

Making it **CLEAR**

The mission of FOLA is the restoration of Lake Apopka and surrounding wetlands



January 2005

Message from the President

Environmental Problems With Political Solutions

My friend, Jack Amon, is forever reminding me that when facing the challenge of fighting for environmental problems, especially those with political solutions, it's not a race – it's a marathon. (I have to admit right now I am not sure if someone is busy raising the hurdles or placing them closer together, but it is down right overwhelming.) There always seems to be one more cause to add while you are still in the mist of dealing with old ones and then out of no where one you thought you had won, or at least had come to terms with, ends up back in the mix.

I learned years ago to choose my battles wisely. Often I feel, however like I lose more by deciding not to fight at all. But this latest defeat (setback) has really been disheartening. The logic evades me. I am referring to the approval by the Lake County Board of County Commissioners for the extension of the runway for the proposed private Airpark at the Long and Scott farms on the north side of Lake Apopka. The flight pattern will go right over the marshes on the north shore restoration area. Orange County also approved the airpark and the expansion of the Orlando Country Garden Airport, which we were told would be closing to make way for the Airpark. Add the existing Bob White Field and that makes three airports in a 4.06-mile radius.

Taxpayers have invested more than one hundred million dollars to purchase the surrounding farms for the purpose of restoring the marshes and Lake Apopka. A major reason for the restoration will be the creation of habitat for large numbers of birds. This birding area already brings in birders from all over the world who have sighted many rare and endangered species—more critically, in this situation, flocks of large wading birds.

This airpark is not a compatible adjacent land use for this critically important restoration project. It can be argued that Long-Scott Airport has been established in this area, but the change in the landing pattern and size of the runway as well as the changes from the current use creates some serious safety concerns. The most critical deals with the on-going restoration of Lake Apopka. As the fields from the old muck farms are restored to marshes the number of shorebirds wintering and migrating through the marshes will continue to rise. The staff at St. John's River Water Management District organizes volunteers for a bird count the first Saturday of every month and report that they are seeing more birds now than in previous years and this pattern is expected to continue to rise as the restoration progresses.

These birds include large waterfowl and wading birds. Not only does the proposed flight pattern extends right over the marsh area but the extension of the runway allows for larger planes.

In the July edition of "The Auk" magazine there is a very enlightening article entitled *Competition in the Air: Birds Versus Aircraft*, which deals directly with this subject. Author Navjor S. Sodhi reports that although it is hard to know exactly how often birds and planes collide because most pilots do not report the incident (only between 20-30%) "Over 5,000 bird strikes were reported in the United States in 1999, which cost an annual \$400 million in aircraft repairs and it is estimated that at least 350 people have been killed in bird-aircraft collisions worldwide." Perhaps the most compelling and significant statement in this report, in relation to this airpark project, deals with the types of birds, which are colliding with aircraft and their behavior patterns. Sodhi reports, "Usually ducks, geese, herons, owls, and doves collide with aircraft as individuals. However, **shorebirds and starlings usually hit aircraft in flocks.**" A majority of these species will be attracted to the restored marshes in large numbers.

Sodhi also states, "Airports attract some bird species by providing them with resources such as food and nesting sites." I am concerned that the incompatibility of these two forces will bring my fears to a head. And, when birds and planes collide, where will the responsibility lie? Will it fall on the Department of Transportation for approving an airpark in this area, the State for owning the marshes, the owners for establishing an airport with a flight pattern over the marsh or, Lake and Orange counties for approving this atrocity? Once it happens what will change to keep it from happening again? Who will enforce the changes? Will these issues be resolved before this project proceeds? Or, maybe that would constitute probability. (Do I sound a little cynical?)

One of the keys for surviving the marathon is awareness. Unfortunately, in this case we were not informed. The sad thing is on December 18, 2001 this issue was brought before the Board of County Commissioners in Lake County and denied. It is so disappointing that they have reversed their decision and done so without notifying those of us who truly understand the significance of the negative impacts of this project, even though we have previously registered our concerns..

Mona Phipps, President, Friends of Lake Apopka

Lake County Proposes NuRF Project

The Lake County Water Authority is proposing to build a nutrient reduction facility (NuRF) near the Apopka-Beauclair canal. The project is intended to reduce the phosphorous levels flowing from Lake Apopka into Lakes Beauclair, Dora and Eustis. This will reduce the eutrophication effect in these lakes and improve water quality as well as water clarity.

