

GEORGIA

Adopt-A-Stream

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Allison Hughes and Sally Mason, Editor



The Rediscovery of a Rare Flint River Jewel: The Fat Three-ridge Mussel, *Amblema neislerii*

The Flint River is known for the diversity of aquatic life that it harbors within its main channel and tributaries. This includes an abundance of freshwater mussels. With over 300 species described in North America, a great portion of these is concentrated within the Southeast. Historically, 29 species within the Flint River system are known to occur, including 7 species found nowhere else. Notably, tributaries of the lower Flint contain the highest concentration of threatened and endangered mussel species in southern Georgia.

So why should we care? Freshwater mussels provide us with many important ecological benefits. As living filters, mussels remove excess nutrients and particulates that could potentially harm aquatic organisms, as well as overall water quality. They are also a significant food source for many aquatic and terrestrial animals. Often called 'silent sentinels,' they are sensitive to certain levels of pollutants, acting as barometers of ecosystem health and indicators of water quality.



Mussel populations have been decimated by industrial, agricultural and domestic pollution, river impoundments, deforestation and intensive upland development. Listed as an endangered species by the U.S. Fish and Wildlife Service in 1998, *Amblema neislerii*, like so many other species of mussel, have a history of threats from human activities and are now considered the most endangered faunal group in North America.



One of the endangered species, the Fat Three-ridge, *Amblema neislerii*, was rediscovered in the Flint River in Newton during a survey held with a mussel workshop at the Jones Center in August. Endemic to the main channel of the Flint River (and the Apalachicola and Chipola Rivers in Florida), this species has not been found in the Flint River since 1988.

Finding that the Fat Three-ridge still occurs within the Flint at Newton is an excellent indication that water and habitat quality are good in the region. Much of this can be credited to largely intact streamside forests, which act as buffers protecting the river from adjacent human activities and careful treatment of industrial and municipal discharges.

Written by Tara Muenz - Research Technician III, Joseph W. Jones Ecological Research Center

Adopt-A-Stream Flows into Southwest Georgia

An annual week-long teacher training workshop was held in June at Joseph W. Jones Ecological Research Center at Ichauway. Twenty teachers from around the region attended the Environmental Education Research Academy (EERA). This program is a cooperative effort between the Jones Center and four of the region's Georgia Youth Science and Technology Centers (GYSTC). Working with scientists and technicians on Ichauway, the course teaches educators about the natural resources of the region so that they can take this information back to their classrooms and more effectively incorporate environmental education into their curricula. Teachers chose two of four subject areas to study that included aquatic ecology, forest ecology, plant ecology and wildlife.



Another annual event held in June at the Jones Center was a two-day program called the Living Flint. This program is an educational journey down the Flint River from the upper basin to its terminus at the Gulf of Mexico. Along the way, teachers learn about the hydrology and ecology of the river, water quality, and water resource issues, including socio-political and economic perspectives. The group focused on natural systems and water quality while on-site at Joseph W. Jones Ecological Research Center at Ichauway.

In July, several teachers in southwest Georgia completed AAS biological and chemical training through a Math and Science Partnership Grant Program. The cooperative program between Georgia Southwestern State University and the Sumter County School System provided an opportunity for middle and high school science teachers to learn about aquatic ecology, macroinvertebrates and water quality issues. As part of a Summer Institute, AAS trainers Drs. Hap Tietjen and Tom Weiland worked with the science teachers in the classroom, lab and field. Fieldwork focused on local streams with safe and easy access where students could participate in the sampling process. As a result of the program, several of the teachers are now QA/QC certified volunteers. Partnerships have also been established to increase the number of volunteers and adopted streams in the southwest Georgia Adopt-A-Stream Program.

Adopt-A-Stream Partners with the Flint RiverQuarium

The Flint RiverQuarium, known for its amazing 175,000-gallon 22-foot deep Blue Hole Spring Aquarium, is one of Adopt-A-Stream's newest partners. The partnership was developed to increase public access to citizen monitoring equipment in Southwest Georgia. The Flint RiverQuarium, located in Albany, GA, is the home of several Adopt-A-Stream monitoring kits. If you would like to gain more information about reserving one of these kits, please contact Melissa Martin at MMartin@flintriverquarium.com or by calling 229.639.2650.

EPA's New WaterSense Program

Did you know that widespread adoption of weather-based irrigation controllers could improve the health of our nation's lawns and potentially save more than 11 billion gallons of water each year? This savings is equivalent to the amount of water from more than 3,200 garden hoses flowing continuously for one year! Water-efficient technologies, such as smart irrigation controllers or soil moisture sensors only water your plants when they need it, saving even more of this precious resource. EPA's new WaterSense Program (www.epa.gov/watersense) will also help save both water and money, while enhancing the appearance of your landscapes. This new voluntary partnership program helps identify water-efficient landscape irrigation technologies and irrigation professionals with demonstrated water efficiency knowledge.

