Freshwater Fish Feature: Bluegill
The Ups And Downs Of Life On A Lake
Make Your Waterfront Wildlife-Friendly
Bluegill, or *Lepomis macrochirus*, is a rather common fish found in a vast number of freshwater bodies in Florida. This species of fish is naturally found from Virginia to South Florida, all the way west to the Rocky Mountains. These fish go by many different names across the country, including Bream, Brim, Copper Nose and Sunfish.

Bluegills are usually found in the shallow areas of lakes and ponds, along with the slow moving areas of rivers and streams. They choose areas with a lot of aquatic vegetation which provides shelter from predators and a place to spawn. Bluegills often school into groups of 10 to 20 fish. Florida’s lakes and ponds provide a great place for them to live since they prefer warm water, from 65-85ºF. Their diet consists mainly of insects and insect larvae, which makes them a valuable resource for insect control.

Bluegills can be easily identified using a few distinguishable features. One of the most obvious is the dark blue color found on the sides of their head and chin. Other unique characteristics of these fish are the 5-9 vertical bars found on their sides, as well as a dark spot found just behind their gill plate. Bluegills average in size from 4-12 inches, but can reach over 16 inches. The largest ever caught measured 4 pounds 12 ounces.

Fishing for Bluegill has been popular for many years, due to their abundance and good table fare. They are included in a group of freshwater fish referred to as “Panfish,” which comes from their size and method used to cook them. The most popular baits for Bluegills include worms, crickets, grasshoppers and grubs. They can even be caught on cheese or bread! Bluegills also make great live baits for larger predators such as Largemouth Bass and Catfish.

**Yard Care That Makes A Difference! - Irrigation**

It’s nearing the end of the rainy season and winter is fast approaching. Now’s the time to get your yard ready for the drier season. If your landscape needs more water than what rain alone can provide, then it’s important to have your irrigation system set-up for efficient watering.

Here are some ways you can make a difference. For automatic irrigation systems, use your rain shut-off sensor, so your landscape is only watered when needed. Look for signs that your grass needs water, including leaf blades folding and footprints left long after walking on the grass. Use microirrigation to target water at the plant’s roots, rather than wasting water on areas that don’t need it. It’ll also help prevent weeds in your garden. Water in the morning and only on your designated watering day. Just because you can water, though, doesn’t mean the landscape needs it.

With these tips, you’ll be well on your way to making a difference by conserving water and minimizing water runoff from your yard. For more tips and the current watering restrictions, visit the Southwest Florida Water Management District’s website at [www.WaterMatters.org](http://www.WaterMatters.org). Learn how to set-up microirrigation in your garden and sign up for a Water-Wise Workshop at the Hillsborough IFAS Extension office by visiting their website at [http://Hillsborough.ifas.ufl.edu/fyn/Water-Wise.shtml](http://Hillsborough.ifas.ufl.edu/fyn/Water-Wise.shtml).
Floating Islands

Floating islands of native plants can be a great addition to any pond. They are a creative way to add more life to the waterbody. You can anchor them anywhere around the water you’d like. If you later decide you’d like it somewhere else, you can just pull up the anchor and move it somewhere new. The native plants not only filter pollutants from the water, they also provide habitat for wildlife. Small fish will swim among the plants, looking for shelter and food. Birds will use the island as a perch. Turtles have even been seen basking on the islands.

We’ve seen several different designs used for the island’s frame. One design that has proven to be very durable, came from one of our program participants, Don Hardy, from Logan Gate Village in Tampa. He used the following supplies to build his floating islands.

Materials:
PVC pipe with matching elbows and tees
PVC pipe primer and cement
Garden lattice
Plant baskets
Zip ties
Plastic empty drink bottles with caps
Anchor (e.g. cinder block) with rope
Native aquatic plants (e.g. Golden Canna, Blue Flag Iris, Pickerelweed, Duck Potato, Soft-Stemmed Bulrush, Fire Flag)

To assemble the island, cut the PVC pipe to the dimensions you’d like to make the island. Stuff the PVC pipe with the empty plastic drink bottles and use the PVC primer and cement to seal the joints of the frame. The bottles will help keep the frame afloat in case there are any leaks in the frame joints. Attach the lattice to the frame and the plant baskets to the lattice using zip ties. You could also cut holes in the lattice for the baskets to fit in, as is shown in the photo of the North Lake island below. Small rocks or zip ties can be used to hold the plants upright in the baskets. Once the plants begin to grow and spread, their roots will hold them in place.

