On Our Pond

A NEWSLETTER FOR CLEANER WATER & BETTER POND ENVIRONMENTS

Volume 11 No 1 Adopt-A-Pond is sponsored by Hillsborough County Stormwater Management, the Southwest Florida Water Management District, and YOU! Summer 2005

Where We've Been

Education Meetings
- Twisted Oak
- Valley Ranch
- Emerald Acres
- NE Shadow Pond

Plantings
- Cross Creek HOA
- Arbor Hills (2)
- Manor Oaks
- McCrea (2)
- Reynoldswood
- Seafairer

Pond Walks
- Lakeview
- Valley Ranch
- Lithia Ridge
- Cross Creek
- Cedar Creek

FREEBEE BOX
- **Carp signs**
- **AAP T-shirts**
- **NEW! ID Decks**

Call or email for yours now!

HAVE YOU SEEN THESE GUYS?

BEWARE! The Adopt-A-Pond crew is lurking. You may have seen these guys near your pond or possibly in it but don't worry - they are professionals! Story on Page 3.

TAKE THE ONLINE WATERSHED EDUCATION SURVEY! SEE PAGE 8

On Our Pond
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Shovel Accepted - Message from the new coordinator - Jason Mickel

I would like to take this opportunity to introduce myself as the new Adopt-A-Pond Program Coordinator. I know, many of you are saying, "another one!" I have been hearing that since I started in January, but since John departed early last year, Martin Montalvo has only been serving as the interim coordinator - he actually has another job! Anyway, I just wanted to say hello, briefly tell you about my background, and outline some of my ideas to build on this wonderfully successful program.

I have a BS in Environmental Science and Policy and a MS in Environmental Management from the University of South Florida. I have a broad range of experience having worked for the Florida Department of Environmental Protection as an Environmental Specialist and the Southwest Florida Water Management District as an Environmental Planner. I am excited to be working for Hillsborough County, especially with the Stormwater Management Section's Environmental Team. My philosophy for the Adopt-A-Pond Program is simple - If it isn't broke, don't fix it. Adopt-A-Pond along with Officer Snook and Stormwater Ecologist has been serving the community for many years and I am looking forward to working with all the pond groups, schools, members of the Adopt-A-Pond Committee, the Specialized Services crew, SWFWMD, HCEPC, and everyone that has made these programs so successful. You guys are the Adopt-A-Pond Program! In addition to all the great things that we are all used to, you can look for updates to the Adopt-A-Pond Website, new features to our newsletter, perhaps some advanced training for pond groups, and hopefully, some surprises.

In closing, I would like to mention that I never had the pleasure of meeting John McGee but it is obvious that he left behind many happy pond groups, many informed children and teachers, and many good friends, as well as a legacy of working to improve the environment. Big shovel to carry, I know! I will do my best.

Pond Reflections - A Reminder for Summer

Pond group members conducting a workday at McCrea pond.

Based on the many phone calls and emails that I have recently received, it is obvious that summer is here! You may have noticed an explosion of growth around your pond, whether it is your beneficial, native species or the pesky, troublemakers such as algae, duckweed, primrose willow, or any other invasive species. Therefore, with the Florida summer in full swing, it is time to put some serious work hours into your pond. It is time to identify the natives from the exotics and other invasive species (of course, please ask AAP if you need some help). Get your group together, get pulling and hacking, and be sure to fill out your workday reports at the AAP website.

However, this is also the time of year that serious precautions must be taken when you are outside. In addition to the dangers of sun exposure, we should all be familiar with heat related injuries including heat stroke, heat exhaustion, heat cramps, heat collapse, and heat rashes. At AAP, we encourage everyone to practice safe pond maintenance; therefore, I included some simple, common sense tips to follow when outside working on your pond:

Cover up: Use sun block, wear a hat, lightweight, breathable clothing, and a pair of quality boots.

