



# LAKEWATCH / Project COAST

Dedicated to Sharing Information About Water Management and the Florida LAKEWATCH /Project COAST program Vol XVIII 2001

*We thought lake levels were low a year ago and yet here we are still looking expectantly toward the sky and wondering when it will rain again. Even with the rainfall in recent weeks, Florida remains in the throes of a severe drought. As a result, lakes throughout the state are experiencing significantly low water levels. A few have almost entirely dried up or are dwindling down to nothing more than a cluster of small ponds.*

*Such low water levels are certainly making things difficult for LAKEWATCH volunteers as they attempt to collect monthly water samples. Many are unable to launch their boats or keep a boat anywhere near the waterfront.*

*For instance, Don Missett sent us a photo of his lake in Citrus County (see photo of Lake Hampton on page 3) to illustrate just how low the lake is. An extreme case of low water levels has been documented by Archie Howell on Lake Croft in Citrus County (see photo at right). Residents there can't even see water from their lakeshore.*

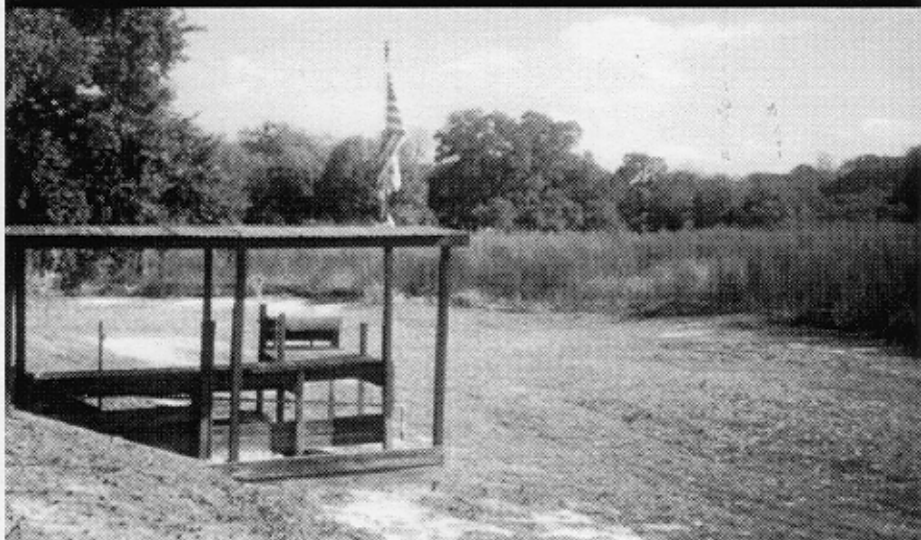
*While this may seem like rather bleak news, there is a positive side to the drought. Prolonged dry periods are, in fact, a natural process that occur from time to time and Florida's shallow lakes happen to be particularly susceptible to its effects.*

*The good news: These natural drawdowns also bring opportunities. We've highlighted a few of them in this issue.*

*However our main message is... don't give up! It will rain again and water levels will eventually return to "normal." When that does happen, LAKEWATCH/Project COAST volunteers will have the chance of a lifetime to participate in the collection of some extremely rare water chemistry data. Never before have we had the ability to collect data on so many lakes after such a lengthy period of drought.*

*So keep up the good work and stay tuned!*

## When Opportunity Knocks... The Bright Side of Florida's Drought



Archie Howell

*Lake Croft in Citrus County during a naturally imposed drawdown (a.k.a. drought).*

**A** drawdown is a lake restoration technique that involves a periodic "de-watering" of a lake whereby approximately 45% or more of the lakebed is exposed to the sun and air for a prolonged length of time.

Drawdowns are used by lake managers as an especially effective way to consolidate and compact organic sediments in a lakebed. The newly hardened lake bottom makes a good substrate for macroinvertebrates and for fish to lay their eggs. These dry periods can also help to stimulate the growth of aquatic plants once lake waters return, creating ideal fish habitat. Fisheries biologists are especially fond of drawdowns as it is a proven technique for increasing the numbers and biomass of sport fish once the lake returns to its "normal" level.

So how do scientists and lake managers know about drawdowns? They've learned from the best example of all — mother nature.

