# GEORGIA Adopt-A-Stream

Volume 11, Number 5, September / October 2004 Harold Harbert and Kim Morris-Zarneke, Editors



## Physical Stream Measurements Are Important Too

When fellow Adopt-A-Stream Advisory Board member Bob Bourne and I first observed Cobb County's Proctor Creek at Giles Road in 1996, it was showing signs of the effects of new development in the upper portion of the watershed. While recent silt and sediment deposition was evident and the biological community was less than expected for a stream reach with diverse habitats and a healthy riparian cover, there was little physical indication of streambed or channel stress. The light bulbs simultaneously flashed

in our heads: What an extraordinary opportunity to document the almost certain rapid development of a small watershed on physical configuration, biological community and water chemistry of the stream.

Despite a growing interest in stream morphology and physical response to development, few long-term studies of the physical response of stream channel, slope, and configuration to intensive watershed development have been conducted in the United States and none that we know of in the Southeast. The reason is that the responses of stream morphology may lag many years behind changes in watershed hydrology and will continue over time periods measured in decades. Research is normally funded for substantially shorter time periods, and even if available, it would be fortuitous to find candidate study streams on the verge of development. We recognized that Proctor Creek presented a rare opportunity to document and study the response of stream urbanization. The research has been reported at national conferences and at the biannual Georgia Water Resources Conference (and will be presented again in 2005).



At a recent workshop Ted demonstrates taking cross-section measurements.

The point of mentioning our study is to illustrate the need for collecting long-term data on stream crosssections in Georgia and to encourage Adopt-A-Stream groups to add the annual or biannual measurement of cross-sections and other physical measurements to their normal chemical and biological measurements. Widespread and continuing measurements of cross-sections for a wide variety of watersheds in different regions of the State would provide an invaluable data base (which Georgia Adopt-A-Stream will develop and maintain) for future study of stream morphology which could not be conducted or collected with typical research funding.

Can you collect physical data sufficiently accurate for future research? Certainly! Careful application of the procedures for measuring stream cross-sections described in the Georgia Adopt-A-Stream "Visual Stream Survey" can yield a less than 5% error in the measurement of the area of a cross-section.

If your local group is interested in adding stream cross-sections and other physical measurements to your monitoring activities, contact the State Adopt-A-Stream office at 404-675-6240. We would be pleased to provide assistance to you on how to do the measurements.

Article submitted by Ted Mikalsen

### A Decade's Worth of Achievements for Upper Chattahoochee Riverkeeper

2004 marks the 10th Anniversary for Upper Chattahoochee Riverkeeper (UCR). In ten years, UCR has compiled a substantial list of accomplishments that have protected the Chattahoochee River, its tributaries and watersheds. One of the first orders of business was to establish a Stream Monitoring Network and a Citizen Response HOTLINE Program, which annually provides assistance to 300 callers. In 1998, UCR initiated a fish consumption survey on the River to identify contaminant levels in fish and public health threats. In ten years UCR has advised local governments on soil erosion control, as well as responded to citizen's calls of violations of the Clean Water Act. And most recently, UCR led the Water Coalition in its defeat of legislation allowing water speculation for private gain. Considering the Chattahoochee River provides Atlantans with 70% of their drinking water, many of us have much to be thankful for.

A celebration to mark this occasion will be held on the evening of Friday, September 17, 2004 at The Foundry at Puritan Mill. The event will honor Ted Turner and Robert Kennedy, Jr., the leader of the National Waterkeeper Alliance. Please go to **www.chattahoochee.org** to participate.

# Looking for Indian Fish Traps

Riverine natural resources and riverine cultural resources are rapidly disappearing and need to be located, recorded & documented for the protection of the resource. Fish trap dams built by Indians and early settlers date to pre-historic times and their use continued until the 1930's. Terry Newlon of Georgia Canoeing Association & American Whitewater furnished this photo of an undated fish trap from Mountaintown Creek in Gilmer County.

Anyone seeing the telltale "V" in the current on or near a shoal should contact Bill Frazier, "Georgia's Streams/Fish Traps," at **fishtrap@bellsouth.net** or 404-292-9255 with questions or information.



