



Current Events



The Newsletter of the Arkansas Stream Team

Volume 13, Number 4

October – December 2009

News from Region II (Delta) Stream Team Coordinator, Stephen O'Neal...

The final Quarter of 2009 was certainly productive and absolutely, unmistakably, and unequivocally WET—the state received record rainfall amounts and massive flooding was seen in many parts of the state. Nevertheless, the Stream Team was actively wading through and making things happen on several fronts.

The Bald Knob fifth-grade class started their venture into the watery world of water quality monitoring with a talk from their Regional Stream Team Coordinator. Later, they visited the inflow of Bald Knob Lake and performed a litter pickup. They are planning a 'bug kick' and water chemistry testing in the spring. Well done, folks! You all had a great time and were doing your best to keep *the Natural State*...natural.



***Get your feet wet---you never
know where it will lead until
you jump in!***

A site was visited on the South Fork of the Spring River near Salem where severe bank erosion has been occurring along a 600 ft. stretch of the river. Plans have been developed to take advantage of (hopefully) lower water conditions in 2010, and renovate the site to include riparian area plantings, boulder clusters, and instream habitat and velocity breaks for fish habitat improvement.



Massive bank erosion results in poor aesthetics, degraded water quality, and sediment-choked fish spawning beds. Restoration of such sites benefits many stakeholders in the watershed, as well as aquatic life.

The Alf Jr. High School in White County was introduced to the Stream Team and took a stream stroll along Gin Creek in order to perform a litter pickup. The students removed a large amount of trash in a short period of time. Sometimes the rural streams that pass through our towns are underappreciated as mere “ditches.” However, from their short walk beside the flowing waters they are interested in studying, the students have gained a full appreciation for the aesthetics that this stream, and others like it, provides.



Water quality testing on the biological front results in some fascinating animals. This mayfly was scrambling in the net after a short ‘bug kick’—these and many other macroinvertebrates are used to rank stream and watershed health.

Some of our Stream Team “ambassadors” (reptiles and amphibians) were on display at a local business in Searcy, and were a hit with young and old. Discussions surrounding our rivers and streams naturally ensued, as the draw of live animals and the habitat in which they live are naturally fascinating. They are a great way to promote stewardship projects, water quality issues, and mention broader Game and Fish issues, as well. Many thanks goes to our live animals—without them our efficacy would be much reduced.



*Sometimes a picture is worth a
thousand words.*

**News from Region III (Gulf Coastal Plain)
Stream Team Coordinator [currently
vacant]...**

NOTE: The following articles/pictures in the “News from Region III...” section of the newsletter were submitted by Dr. Ed Bacon, leader of the ‘Lower Saline River Stream Team’ and biology professor at the University of Arkansas at Monticello.

LOWER SALINE RIVER STREAM TEAM

Members of the Lower Saline River Stream Team are shown (below) conducting the annual trash clean-up of the Saline River, from the Highway 278 Bridge to Ozment's Bluff. The Lower Saline River Stream Team has been active for the past 10 years in promoting education and environmental protection to the Saline River watershed.

The members have provided the leadership in recycling aluminum cans and plastic bottles on the campus of the University of Arkansas at Monticello, to help reduce disposal of litter in the watershed. Stream Team activities include the annual trash clean-up, ecological studies of the river ecosystem, and water quality monitoring.

Letters to environmental groups and newspaper articles promote public awareness and encourage citizens to participate in watershed conservation efforts of the Saline River. Current projects include a water quality study, an assessment of the mussel populations, and the habitat value of macrophytes and woody debris for aquatic animals.

Citizens interested in information on the Lower Saline River Stream Team and the lower Saline River should contact Ed Bacon, 345 Crestwood, Monticello, Arkansas 71655; Telephone 870-723-4671.



Members of the Lower Saline River Stream Team include (from left to right): Misty Temple, Maranda Henley, John Hunt, Michael Cagle, Lindsay Rymes, Sara Prior, Chris Sims, Stephen Cagle, Andres Bacon, and Amy Hoang.



Photograph: *Pectinatella magnifica* in the Saline River.