For more information on floating islands and native aquatic plants, check out the Adopt-A-Pond notebook at www.HillsboroughCounty.org/AdoptAPond. While you’re there, view our program videos. We’ll be making a new one soon about how to make a floating island.
**Pond Plant Spotlight: Golden Canna**

By Kyle Wright

Also known as Bandana of the Everglades, Golden Canna (*Canna flaccida*) naturally occurs throughout the southeastern United States. Spanning from South Carolina to the Florida Everglades and west to Texas, this plant can be found on the banks of slow moving rivers, streams, lakes and ponds.

Golden Canna is most recognizable by its fragrant canary-yellow flowers, which are about 3 inches across. Bees and hummingbirds are especially attracted to the flowers for their rich pollen. An interesting feature is that they bloom in the evening as the temperature cools, then begin to wither away as the heat of the day sets in. The plants themselves grow to an average of 4 feet high. Their fleshy green leaves are broad and long, growing up to 6 inches wide and 2 feet long.

Planting Golden Canna is a great way to add natural vegetation to a lake or pond, which will help attract animals, filter the water, reduce invasive plant populations and enhance the appearance. To add some Golden Canna to your pond, simply plant them about 18 inches apart in soil that will never dry out. Once established, many different shoots can spring off of one plant, providing a beautiful and lush group of plants.

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**Sampling All-Stars**

A big thanks to everyone who samples through our Lake & Stream Management Program. This year most of our sampling volunteers submitted samples for 10 or more months.

Congratulations and thanks to all our sampling all-stars! The volunteers for the waterbodies listed below sampled all 12 months! Keep up the good work!
The Ups And Downs Of Life On A Lake

A family moved to Florida, found a beautiful lot on a gorgeous lake, built the home of their dreams with a two story dock to park their ski boat and grill…and 10 years later, the dock sits 20 feet from the water. On the next lake, a family did the same thing, only 20 years later, their dock is under water and the septic tank won’t flush. What happened?!

The truth is, Florida water levels fluctuate dramatically. The state is a shallow sponge of sand and porous limestone. Water passes right through. So when we have a lot rain, water levels rise. Less rain means water levels go down.

This has occurred for centuries. The natural systems that grow in Florida are adapted to the changes, and sometimes even depend on them. The old Florida people have adapted to it too. My grandparents talk about hunting in the lake bed, and salvaging boats from the bottom of the lakes when they went dry. No one built close to a lake because of it.

You can adapt too. For example, if you build a fixed elevation dock, plan on it being completely out of the water or under water at times. A floating dock is a better choice. That way, when the water level fluctuates, so will the dock. If you have an old septic tank, raise the elevation, or hook up to sanitary sewer. If it’s flooding, it isn’t working anyway. You could have sewage leaching into your lake. When building a house, look at historic lake levels. Go back as far in time as you can. Look at the vegetation on the lot.

Cypress trees are a dead giveaway that the area gets very wet. Lastly, know that your home is your responsibility. Prepare yourself and build smart. While government has certain specific responsibilities regarding water levels, keeping your home or property dry is not necessarily one of them.

Baker Creek

The Baker Creek watershed runs from Brandon and Plant City all the way to Lake Thonotosassa. It’s the primary input to the big lake. A recent study by the Southwest Florida Water Management District (the District) revealed that it is also a source of nutrient pollution to the lake. The District and Hillsborough County are working together to find out exactly where the nutrients are coming from in this watershed.

Through a process called “source tracking,” we hope to narrow down the “hot spots” for nutrients and come up with solutions. The end goal will be cleaner water in the creek and also the lake. We’re just starting on this multi-year project, so watch for updates as we progress.
Ask Stormwater Ecologist

On Our Pond

Dear Stormwater Ecologist,

Do you help schools select and plant vegetation for their ponds?

Sincerely, Pondering EduPlantings

Dear Pondering EduPlantings,

We offer stormwater educational programs to grade schools throughout Hillsborough County, with and without ponds. For 2nd grade, we have the Pete the Pelican Pirate program, which teaches students about preventing water pollution by reducing, reusing, and recycling. For 3rd through 12th grade, we have the Stormwater Ecologist program. This program features several interactive presentations. For smaller groups, we use a table top model to show various causes of water pollution and ways to prevent it. For larger groups, we play an Environmental Jeopardy game where students learn about the environment in a fun, exciting way. For schools with stormwater ponds, we also do interpretive walks and work with students and teachers to add beneficial plants to their pond.

To request a Pete the Pelican Pirate or Stormwater Ecologist presentation for your school, visit www.HillsboroughCounty.org/AdoptAPond.