Stay hydrated: Drink plenty of cool fluids (non-alcoholic). I prefer mixing Gatorade and water but plain, old water is still the best to keep you hydrated. Thirst cannot be relied on as a guide to the need for water; instead, water must be taken every 15 to 20 minutes in hot environments. It is important to start the intake of cool fluids before the heat of the day increases in order to prevent a heat-related injury.

Avoid midday heat: The sun is the hottest between noon and 4:00 p.m. This is a good time to have lunch and pack it up for the day. Seek air conditioning or a shaded area to protect yourself against heat-related illness.

Eat light: Avoid heavy foods; instead, eat foods high in water content such as fruits and salads. Cold watermelon is a great summer snack and it is packed with vitamins and minerals such as A, B6, C, potassium, and lycopene.

The Crew - AAP & More

The crew that you may see from time to time is actually part of Specialized Services, which is the operational unit of the Stormwater Management Section. This unit handles all the equipment for the section including heavy machinery, TV inspection robots, ground-penetrating radar, Global Positioning Systems. They also maintain created wetlands (wetland mitigation) for the entire county, which requires many hours of physical work and an expert knowledge of natural systems. This unit also conducts state-of-the-art GIS work. Of course they do all of this while keeping all of the AAP pond groups happy!

Dan Darnell raking duckweed.

The crew that visits your pond will help assess your pond and develop a plan to address your unique issues. The crew and I will discuss potential options for your pond and before you know it, they will be working in your pond.

I have only been coordinating the AAP Program for six months but I have become very familiar with the Specialized Services crew and the outstanding, high-level work that they consistently conduct. If you are part of a pond group or a volunteer, then you probably know some of these guys. In fact, if you had your one-time clean up, you probably know Dan the Schaeff driver, a.k.a. the pond artist. Dan and Mike will also record water depths throughout the pond to ensure that Dan does not have to swim back to shore. Mark leads the herbicide crew and can rattle off the name of just about every plant in Hillsborough County. The AAP Program rarely uses herbicides, but when we need to, we call on Mark. Cecil, Jim, and Joel are all qualified field biologist that you may have seen conducting an educational presentation such as a "pond walk," which is a popular AAP service. Of course, Don provides an abundance of support and help to the AAP Program including coordinating the crew, logistics, budgetary issues, and much more. This is just a short list of some of the crew that helps the AAP Program and some of the services that this unit provides. The AAP Program truly could not function without the help of the Specialized Services crew!

Cecil Brockinton discussing native plant species.

Annual Pond Seminar - Spring 2006

The Hillsborough County Adopt-A-Pond, Lake Management, and StreamWATERWATCH programs will holding the Annual Lake and Pond Seminar in the spring of 2006 at the Florida Aquarium!

This event is an opportunity for volunteers and citizens interested in the health and management of our water resources to share with each other what they have been doing in their community, to gain useful information and management tips, and to learn more about the efforts of similar organizations in the county. Since spring is the start of the growing season, what better time to hold a seminar that helps volunteers "brush up" on maintenance techniques?

The seminar will feature displays and exhibits from environmental organizations and other vendors as well as several excellent presentations on related topics. Guests will be able to network with other volunteers, view and ask questions related to the displays, win prizes, and participate in some excellent learning opportunities. Oh yeah, I almost forgot to mention, the Aquarium will be open for participants throughout the evening. In the past, we have had a very large turnout from our many volunteers and their families. We are very proud of our network of volunteers and all the hard work that you all have done. I will send out invitations to everyone early in 2006. We look forward to seeing you all there.

READY... SET... APPLY FOR THE POND JUDGING THIS FALL!

It's time to get ready for the annual Best Maintained Pond Competition! The "Pond Judging" will be coming in Fall 2005, so plan on it. And tell your Group Rep to send in the application when it comes. You're pond could the best of the year!