The freshwater bryozoan, *Pectinatella magnifica*, is a common colony of animals in ponds, lakes, and rivers of Arkansas. Many observers of these organisms do not recognize the colonies as animals. They have sometimes been called “water brains” and mistaken for masses of amphibian eggs. This group of animals has an ancient history with fossils dating back about 500 million years to the Cambrian Period. These colonial animals belong to the Phylum Bryozoa (moss + animal), and technical common names used by scientists include moss animals and bryozoans. There are more than 5,000 species of bryozoans, but only about 50 species are known from freshwater habitats. In North America, *Pectinatella magnifica* was first reported from Massachusetts in 1866. The original known distribution of *Pectinatella magnifica* included Canada and the United States, but since 1980 they have been reported from countries in Europe and Asia. Large colonies of this bryozoan can frequently be observed throughout the Ouachita River Basin

including the Ouachita River and Saline River, and also in Lake Chicot.

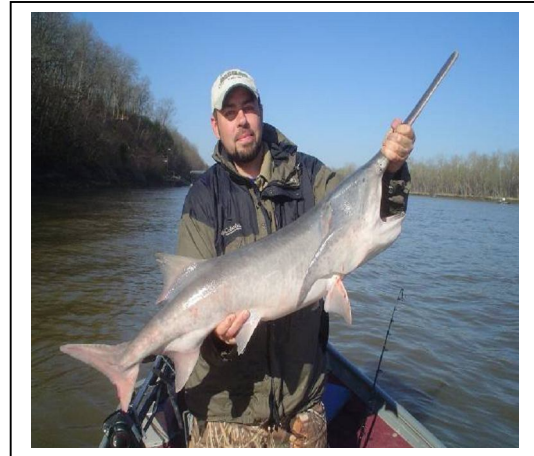
Colonies are usually more abundant in warm, productive lakes, ponds, and rivers. In rivers, they prefer calm, slow-moving waters, and colonies often attach to plant stems, submerged trees, and boat docks constructed of wood. The overall coloration of the colony is brown with clear areas, when viewed from underwater. The interior of the colony is a gelatinous mass consisting of 95-to-99 percent water. Each individual possesses a ciliated feeding apparatus called a ‘lophophore’ that is attached to a u-shaped intestine. Animals in the colony are suspension feeders that ingest mainly algae, bacteria, and detritus from the water. Large colonies may remove large amounts of suspended matter and may increase the clarity of the water.

During the summer and fall, buoyant statoblasts are produced and released into the water that will settle and develop new colonies during the next year. Colonies typically start to disintegrate during the fall and drift towards the shoreline in ponds and lakes, or downstream in rivers.

The Region III Stream Team Coordinator position is currently vacant due to budget cuts. Andy Turner (former Region III Coordinator) is now serving as the Region IV Stream Team Coordinator, after Jim Ahlert’s retirement. The Region III news will continue once this position has been filled.

News from Region IV (Ouachita Mountains and Arkansas River Valley) Stream Team Coordinator, Andy Turner...

Since the last newsletter, I have transferred to the Russellville Regional Office and am now the Stream Team Coordinator for Region IV. However, while I get new projects going in Region IV, I am still finishing-up the ongoing Stream Team activities in Region III. With all the precipitation, there are no shortages of erosion problems in either region, so future projects should be plentiful. With the near-constant precipitation, stabilization projects have been on-hold for months now but, with a little luck, they should get started when the weather warms up a bit.



The first paddlefish I ever snagged. Paddlefish are a strong fighting sportfish, and are also great table fare. Their meat is thicker and denser than most other sportfish, making the meat great for grilling.



Mark Jansen's newly stabilized streambank on the Ouachita River near Arkadelphia. The bank was sloped, the toe protected with rock, and all that is left is to plant vegetation when the weather warms a bit.

Mark Jansen, from Arkadelphia, recently finished up an erosion control project on the Ouachita River. Mark has been working with the Stream Team to address his erosion problems and, after significant planning, this project has come to fruition. Eroding banks were sloped back and the lower section was covered with large rock to halt erosion and provide stabilization. In the spring, we will return to the site to plant vegetation on the upper bank through the erosion control matting that was anchored there. This vegetation will help dissipate energy from floodwaters and stabilize the slope's soils, as well as provide shade and habitat for wildlife..



