# Friends Of Istokpoga

## Newswire

**Friends Of Istokpoga Lake Association, Inc.** 36 Bald Cypress Street, Lake Placid, Fl 33852

Phone: 941-465-6913

In This Issue: C & CS Update,

Next Meeting December 10, at 7:00 PM

#### І втокрода:

**UPS AND DOWNS** 

by: Paul N. Gray

In the "good old days," Florida's lake levels rose and fell as they pleased. During the heavy rains of hurricanes, or El Nino years, lakes would swell to the brim, often ten feet deeper than during the worst droughts. In drought, large areas of exposed lake bottom dried in the sun. Long-term changes were superimposed on annual changes-lakes would raise several feet each rainy season (summer), and drop several feet during the dry. People trying to live along the lake's edge had a hard time, the shoreline was always on the move.

Florida's plants and animals adjusted to these radical changes in their environment, and learned to thrive because of them. Wading birds, for instance, nest during the dry times of the year, which seems strange for wetland dependent birds. But if you watch a large lake dry down, getting smaller each day, and

watch the fish therein, getting more crowded each day, and watch that bird wade into the middle of crowded fish, quickly catching enough to feed itself, and its young, then this dry-season nesting makes sense.

Lake biological-productivity benefited from the up and down water too.

Plants always have difficulty finding enough nutrients to grow optimally (we fertilize our gardens for this reason—certain essential nutrients like phosphorus, nitrogen, and potassium, usually are not abundant enough to allow plants their full growth potential). Florida has sandy soils that, by nature, are low in nutrients. When a plant captures one of these nutrients, the plant fights to keep it, keeping soil nutrients scarce. Only when a plant dies, or is eaten, will it release these valuable nutrients.

In lakes, nutrient availability is even more of a problem. Plants who die above dry ground, do so in an atmosphere that is 20% oxygen. All our little decomposers work

very efficiently in this glut of oxygen, breaking down the plant and releasing the nutrients into the environment. But plants who die above water, sink into a medium that has very little oxygen. Typical readings in lakes are 1 to 10 parts of oxygen per million parts of water, less than a millionth of that on land. Plant decomposition, and subsequent nutrient release, grind to a virtual halt under water. In the good old days, the lake would eventually drop, exposing the dead plants to air. They would rot and release nutrients. The food chain would have another injection of available nutrients. But not anymore.

To make Florida more livable for people, and predictable for farmers and ranchers, we have constructed great water management systems. Lake Istokpoga is kept, with pretty good accuracy, from falling or raising more than a foot. We no longer have to move our house each year to stay at the water's edge. Ranches rarely flood so deeply that grass won't grow. During droughts,

the lake still has water to meet our needs—for irrigation and drinking. But along with stabilizing water levels comes the loss of the lake's vital wet/dry cycle.

Now, Lake Istokpoga is filling with organic muck. The low water levels, that formerly exposed those organic materials to the oxygen-rich atmosphere, no longer occur. White sand is covered with ooze.

Normally, the loss of nutrient recycling would eventually slow muck accumulation, but in today's world, the fertilizers we all use on our lands are fertilizing the lake. Muck continues to accumulate. The lake stays fairly productive even though the decomposition cycle is interrupted.

The continued productivity fuels another process: tussock formation.

Plants grow into dense mats that float around the lake, or attach in certain areas, making a habitat that is neither upland, or wetland, and that no person can easily traverse. Tussocks actually are natural, but

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they did not last as long as now. When water got very high—they floated to shore and subsequent decreasing water left them stranded—where fire or rotting would destroy them. Low water levels made all tussocks vulnerable to fire or rotting—whichever came first.

Now, stabilized water levels allow tussocks to form and do not allow them to get stranded, or go dry. They grow, but are no longer being destroyed.

Fertilizer inputs into the lake, combined with lack of water level fluctuation, also have added dense plants along the shoreline.

Cattails were not dominant in Florida historically because we did not have enough nutrients to let them "take over." Now, with ample nutrients, and without periodic dry downs to allow fire to burn them out, cattails and other shoreline plants are more abundant than ever. In the good old days, shorelines were not so congested with plants.

The "Lake
Restoration" proposed by
the Florida Game and
Fresh Water Fish
Commission will help
reverse these events. The
lake will be drawn down,
the muck and tussocks
will be removed
mechanically, dense

shoreline plants can be removed too. When the lake refills, many problems will be ameliorated and Istokpoga will be healthier.

Unfortunately, with this kind of restoration, the problems that got the lake to this condition in the first place will remain unchanged.

Stabilized water levels will remain. Nutrient inputs will continue. We will have spent millions to do something Mother Nature used to do for free. and our problems will return. If you are a wading bird, you will be unimpressed—one draw down every 10 years or so just does not allow you to feed the young you must produce every year. The lake is not actually restored; perhaps we should call it "Lake Rejuvenation."

We are faced with a dilemma. Residents enjoy stabilized water levels because they like having water next to their house. Agriculture likes stabilized water because it gives them a reliable water supply, and flood protection. Utility companies, who must give us drinking water, support having water stored in the lake as well. Fishing people are a little more nervous-they realize water level fluctuations are better for fish, but if the water is too

shallow for your boat, you cannot go fishing. If you are a wading bird, you know the lake isn't working like you need, ever. Human interests are helped, and hurt, by stable water levels.

These dilemmas are complex and I must close this article without a solution. For Istokpoga to really become "restored," we need to restore water level fluctuations, which agencies are reluctant to do. We also need to control nutrient inputs. Happily, these problems have not "killed" the lake, and can be addressed in degrees. I think this is an opening for The Friends of Istokpoga. The problems are identifiable, and they are fixable. Some fixes will take more time than others, but there is nothing stronger than the long-term work of citizens. Nothing! The Friends of Istokpoga can make a difference for this magnificent lake.

Dr. Gray lives in Lorida and works for the National Audubon Society managing their Kissimmee Prairie Sanctuary and Lake Okeechobee Sanctuaries.

#### Message from the Fund Raising Committee

COOKBOOKS, that's what we have been up to. Once again we are trying to generate funds to keep the membership dues at \$5.00. Here is how you can help; send us your favorite recipe typed or hand printed, list the ingredients first then complete instructions and we will print it in the Friend Of Istokpoga cookbook. Deadline is November 30th, cookbooks will be available in March. Get your favorite recipe in print! Send to: Debbie Galloway 225 Wild Duck Point Lorida, Fl. 33857 or e-mail Debbie at: galloway@strato.net

For more information please call Debbie at 655-3439 or Bill at 465-6913. No copyrighted recipes please..