FUN & GAMES - A PLANT PUZZLE FOR KIDS

By Christina Bryant

Summer is here! I am sure you guys are helping take care of your pond. After you complete the puzzle, try to find examples of the plants and make a field book! See if you can tell the difference between the natives and exotics. Your mom or dad should help you and you never know, your science teacher next year might think it is pretty cool. Check the Adopt-A-Pond website at http://www.hillsborough.wateratlas.usf.edu/adopt for more information about plants and some exciting activities.

Don't forget…Reduce, Reuse, Recycle!

ALGAE	SALVINIA
BLADDERWORT	SEDGE
CATTAIL	SMARTWEED
DUCKWEED	SPATTERDOCK
MAIDENCANE	WATER HYACINTH
PARAGRASS	WATER LETTUCE
PENNYWORT	WILLOW
PICKERELWEED	

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S S F P P X J A U T M P Y J S Y W H B M
Z P S F S D V N J R P J T Q E I T C A T
S N A A S A B C Y O B H R N L N H I W H
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POND WALK SEASON IS IN FULL SWING

Since Pond Walk season started back in April, we have been keeping the field biologists very busy! Remember, a Pond Walk is an opportunity for you and your neighbors to have a guided tour of your pond while learning about many important ecological issues such as plant and wildlife identification, and Best Management Practices (BMPs).

The AAP field biologists are wetland and aquatic plant experts from the Specialized Services Unit, the Environmental Protection Commission, and the Southwest Florida Water Management District that volunteer their time to provide this extraordinary service to your community.

Our goals for providing your neighborhood with a Pond Walk include:
1. Identifying plants in and around the pond, especially nuisance exotic plants that can become a maintenance problem.
2. Identifying pond maintenance and management activities that can be accomplished by your pond group during pond workdays.
3. Previewing your neighborhood as a potential applicant for the Adopt-A-Pond Program.
4. Providing continuing education and guidance for pond groups who are already in the Adopt-A-Pond program.

A Pond Walk is a great way to decide if you and your neighbors are truly interested in the AAP Program. New Pond Groups that are accepted into the AAP Program receive many benefits including a free one-time clean up, Florida Native Plants, Plant ID Decks, and much more! For more information about Pond Walks or the AAP Pond, please give me a call.

Beyond the Pond

FOCUSING ON ISSUES FROM BEYOND THE SCOPE OF ADOPT-A-POND

An Apple (Snail) A Day?

By David Glicksberg, P.G.

Apple Snail *(Pomacea canaliculata)*

They may look innocent enough, but the Golden Apple Snail (also known as the Channeled or Banded Apple Snail; scientific name Pomacea canaliculata) is fast becoming one of the worst exotic-invasive species in aquatic environments.

These freshwater snails, which are native to South America, can grow to be up to 10 cm in size, and have generally brownish to greenish colored shells usually with spiral banding patterns around the whorls. They are often first identified by their pink egg clusters which are laid on vegetation or other solid surfaces above the water. These snails have a voracious appetite for water plants, and have become a significant problem in rice fields around the world, as well as wetland habitats.

Pomacea canaliculata larva on *Sagittaria lancifolia (*Duck Potato)

A Florida native species of apple snail, Pomacea paludosa, is smaller and darker in color than the Golden Apple Snail, and lays eggs that are white to light pink.

The Golden Apple Snail was introduced into southeast Asia around 1980 as a local food source, and as a gourmet food export. These markets never developed, and snails escaped or were released into the environment. They have spread across Asia impacting the rice production industry. Other sources of the spread of this invasive species are snails escaping or being released from aquariums, and aquaculture facilities.

Native Apple Snail *(Pomacea paludosa)*

They are prolific reproducers, typically laying eggs in clusters of a few hundred up to one thousand that generally hatch in 7 to 15 days. Egg clusters can be laid every few weeks. They can live up to four years, and reproductive maturity is usually reached between 3 months to two years.