Sincerely, Stormwater Ecologist

If you’d like to ask Stormwater Ecologist a question, e-mail AragonJ@HillsboroughCounty.org and include the subject line: Stormwater Ecologist. Your question might be the next highlighted in this newsletter!

Make Your Waterfront Wildlife-Friendly

Wildlife viewing is one of the many benefits of living on a waterbody. It’s exciting to watch birds hunting for fish, fish hiding and nesting around shoreline plants, and since we live in Florida, even snakes and alligators have their place.

There are several things you can do to make your waterfront wildlife-friendly. Just include each of the following into your waterscape:

**Food.** While there’s no need to feed store-bought seeds or bread to wildlife, making their natural food available will attract them. Native plants in and around the waterbody will not only provide food directly, but amongst the plants, wildlife will be able to find bugs and fish to feast on as well. Examples of native water plants that are great for wildlife include Pickerelweed, Duck Potato, Soft-Stemmed Bulrush, and Lemon Bacopa, just to name a few.

**Shelter.** This can be provided many ways. The water plants used for food are also good for providing hiding and nesting spots for fish. Trees and bushes, such as Cypress, Red Maple, and Wax Myrtle, are also great to have around the water. They provide natural cover for animals to move from one area to another without being seen by predators. You can also add nest boxes for birds, such as wood ducks.

**Connectivity.** Many wildlife need to move from place to place for food, protection from predators, and for seasonal changes. Using trees, large shrubs, and other natural cover helps make their travel easier.

For more ways you can make your waterfront wildlife-friendly, including plans for building nest boxes, check out the Adopt-A-Pond Notebook at www.HillsboroughCounty.org/AdoptAPond.
On Our Pond

Rain Garden In Action! - Sun City Center

By Mary Duncan

I first heard about rain gardens when Jennifer Aragon spoke to our group at North Lake concerning the Adopt-A-Pond program. Since the two downspouts in the back of our house were clearly eroding the lawn as the water rushed down to the lake, a rain garden to slow the flow made sense. I am always up for projects that get rid of the lawn. And free plants from Adopt-A-Pond for the rain garden, meant I was definitely doing this! I got the Rain Garden Manual from the Hillsborough County IFAS Extension Office and read up on rain gardens on the internet. First bit of advice: follow their directions! According to the directions, my slope was too steep and a rain garden wasn’t advised unless a retaining wall could be built (preferably by a landscape architect). Next bit of advice: do your research on building a retaining wall, don’t rely on a friend who says he knows how and will help you. It took a day to build the wall and it only took two hours for a downpour to wash dirt out through the cracks in the retaining wall because we hadn’t lined it. We lined it and planted it with Beach Sunflower, Blanket Flower, Muhly Grass, Blue Flag Iris, and Golden Canna. The plants are doing well but haven’t taken off yet; when they do, it will be wonderful. Some of our big downpours have filled the garden so it looks like a pond, but a couple of hours later, the water has filtered down through the sandy soil – just as the directions said it would!

Now, I wanted to be sure the water from the down spouts went into the rain garden and not just in and around (while still eroding the grass on the way). Perhaps a french drain? Someone mentioned a dry creek bed. I was definitely doing that. I even brought some rocks back from a visit up to Connecticut. I read up on the directions (since I’d learned my lesson from before). I wasn’t clear on just how many rocks would be needed. Several trips to Home Depot for bags of river pebbles, much digging, and several Tylenols later, it is done. It looks great – and more lawn is gone!

Now, the area next to the creek seems to be calling out for a little patio with a fire pit…

To pick-up your free copy of Rain Gardens, A Manual for Central Florida Residents by Marina D’Abreau, visit the Hillsborough County Extension Office at 5339 County Road 579, Seffner, FL 33584 or view it online at http://Osceola.ifas.ufl.edu/pdfs/fyn/RainGardenManual.pdf.
2014 Calendars Now Available!

Our 2014 Stormwater Environmental Programs Calendars are now available! This year’s calendar features the variety of landscapes found around lakes, ponds, and streams. These planted shorelines are not only attractive to look at, they also provide benefits to wildlife and the water.

We had over 150 photos submitted this year! It was tough to narrow it down because there were so many great photos. The ones that made it into the calendar show a wide variety of well planted shorelines and other aquatic scenes that you help care for. Check out the additional photos at the end of the calendar to see more great photos. Thank you to everyone who sent photos and congratulations to those whose photos made it into the calendar!

To order your free copy, email your name and address to AragonJ@HillsboroughCounty.org or call 813-744-5671 and ask for Jennifer. We have a limited number of copies, so get your order in today!