Lake Apopka is at the headwaters of the Oklawaha watershed. Water flowing from the lake flows north through the Harris chain of lakes (Beauclair, Dora, Eustis and Griffin) then into the Oklawaha River, the St. Johns River and eventually to the Atlantic Ocean near Jacksonville. Any improvement in water quality flowing out of lake Apopka has a beneficial effect on water far downstream.

In recent years, there has been encouraging progress in the water quality of Lake Apopka. The purchase of the muck farms along the north shore along with the creation of the marsh flow-way have resulted in total phosphorous, (P), levels dropping by as much as 30%. Currently, the P levels are in the 78-82 ppm (parts per million) range. While our focus continues to be on the long-term restoration plan of Lake Apopka we certainly understand the importance for improving the water quality that flows from the lake through the Beauclair Canal and into the Harris Chain. The goal for Lake Apopka is 55 ppm, and the goal for Lake Beauclair is 32 ppm. Obviously the goals are incompatible, since the water flowing from Lake Apopka will have a

higher P level than the goal for Lake Beauclair. That is one reason the Lake County Water Authority has proposed the NuRF.

The NuRF is proposed to lie to the west of the Apopka-Beauclair canal, on the old CC Ranch property. (The use of CC Ranch property as the site for the alum treatment ponds concerns FOLA. This is one of the few sites that was never tilled for farming and could be restored to wet prairie, and is a nesting area for sandhill cranes, and it offers diverse and sustainable habitat for many bird species. It is FOLA's hope that other opportunities will be explored perhaps along the canal, which could prove to be more beneficial.) Water will be diverted from the canal, depending on the flow through it, and treated with alum in the NuRF. This will leach out the P in the water, which will then be re-directed into the canal and on to Lake Beauclair. The flocculent that results from the reaction between the alum and P will be removed from the retention pond, dried and then removed for use elsewhere. The amount of water treated depends on the flow rate through the canal.

Even with the apparent benefits of this project, it is still very expensive. FOLA is concerned that long term operation will affect funding designated for the restoration of Lake Apopka.

FOLA applauds the efforts of the LCWA and although we have several concerns about the project it is important that we continue to work together to achieve our goal of healthy lakes in Central Florida.

News Briefs

Projects and Land Committee Meeting

The Projects and Land Committee, which is a subcommittee of the Board of Directors for the SJRWMD, has scheduled a **public meeting on Thursday February 3 at 6:00 PM at Mission Inn in Howey-in-the-Hills**. The Committee reviews and provides recommendations to the Governing Board concerning planning and implementing District surface water restoration projects, water supply development projects, water resource development projects, land acquisition and land management.

Scheduled speakers include Dr. Gian Basili, with SJRWMD who will be reporting on the Apopka north shore restoration project, Michael Perry, with Lake County Water Authority will speak on their partnership with SJRWMD for the NuRF project and FOLA will give a presentation. Everyone is welcome to attend.

FOLA Online Newsletter Offer

Would you like to receive our new FOLA Update? We will be sending out a short newsletter by Email quarterly, similar to the ONP Update for the Oakland Nature Preserve. If you would like to subscribe to either or both of these, please send your request to Postmaster@OaklandNaturePreserve.org with your full name and preferred Email address. They are sent individually, not in a group mailing, in either HTML or plain text.

Christmas Bird Count

Thirty-seven volunteers participated in the Christmas bird count at the north shore restoration area and 160 species were noted. This is the highest inland count east of the Mississippi. All the totals are not in yet but some of the different species included: brown crested flycatcher, scissor tailed flycatcher, sparrows, warblers, variety of ducks, hawks, egrets, herons, kestrels, woodpeckers, swallows,

wrens, grackles, buntings and the impressive bald eagle to name a few. Is it any wonder birders come from all over the world to enjoy this area? This time of year sunset is captivating—the calling of so many species as they settle in for the night, it gives one hope that the marshes are once again able to become a productive habitat

Rotary Environmental Education Center at ONP

Ten local Rotary Clubs will break ground for a Rotary Environmental Education Center at 11 A.M. on February 19 in the Oakland Nature Preserve. The building will be dedicated later this year to celebrate one hundred years of Rotary International's commitment to improving communities throughout the world. Rotary Clubs participating in the project include Apopka, Lake Buena Vista, Maitland, Ocoee, South Lake, South Orlando, Southwest Orlando, West Orlando, Windermere, and West Orange.