Controlling them is no easy task. Fish can be used to control snail populations (puffer fish and carp for example), and Snail Kites and Limpkins prey on the snails, but they can only eat so much. Pesticides can be applied, but they may affect other parts of the ecosystem. Probably the best control once an infestation occurs is to physically remove the snails and eggs, but this of course can be very labor intensive, and will most likely need to be done on a reoccurring basis.

The recent spread of apple snails around the world and their ability to adversely impact aquatic habitats, illustrates the dangers that come along with the introduction of non-native species. This is the main reason why many countries have very strict rules when it comes to importing foreign animals like apple snails (and other animals and plants). So, if you have any snails in an aquarium, remember to never release them into the environment, or they may become part of the problem afflicting many of our local waterways and wetlands.

For more information about Apple Snails, please visit applesnail.net or cars.er.usgs.gov/sofla/Apple_Snail/apple_snail.html.

TAMPA'S RIVER HEART - THE LOWER HILLSBOROUGH RIVER

Hillsborough River
Photo: Florida State Parks - Larry W. Arrington

Guest Column by Joe Murphy, Tampa Bay Sierra Club Hillsborough River Committee

River. The very word evokes images of movement and flow, of magic and wonder. There is something magical about the flow and movement of water, the gathering of streams and springs uniting in the shared purpose of seeking out the sea. Rivers offer habitat for things wild, and solace and spiritual renewal for things human. Rivers are sacred places that exist to remind us of the purity and wonder that resides in all things wild and free. We are blessed in this place we call home to share with the natural world the river Hillsborough.

The Hillsborough River is one river, yet it is many rivers. There is a river above the dam, and a river below the dam. There is a river that flows high in times of rain and plenty, and low in days of drought. There is a river that can be seen from gunnels of a canoe, and the river underneath that is known only to the otter and the alligator. There is the river of today, and a river of the past that is rich in stories and legend. There is a river that is ecologically healthy, and river that is imperiled by development and pollution. Many rivers uniting as one, many rivers flowing together. The Hillsborough River is the great sum of many amazing and diverse parts.

As the river enters the City of Tampa, below the Rowlett Park dam, one finds the lower Hillsborough River. The lower Hillsborough River is an urban river, bounded by seawalls and sometimes the end point for pollution. Yet despite all that it endures, its magic and charm is still strong. The lower Hillsborough River in some ways is but a dim reminder of once was, before the dams and seawalls, before the drain pipes and bridges. Yet it still provides some of the most critical habitat for wildlife within the city limits of Tampa. With continued efforts to restore shorelines, improve water quality, maintain flow below the Rowlett Park Dam, and educate citizens of Tampa about the value and wonder of this treasure…..the river is coming back.

Time spent on the lower Hillsborough River provides the opportunity to see wading birds, birds of prey, manatees, game fish, amphibians and reptiles that are shoreline dwellers, and wildlife that travels from and to Tampa Bay. The river provides wildlife a place to breed, feed, hide, and continue the cycle of life. This critical habitat is maintained and protected by protecting and restoring shorelines, and working to improve and protect water quality in the river. The American Alligator prowls the river in Tampa. This amazing creature is the consummate aquatic predator, evolving over millions of years. Alligators are a crucial part of a healthy river ecosystem, and seeing them on the river is a reminder of all the life that exists that we don't see and is part of the food chain.