Give Us Your Tired, Your Weary, Your Dedicated...Volunteers that is!

It's time for our annual awards, so please consider nominating a person or group for one of the six awards listed below. The nomination process is simple; just send Georgia Adopt-A-Stream a short essay explaining why your nominee deserves the award. Remember to include the name of the person or group and the name of the award. The deadline is **January 8th**.

Volunteer of the Year

This goes to the individual who has gone beyond the call of duty to protect Georgia's waterways and support the Adopt-A-Stream mission, giving their time and energy to improve our waterways.

Extraordinary Volunteer Watershed Effort

Protection of our streams starts with the protection of our watersheds. Help us recognize the group that has accomplished the most to blur political boundaries and confront local issues by working in the watershed.

Red Flag Award

Perseverance, environmental awareness, a keen understanding of water policy, and a desire to act when a problem is detected are the traits we are looking for in our Red Flag Award.

Outstanding Outreach and Partnership

The first step in conservation is awareness. And awareness only happens through effective outreach efforts and partnerships. Nominate a group or person that has demonstrated skill in effectively organizing and educating others.

Adopt-A-Stream in Action: Video or Photography

A photograph is worth a thousand words. Often times a photograph is all that's needed to identify a problem. Send us your exceptional images and a short justification.

Excellence In Data Collection

Volunteer monitoring data can make a difference, but only if it's collected consistently and under a QA/QC plan. Nominate an individual or group who has consistently collected quality data.

Adopt-A-Stream Watershed Awards

The Adopt-A-Stream Watershed Awards honor the efforts of local government agencies working to improve Georgia's waterways through participation in the Adopt-A-Stream Program. Four potential winners will be selected from four categories based on the size of the local government. To submit an application for an Adopt-A-Stream Watershed Award, the applicant must describe in 3 pages how they have accomplished the four Adopt-A-Stream goals. Please go to the Georgia Adopt-A-Stream website at www.georgiaadoptastream.com to download the award submission guidelines and application. All applications are due **January 8th**.

Georgia River Network's 3rd Annual River Celebration Awards to be presented at the Georgia River Network Annual Conference - February 16-17

Georgia River Network seeks nominations for the third annual Georgia River Network River Celebration Awards. The award program was designed to celebrate the successes and dedicated efforts of river activists in Georgia. Award recipients will be honored during a ceremony at the 2007 Georgia River Network Conference in Milledgeville on February 16, 2007. Award Categories include River Conservationist of the Year, Watershed Group of the Year, and Volunteer of the Year. Individuals and organizations who successfully work to improve and protect Georgia's rivers are eligible. Nominations by phone, email or letter are due to the Georgia River Network by December 8, 2006. More information can be found on www.garivers.org or by calling 706.549.4508.

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 PLU credit for participating. Please visit the AAS website under the Teacher Corner heading for PLU information. Please call to register for a workshop.

What	Who	When	Where	To Register
Adopt-A-Wetland Biological	UGA Marine Extension DeKalb Co. AAS	Nov 21 Dec 9	Skidaway Island Chamblee HS	912.598.2348 404.675.1636
Adopt-A-Wetland Chem & Bio	UGA Marine Extension Ogeechee-Canoochee Riverkeeper	Dec 9 Dec 11	Skidaway Island Statesboro	912.598.2348 478.289.6523
Visual & Chemical Biological	Savannah Riverkeepers Savannah Riverkeepers	Jan 6 Jan 13	Augusta Augusta	706.364.5253 706.364.5253
Adopt-A-Wetland	UGA Marine Extension	Jan 13	Skidaway Island	912.598.2348
Adopt-A-Wetland	UGA Marine Extension	Jan 25	Skidaway Island	912.598.2348
Chemical	Metro Atlanta AAS	Jan 27	REI - Atlanta	404.675.1635
Intro, Chemical & Bio	Elachee Nature Center	Feb 16-17	Hall County	770.535.1976

Workshop information is updated weekly on our website at www.GeorgiaAdoptAStream.com

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.

2007 EEA Annual Conference, March 30th – April 1st at the Jekyll Island Conference Center

The 2007 EEA Annual Conference will be inviting environmental educators to share their experiences and discuss "Connecting Environmental Education to My Students, My Community & My World." For details visit www.ealliance.org.

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) 675-1636 or 1635
www.GeorgiaAdoptAStream.com**

