of the street.
Insect Variety Impacted by Your Plants

Are you interested in attracting a variety of butterflies to your garden? A recent study done by the University of Delaware found that native plants attracted more variety of insects to the landscape.

We often hear about how one invasive animal, like the Cuban treefrog, can affect the same type of animal (other treefrogs). But we may underestimate the effects non-native plants can have on insects, like caterpillars.

The University of Delaware study showed that a landscape with non-native plants resulted in lower variety of insects, especially young ones, when compared to native landscapes. The adult butterflies can easily move from one plant to another, but the caterpillars can not. So by looking at the variety of caterpillars in the landscape, you can get a better idea of how well the landscape is supporting these beneficial insects.

These observations can be brought back to our own gardens. If we plant only non-native plants, we are limiting the variety of insects around. This will especially be the case in new developments if only non-native plants are put in the landscapes of every house. Not only are butterflies beautiful to watch fluttering from one flower to the other, but they are also a source of food for several animals, including lizards, dragonflies, frogs, and birds.

Help create a better environment for a variety of insects by making good landscape decisions and choosing more native plants.


Pond Plant Spotlight: Blanket Flower

By: Lea Vargas, University of South Florida, Volunteer

Are you looking to add a vibrant pop of color to your yard, while supporting Florida-Friendly landscaping? Look no further, because the blanket flower (Gaillardia pulchella) is what you want! Great for ground cover, these flowers look something like your favorite sunset, with showy yellow-and-red petals that are sure to awe neighbors and guests.

These beautiful, annual plants bloom throughout the summer and fall seasons and require a minimal amount of work. When planting, they need full sun, dry soil with good drainage, and the occasional watering.

Another cool thing about these flowers: Once they have established themselves in their new environment, blanket flower is known to be both drought and heat resistant. They are great at reseeding themselves and, with a little bit of pruning, the blooms multiply and can last longer.

If the minimal work and charm of these plants aren’t enough, blanket flower is also great at attracting butterflies, birds, and bees, which help promote the overall health of your garden! So give these lovely flowers a try - you won’t be disappointed.
Organizing Your Lake

The benefits of having an organization to coordinate lake management are clear. There is a body to discuss and decide what needs to be done. It provides a forum for residents to bring concerns or requests. Soliciting funds, either from individuals or grants, is easier when there is a formal organization to handle it. We could go on. The question is what kind of organization would suit your situation.

The first type would be a mandatory Homeowner Association (HOA) or Community Development District (CDD). These organizations often already exist for other purposes, but can include lake and other environmental management.

If you do not have one of these in place, you can form a voluntary HOA or Civic Association. To do this, you need to draft by-laws, establish a governing board, hold a public meeting, and register with the state. The Hillsborough County Office of Neighborhood Relations (813-307-3564 or www.HillsboroughCounty.org) can assist you with all of this. This is perhaps the easiest organization to form, but it is voluntary, so not everyone has to participate.

Another type of organization is a corporation, both for profit and non-profit. Forming one is very similar to forming a Civic Association, but the requirements can be slightly different. For-profit corporations may face some challenges in justifying that they represent the community. Non-profits will have more involved documentation requirements. Both will provide a body that can collect money and manage work on the lake. To form these, check out www.sunbiz.org.

The Special Taxing District is perhaps the most asked about and hardest organization to achieve. This organization is essentially a government entity. They are established by special acts of State Legislature or by County ordinance, depending on the particular type. They have the ability to tax their jurisdiction for the work they cover on owners’ property tax bills. This requires significant oversight and districts must comply with laws on ethics and disclosure, etc. To form one, a community has to show that there is a true public purpose to their intentions because the money they receive is truly public funds. Usually, this means the lake must have a publicly owned parcel that has true public access. Without that, it will be a hard case to make that work done on the lake will benefit the public and not just the property owners or nearby residents.
Floating Dock Survey Results

Following our article about floating docks, we received a few questions. To gather more information, we sent out a survey to ask lake residents about their docks.