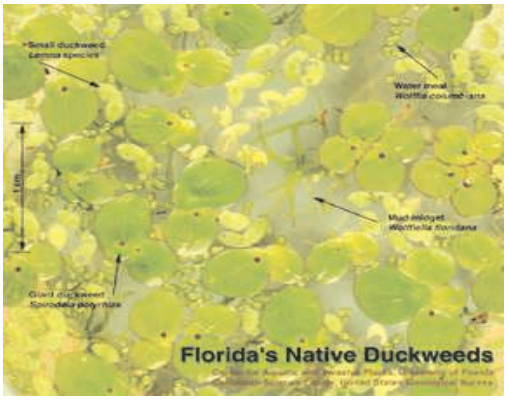
The West Indian Manatee uses the river, and is a wonderful reminder of how a species on the brink of extinction can begin a slow comeback when we protect habitat and water quality. Manatees remind us of the magic of nature, and seeing one is always a welcome thrill on the river. Along the banks and shoreline of the river there are hundreds of creatures of all sizes that are important pieces in an intricate mosaic of life along the river. Wildlife can find small places to hang on in an urban setting when we have the grace and wisdom to provide and protect habitat. Great Blue Herons, Ospreys, Ibis, and migratory birds in the seasons of transition all depend on the river and its health.

The water that flows through the river eventually reaches Tampa Bay where game fish, blue crabs, and other creatures of Tampa Bay thrive as fresh and saltwater mix. Everyday, as we drive past or over the river there is dance of life that is millions of years old taking place just beyond what we see.

These creatures of the river and bay, this magic dance of life that pulses everyday and night… they all depend on a clean, healthy river. They depend on our efforts to protect, restore, and enhance the slim tendril of wilderness that still exists in the heart of the city, and in the heart of us all.

Duckweed: Friend or Foe?

By Christina Bryant



Duckweed! Oh NO! It is a plant and can take over a pond in no time at all. But is it really that bad? Let's get to know one of the smallest flowering plants in our ecosystem. AKA: Common Duckweed, Duck's Meat,

Family: There are 22 different species of duckweed. Even though it has a large family duckweed is a free spirit. You will find it floating on top of the water and it has only one root. It reproduces at lightening speed (twice as fast as other vascular plants) through budding and by seeds.

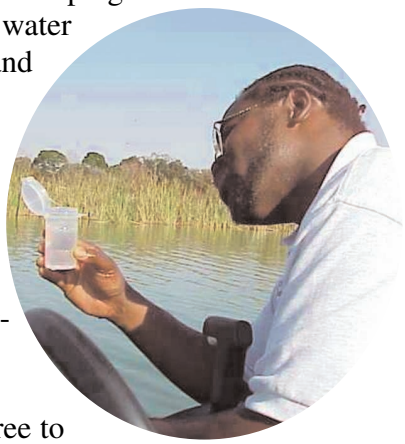
Job Description: Duckweed is an excellent filter. It removes excess nutrients from the water. If a water body has high levels of nitrogen and phosphate, the duckweed will grow rapidly (30% faster than water hyacinths). The cover of duckweed shades the pond bottom stunting the growth of algae. Usually, if a water body has high nutrient content (eutrophic), algae will overgrow or 'bloom". When the algae decay, it decreases the amount of dissolved oxygen in the water which is harmful to fish. In agricultural areas, duckweed can serve in multiple capacities. It can be grown in the runoff or retention ponds to remove excess levels of organic nutrients. Should there be an overgrowth, it can be harvested and used as feed for the animals and mixed in with silage. Moreover, it can be used as green fertilizer. Research is also underway to assess the pharmaceutical benefits of its proteins. So you see duckweed does have perks. However, if it has taken over, here are some suggestions about controlling the problem.

1. Consider reducing lawn fertilizer use. When the fertilizer is watered in, the runoff is just what duckweed needs to grow. Try using time-released fertilizers and leave a 20ft buffer from the pond.
2. Use of fine nets or pool skimmers to physically remove duckweed. Mechanical skimmers are available but they tend to be rather expensive.
3. Fish such as Grass Carp or Tilapia. Check to see if you need a stocking permit.
4. If you are considering using herbicides, please contact a licensed aquascaping company.

Word of warning! Before you do any removal consult Adopt-A-Pond !