Educational Kiosk at Magnolia Park



Fred Wilson, Magnolia Park Supervisor, designed and constructed this kiosk at the park's boat ramp to display a large graphic depicting the history of Lake Apopka. Created by Mike Malloy, the graphic was presented to the Orange County park by FOLA.

Keeping You in the Loop

The Friends of Lake Apopka continue to work with Lake and Orange Counties, as well as St Johns River Water Management District for the completion of the 54-mile Loop Trail around Lake Apopka. The plan for the Greenways and Trails project also calls for trail segments off the main path that offer additional access points to the lake and/or recreational areas. With the help of St. Johns, FOLA is looking at opportunities for access to Clay Island from CR 455, which has been designated a Scenic Byway, in Lake County. Another great asset to the project is The Ferndale Preserve, which is also in Lake County. This site is being considered for acquisition with funding from Florida Communities Trust with matching funds from Lake County, The Lake County Water Authority and SJRWMD. According to Lake County staff the appraisals are complete and the acquisition of the 200-acre park on Lake Apopka looks good.

Lake County is also moving forward with Phase II of the South Lake Trail, which will connect Clermont to the West Orange Trail. The last piece of right of way has been received and the construction of the trail is scheduled to be bid out in February 2005. Staff expects a 12-month construction project.

FOLA's role as a citizen advocacy group is to help create a positive means to keep the restoration of Lake Apopka in the public eye. One way FOLA is actively reaching this goal is working with the Board of Directors of the Oakland Nature Preserve, on the southwest shore of Lake Apopka and 10 local Rotary groups to build an education center which will include education on the demise and restoration of Lake Apopka and the former muck farmlands.

Other amenities on for the loop trail are the marshes on the north shore restoration area, which are among the top bird-watching areas in the country, with thousands of migrating shorebirds and are incorporated into the master plan as one of many ecotourism opportunities. Orange Audubon continues to work with staff from SJRWMD for a center in this area.

Orange County estimates between 60,000 to 90,000 people currently use the West Orange Trail every month. At this time FOLA is working with Orange County focusing on a link of the trail that will connect to Magnolia Park. It is exciting to think that eventually the trail will connect the South Lake Trail/Lake Minneola Scenic Trail, the Mount Dora Trail and the Gen. James A. Van Fleet Trail. All eight jurisdictions within the Lake Apopka basin have adopted the plan.

It is our belief that when the Lake Apopka system of greenways and trails become a reality, the trail system will raise visitors' awareness of Lake Apopka as an important natural resource, will educate the public on the importance of protecting our water resources, help to restore the Lake and will preserve a part of natural Florida for future generations.

Gizzard Shad Harvesting

This year's shad harvest began December 1 and 19 fishermen have received permits to harvest this season. As of December 21 the total catch so far this year is 170,000 pounds. The season is from December to April because the fish school more over the cooler months and are easier to catch. This year the fisherman can begin before sunrise when the shad are on the move, hopefully helping to increase the catch.

Scientists with SJRWMD have discovered that mass gizzard-shad removal benefits shallow, nutrient-rich lakes in two ways. First, appreciable amounts of nutrients (phosphorus and nitrogen) are permanently removed from the lake. Second, the changed food web and lower nutrient recycling that can follow fish removal results in lower algal growth and increased water clarity, which allows more growth by rooted plants. This plant growth will help baffle wave action and lower sediment re-suspension thus further decreasing nutrient recycling and further improving lake conditions. Highly beneficial effects of shad removal were shown in the District test lake and in other case studies. Lake Apopka has shown significant water quality improvement following implementation of a restoration approach that includes gizzard shad harvesting.

Gizzard Shad are native to Florida and in a healthy lake make-up 5 to 20 percent of the fish biomass. Lake Apopka, once noted as the bass capital of the world, is so nutrient-rich and algae-dominated that shad proliferate and account for more than 90 percent of the total fish biomass.