Not surprisingly, most of the respondents had fixed docks. About half said they would consider a floating dock as their next dock. Among the 20 percent who had floating docks, only one person didn’t like it. The rest said a floating dock is all that they would ever have.

Reasons varied for why some owners would not consider a floating dock. Several said it was not necessary because their lake level was stable. But many had concerns that stem from misconceptions or unfamiliarity.

Docks were built by a diverse group from the homeowners themselves, to specialty dock builders, to general housing contractors. Interestingly, all but one of the floating dock owners knew who built theirs, but many of the fixed dock owners did not know who had built their dock.

The lifespan of both types was about equal, with the oldest of both types built in the 1980’s. All of the docks but one were made of wood. It was made of metal.

Our sample size was not nearly big enough to be representative of the entire county, but it does provide some insight and information. No one type of dock will suit all situations, but floating docks or a combination of fixed and floating can help resolve a lot of issues. Many of the barriers people reported to having a floating dock can be overcome with a little more understanding of how they work.

Regardless of which type you choose, it is important to recognize that while some lake levels are managed, no waterbody is guaranteed to have any certain water level. At some time there will be too much or too little water to someone. When planning a long term investment like a dock, it makes sense to build it as adaptable as possible.

Trash Catcher Giveaway Closed

Over the last year, we have moved a step forward in keeping our waterways clear of trash. More than 20 ponds and lakes in Hillsborough County now have trash catching devices installed to collect trash that washes in from the street. The trash catcher recipients can easily remove trash from these devices and properly dispose of it.

Trash catchers were provided for free through our Stormwater Environmental Programs, thanks to funding provided by the Florida Department of Transportation District Seven. We have used all of the funds and the giveaway is now closed.

Help keep our waterways trash free. Instructions on how to build your own trash catching device can be found on our website at www.HillsboroughCounty.org/AdoptAPond.
Your Pond and Lakes: Keeping Them Healthy and Tame Without the "Extras"

By: Lea Vargas, University of South Florida, Volunteer

If you are experiencing problems with your pond or lake vegetation getting out of control, you may want to take a look at what you are “feeding” it. Health experts warn us about giving our bodies the right nutrition; the same applies to the environment surrounding your property. More specifically, sometimes the culprit for your landscaping woes is too many nutrients (e.g. fertilizers).

Recent studies done on global, national, and local scales reveal that the addition of nutrients to landscapes near waterbodies and wetlands can do more harm than good. Lakes and ponds are most effective when native plants are present to manage erosion, water flows, and nutrient uptake. By adding too many extra nutrients to the areas surrounding these landscapes, you increase the chances of losing native plants.

Should this happen, studies show that the following are likely to occur:

• Native plant numbers and variety decline.
• More aggressive, invasive plants move in because of the additional food source (nutrients).
• Invasive plants are able to out-compete the native plants for sunlight and space, furthering the decline in native plants.
• Property owners struggle with the invasive plants hurting their lawns and gardens, as well as with facing issues of new or worsened erosion and flooding.

Native plants do best in areas where the nutrient supply is consistent with the area’s natural levels. When you avoid adding nutrients to the lawns and properties that surround or drain to ponds and lakes, you will have a healthier environment with more diverse plant and animal species.
Calendars Ready!

Our 2016 Stormwater Environmental Programs Calendars are now available for ordering.

The calendar features photos taken by our program participants of local ponds, lakes, and streams. The number of photo entries into the contest keeps getting bigger. It is wonderful to see the enthusiasm. We have some great photographers in our programs and they were able to capture various elements of what helps make up these beautiful waterbodies.

Only twelve photos were selected for the calendar, but we were able to include several others in our Additional Photos section at the back. Make sure to check it out.

To order a free calendar, email your name and address to AragonJ@HillsboroughCounty.org. You can also call us at (813) 744-5671. Supplies are limited, so request one today!