What Exactly is in the Water? good question

Ever wonder exactly what's in the water that's in your pond? Well we do!!! And we're hoping you do as well. The program is actively looking for additional volunteers to conduct water quality testing on their ponds. Volunteers will be trained in proper testing protocols and provided with all necessary materials. Each volunteer is then asked to sample their pond once a month.



Once you've conducted your testing you can simply visit the Adopt A Pond website and submit the data online. We couldn't make it any easier. Once enough groups have been trained, and a large enough data set has been gathered, pond groups will be able to view all of the data regarding their ponds through an interactive online format.

If you feel that you may be interested in joining our group of AAP Volunteers, feel free to send us an email at mickelj@hillsboroughcounty.org with your name, address, pond group ID and pond name. Someone with the program will contact you to explain the requirements in further detail and to schedule a training date for you and our staff. We have received requests for training from many pond groups that want to become sampling volunteers. We greatly appreciate your willingness to participate. Please bear with us as we get everyone properly trained and equipped with the proper supplies.

The Adopt-A-Pond Program
Hillsborough County Public Works Dept.
Stormwater Management Section
P.O. Box 1110
Tampa, FL 33601-1110
Bill to Mail Code 1384

Pre sort Standard
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Hillsborough County Board of County Commissioners
An Affirmative Action-Equal Opportunity Employer

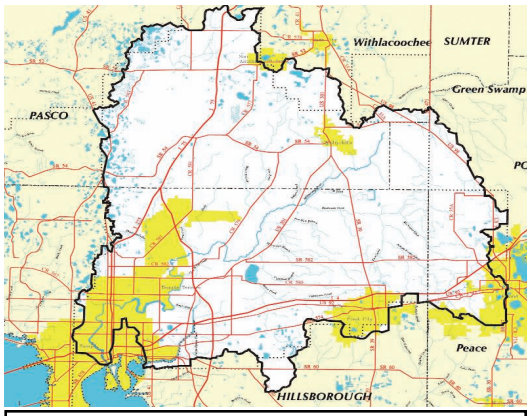
Visit These Websites

LAKEWATCH: **http://lakewatch.ifas.ufl.edu**
Extension Service: **http://hillsborough.extension.ufl.edu**
Hillsborough County Watershed Atlas: **http://www.hillsborough.wateratlas.org**
Adopt-A-Pond Webpages: **http://www.hillsborough.wateratlas.usf.edu/adopt**
Southwest Florida Water Management District: **http://www.watermatters.org**
Frog Listening Network: **http://www.seaworld.org/fln/in.htm**
Schoolyard Treefrog Monitoring Project: **http://cars.er.usgs.gov/Education**
Mayor's Beautification Program: **http://www.mbptree.org**

Help Determine the Health of the Hillsborough River Watershed!

By Devesh Nirmul of the Mayor's Beautification Program

An effort is underway to design targeted community based education programs that will improve the health of the Hillsborough River Watershed. A community based approach to the environmental management is the first step in addressing non point source pollution or land use practices and other human activities that contaminate water resources or affect the proper functioning of watersheds. As such, partners in the Hillsborough River Watershed Education Program have developed a short survey to begin this important dialogue with the community. Your participation in this survey will provide important information about the relationship that you and your neighbors have to the Hillsborough River Watershed. This information from these surveys will help us create more effective community based watershed education programs.



The Hillsborough River Watershed (SWFWMD, 2002)

The Southwest Florida Water Management District (SWFWMD) is providing support for this initiative. It is led by the Mayor's Beautification Program in partnership with the Hillsborough River Greenways Task Force and includes the City of Tampa's Stormwater Department, Hillsborough County's Stormwater Management Section, and Hillsborough County's IFAS Extension Office. Please visit the AAP website at www.hillsborough.wateratlas.usf.edu/adopt or the Mayor's Beautification Program website at www.mbptree.org to take the Hillsborough River Watershed Awareness Survey. To follow the progress of the Hillsborough River Watershed Education Program, including survey results, please pay regular visits to the Mayor's Beautification Program website.