Geologic studies of lakes tell us that drought events, in conjunction with periodic flooding, serve as nature's way of ridding lakes

of the detritus and excess muck that builds up over the years. Restrictions placed on many lakes for flood control have in some instances accelerated this build-up of material. Without a man-made drawdown every so often, the muck build-up can become problematic — even to the point of causing berms to form along a lakeshore.

The lesson here?

While this latest naturally imposed drawdown (a.k.a. drought) can be frustrating for lake residents and water enthusiasts, it's all part of nature's own management plan.

**See page 3 for more on the bright side of Florida's drought.**



**UNIVERSITY OF  
FLORIDA**

Institute of Food and Agricultural Sciences

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# The Bright Side of Florida's Drought

## Low Water Exposes Treasures of the Archeological Kind

Keep an eye out when collecting your water samples these days. You could discover a piece of Florida's past.

Steve Asmann, a LAKEWATCH volunteer on Lake Louisa in Lake County did just that when he found an old dugout canoe recently. According to Steve, a sandbar had been exposed by the low water levels and he noticed the water rippling strangely near it. He got out of his boat and dug around the unidentified object a little, only to find a rare treasure indeed. He recorded the site's GPS coordinates and took pictures to document the find. Steve then contacted the LAKEWATCH/Project COAST office for assistance in tracking down an archeologist.

Regional coordinators David Watson and Julie Terrell put him in touch with Dr. James (Jim) Miller, an archeologist with the Florida Department of State. Jim is with the Division of Historical Resources and investigates claims of archaeological interest. He confirmed that the canoe is indeed a dugout which makes it of significant archaeological value. He also explained that the low water has led to a large number of finds for his department. As a result, the conservation facility is full and has a waiting list.

This means that the canoe Steve Asmann found won't be moved anytime soon, but it will be protected. The Lake Louisa State Park intends to protect it by extending their jurisdiction to include the canoe's resting place.

Dr. Miller emphasized that if you should find something of historical or archaeological interest in your area or waterbody, please call the Bureau at the number below.

He also asks that you **NOT** try to excavate it yourself. Objects that have been submerged for a long time will disintegrate when exposed to air again. Additionally, information gleaned from the arrangement of items at an archeological site may be as useful as the items themselves. He asks that you record the location of the site and then call the Bureau, leaving the site undisturbed. For more information call:

**Dr. Miller**  
**Archaeological Research**  
**(850) 487-2299**



Photo by Jeff Gageoff/AMNH.

*Ray McBee (front left) and Melissa Memory (back left) with the Bureau of Archaeological Research of Tallahassee, and Donna Ruhl (right) of the Environmental Archaeology Lab at the Florida Museum of Natural History, work to uncover one of dozens of canoes that were discovered last summer on Newnan's Lake in Gainesville. Low water levels have exposed numerous archeological treasures in lakes across the state.*

## Timely Muck Removal

Don Missett, a LAKEWATCH volunteer from Lake Hampton in Citrus County is a man who knows how to make lemonade when life hands him a lake full of lemons.

Taking advantage of the low water levels brought on by the recent drought, Don seized the opportunity to have some muck removed at his waterfront property last summer.

Don reports that the process is not as difficult as one might expect. The cost was approximately \$350 and permitting was obtained from the EPA and the Army Corp of Engineers.

First he drew a simple diagram of what he wanted done and the permitters then modified it a bit, leaving a little more muck behind than he had originally intended. Excess muck was moved to low areas along the shoreline of his property. The cleanup effort exposed sand again on over 70% of the area cleared, and extended out beyond his dock.

And according to Don, the muck removal brought about another unexpected benefit. It's also helped to dissuade feral hogs from rooting up his lakeshore; the low water brought them out to feed in the muck at the water's edge and now that the muck is gone, they've moved on.

## Good Time for a Lake Clean-up

Muck isn't the only thing that lake residents are removing now that water levels are low. Some folks are organizing lake cleanup projects. Students with the Eagle Eye program at Walker Memorial Academy in Highlands County are setting a good example.

Items found in their most recent trash collection included water skis, car parts, a pay phone box, a street sign, safe, kitchen knife, bowling ball, fire extinguisher, record player, barbecue grill, and a toy watergun.



Lake Hampton in Citrus County

Don Missett