# Web Links

- EPA and Weather Channel's "After the Storm" Video looks at the interconnections between water supply, water quality and economic vitality and qualify of life in our communities: www.epa.gov/weatherchannel
- Watershed Academy Web has training in watershed management fundamentals: www.epa.gov/watertrain
- US Geological Survey has info and publications on groundwater/surface water interactions, maps, and educational materials www.usgs.gov or for Georgia Resources go to http://ga.water.usgs.gov
- Environmental Statistics Group has more info on maps, including number of miles of perennial and intermittent streams, shoreline, and what percentage of the HUC is within a state, size of the HUC and more at www.esg.Montana.edu/gl/huc/index.html

#### **Adopt-A-Stream Calendar of Events**

The following workshops, taught by certified AAS trainers, provide training in visual, biological and chemical monitoring of streams. Teachers may receive 1 SDU credit for participating – please go to the AAS website under Teacher Corner for more details. Please call to register for a workshop.

What	Who	When	Where	To Register
Chemical	DeKalb AAS	Aug 28	DeKalb Co.	404-371-2540
Biological	Etowah AAS	Sept 11	Cherokee Co.	770-735-2778
Chemical	Upper Chattahoochee Riverkeeper	Sept 11	Dahlonega	770-531-1064
Getting Started w/ AAS	Georgia Wildlife Federation	Sept 11	Covington	770-787-7887
Chemical	Clayton AAS	Sept 25	Clayton Co.	678-422-2838
Chemical	Georgia Wildlife Federation	Oct 2	Covington	770-787-7887
Getting Started w/ AAS	Etowah AAS	Oct 16	Cherokee Co.	770-735-2778
Intro, Bio & Chem	Phinizy Swamp Nature Park	Oct 21, 23	Richmond Co	706-796-7707
Intro, Bio & Chem	Elachee Nature Center	Oct 22, 23	Gainesville	770-535-1976
Chemical	Etowah AAS	Oct 23	Cherokee Co.	770-735-2778
Biological	Georgia Wildlife Federation	Nov 6	Covington	770-787-7887
Biological	Etowah AAS	Nov 6	Cherokee Co.	770-735-2778
Chemical	Alpharetta AAS	Nov 13	Alpharetta	678-297-6200 x1244

**NOTE:** Workshop times vary. For the most updated information on workshops or for trainer contact information to request a workshop, please go to our website at www.riversalive.org/aas.htm.

**QA/QC Recertification:** All QA/QC volunteers must renew certification on a yearly basis. This can be accomplished by participating in the second half of our regular chemical or biological workshop.

#### Return of the Natives

This publication celebrates the diverse partnerships forming across the Southeast to stem the tide of species loss and build a foundation for future species recovery. The report covers 10 case studies. Produced by the Southeast Watershed Forum, their goal is to "foster and enhance cooperative watershed initiatives through education, training and regional dialogue." Order your copy today at **www.southeastwaterforum.org**.

#### NATIONAL HUNTING AND FISHING DAY IN GEORGIA

Each day, millions of Americans are working to conserve and improve our natural resources. They are America's hunters and anglers. September 25, 2004 marks the 33rd anniversary of National Hunting and Fishing Day (NHF Day). Events that will be offered in Georgia include six Outdoor Adventure Days, kid's fishing events and sight-in days. In addition, September 25 is a **Free Fishing Day**. Go to **www.riversalive.org** and look under Current Events for a list of events.

#### Mark Your Calendar - The 2005 Conferences Will Be Here Sooner Than You Think!

- Georgia River Network Conference, February 18 20, at Georgia College & State University, Milledgeville.
- Environmental Education Alliance of Georgia Conference, March 11 13, at Unicoi State Park. The deadline for submitting presentation proposals is September 22. For info go to www.eealliance.org.
- ▶ Georgia Water Resources Conference, April 25 26, at the Continuing Education Center in Athens.

## Celebrate Etowah 2004 September 18- November 7

Several local organizations are collaborating to create what we hope will become an annual calendar of events called Celebrate Etowah. The goal of the celebration is to educate the public about the treasure that is the Etowah watershed and to inspire local communities to come together to protect this globally significant aquatic resource. Events will include river clean-ups, hikes, canoe trips, Adopt-A-Stream classes, workshops and seminars. **All participants** 



**will receive a Celebrate Etowah T-shirt!** For more information on specific events, go to the Celebrate Etowah website at **www.celebrate-etowah.org**.



# Rivers Alive 2004 Is Here!

The website has been updated and all cleanup dates have been posted. With over 170 scheduled cleanups, there's an opportunity for everyone to participate! Go to **www.riversalive.org** to locate a cleanup.

The Georgia Adopt-A-Stream Newsletter is published six times per year. For more information about the Georgia Adopt-A-Stream program or to contribute to the newsletter, call or write to:

Georgia Adopt-A-Stream Environmental Protection Division 4220 International Parkway, Suite 101 Atlanta, GA 30354 (404) 675-1639 or 1636 www.riversalive.org/aas.htm

Printed on recycled paper