Dr. Gian Basili, who heads the Lake Apopka restoration, says he thinks of shad as being, "phosphorous pumps". Shad harvesting is a powerful tool in improving the health of Lake Apopka. Over the last ten years 9 million pounds of shad have been harvested from the lake, removing 64,000 pounds of phosphorus and 194,00 pounds of nitrogen.

Membership Application for Friends of Lake Apopka

Name _____
Business/Organization _____
Address _____
City/State/Zip _____
Phone / Fax / email _____
Volunteer / Interests _____

_____ Student or Youth—\$3.00
_____ Individual—\$10.00
_____ Family—\$15.00
_____ Sponsor, Corporation or Organization—\$25.00
_____ Patron—\$100.00

Please mail this form with your check. Your interest in **Friends of Lake Apopka** is vital to the ongoing restoration effort.

Make check payable to: FOLA

Mail to: Friends of Lake Apopka
PO Box 770355
Winter Garden, FL 34777

Lake Apopka Restoration Update

The Marsh Flow-Way has been operating for almost a full year and preliminary data indicate approximately 50% of Lake Apopka's volume was filtered. Staff at SJRWMD believes the volume is lower than the projected 75% for several reasons including low flows during initial startup and reduced flows for canal maintenance and hurricane preparation. Phosphorous levels, which were near TMDL target of 55ppb through the spring and early summer months, peaked after the storms in October to 138ppb, in November (which was predictable), however, it has decreased to 108ppb.

The data also show that as of mid-December .84 metric tons of total phosphorus has been removed as well as 1.04 metric tons of nitrogen and 3,665 metric tons of total suspended solids.

To date all the fish and other biota collected from all portions of the Marsh Flow-Way have had pesticide levels below the thresholds provided by the USFWS.

Much like the whole state of Florida, the restoration process on the north shore was affected by the hurricanes, especially Hurricane Jeanne. The staff at SJRWMD is working very hard to repair the damage and get back to the business of restoration. Storm water from the hurricanes is now out of Units 1 and 2, but periodic rain events may require additional pumping to keep the fields dry. Some encouraging data from precautionary sampling of

fish in Unit 2 revealed pesticide levels well below thresholds provided by US Fish and Wildlife Service, and there have been no reports of any problems with birds in the area.

Wetland restoration on the former Duda property was expanded from 683 acres to 2,245 acres. We are very excited to see the spontaneous development of wading bird colonies that included many nesting birds and no mortality.

Several new projects are being proposed. One involves the Florida Fish and Wildlife Conservation Commission, which is partnering with Orange County to create 10 fish attractants in Lake Apopka using trees and limbs downed during the hurricane season. District staff has been working with Sam McKinney of FFWCC to locate 10 appropriate sites that are at least 8 ft. deep. Most sites are situated in the southern and western areas of the lake. Another proposed project is the dredging of Beauclair Canal, which is a partnership effort between the Lake County Water Authority and SJRWMD. The Lake County Water Authority is also working with SJRWMD on the proposed "NuRF" project. (Look for an article in this newsletter).

Other Items of Interest

In the good news-bad news department: as mentioned above, the P levels in Lake Apopka have been reduced pretty dramatically recently. The bad news is the SJRWMD has placed the lake restoration fourth on the list of priorities for capital projects, primarily because of competition from other projects. We, of course, would like to see anything to do with the restoration of one of Florida's most polluted lakes kept higher on the priority list.

Announcing Oakland Nature Preserve's 1st Public Meeting

On Wednesday, January 26 at 7:00 P.M. at Oakland Town Hall, the Oakland Nature Preserve will be hosting its first public educational program of the year, "*Is There a Preserve in Your Backyard?*" The speakers will be ecologist and environmental activist Jim Thomas, president of the Oakland Nature Preserve and owner of Biosphere Consulting, a firm committed to the restoration and creation of natural ecological systems, and Bruce and Cathy Brown, owners of B.B. Brown's Gardens, which specializes in Florida native plants. The Browns are also hosts of the National Wildlife Federation's Habitat Steward Training Program. Topics of discussion will include suggestions for helping your landscape recover after last year's hurricane season, landscaping with Florida Native Plants to attract wildlife, the Habitat Steward Training Program, and how to have your yard certified as a Backyard Habitat through the National Wildlife Federation.