Section of stream to be rehabilitated in the DeQueen City Park.

I have also started working with the city of DeQueen to help resolve erosion issues in the city park. Currently, a small stream running through the park is actively eroding, and is becoming increasingly unsightly and ecologically unhealthy. To remedy this situation, the Arkansas Game and Fish Commission's Stream Team, and the city of DeQueen, are working together to develop a successful remediation project. This work will include bank stabilization, construction of pool forming structures, native vegetation plantings, and rehabilitation of an artesian well. Post construction will provide an aesthetically pleasing area with the recreational function of a city park.



The unsightly artesian well that is to be rehabilitated into an aesthetically pleasing and functioning well system.

The Stream Team is also working with the U.S. Fish and Wildlife Service to help with an alligator gar fish passage structure on a tributary to the Fourche LaFave River. Alligator gar populations have been in decline due to damming, overfishing, hydrologic alteration, and loss of reproductive habitat. These fish are sensitive to population decline as a result of life history requirements that often conflict with human activities. Alligator gar do not reach sexual maturity until they reach near to 30 pounds (they grow to over 250 lbs.), and are therefore very susceptible to overfishing, as they must survive fishing pressure for long periods of time before they can produce the next generation. However, loss of reproductive habitat and hydrologic alteration are likely the more important factors resulting in the decline of alligator gar.



Adult Alligator Gar

Reproductive requirements of gar are best found in areas where we humans also find some of the best cropland, and most waterways in which alligator gar inhabit have experienced substantial hydrologic alteration. As a result, locations and ability to successfully spawn the next generation of alligator gar has been largely lost. A few tributaries remain as hot spots for alligator gar spawning, and work is being done to help ensure that these tributaries continue to function as spawning areas.

News from Region I (Ozark Highlands and Boston Mtns.) Stream Team Coordinator, Dave Evans...

Well, 2009 has gone the way of the “Dodo bird,” and 2010 is moving right along. At the time of this writing, it is snowing in the Ozarks. We received approximately four inches yesterday, and this is our third snowfall since Christmas morning. Our first white Christmas in a number of years occurred in 2009, and the kids loved it...even though it was very short-lived.

October through November saw a number of water quality testing outings by several schools and adult Stream Teams at a couple of sites in the western Ozarks. Larry Buell and Matt Pledger took their West Fork Middle School classes on an outing to the West Fork of the White River at West Fork a couple of times. Hal Johnson lead the “Master Naturalists” from the Rogers area on a visit to Frisco Springs near Rogers, and Tanyard Creek near Bella Vista.

The West Fork school kids had a ball “kickin’ bugs” and learning how to use the HACH water quality test kit during two different trips to the city park on the West Fork! They were surprised (as it seems like folks always are) at the number and variety of bugs that live down among the rocks. After a short-lived “icky” factor, everyone was splashing around, netting bugs, and enjoying another “day at school.” During the November outing a couple of girls completed the day by going swimming.

The *Master Naturalists* held an initial training session at the Lake Atalanta Park between Rogers and Beaver Lake. This group (composed mainly of retired folks) will be expanding across Benton County to cover streams from Bella Vista to Rogers. So far, they’ve tested on Frisco Springs in Rogers, and Tanyard Creek in Bella Vista. We’re working on additional training sessions, as soon as the weather cooperates a little.

Last fall, work began on two different stabilization projects in Region I, one on the Little Buffalo River, and one on Long Creek. As I mentioned in the last newsletter, it seems like every time a streambank stabilization project starts...so does the rain.

The Little Buffalo River project near Jasper (Newton County) was delayed by rains several times during the construction phase. We finally got it completed, except for the shrub/tree planting and, in addition, conducted the “as-built” survey. Then, guess what...it really rained! The night after the as-built survey, a storm moved through the Jasper area and dumped enough water so that the Little Buffalo experienced a “10-year” storm...just our luck. There was damage done to the structures and repair work is planned...as soon as the ground dries out and the rain and snow stop falling.



***Little Buffalo River
Flood Debris and Water Line***

The other project started is on Long Creek, near Carrollton in Carroll County, and is partially funded by the National Fish and Wildlife Foundation. Initial construction was delayed by the rains, but work finally began in early December. This project will have a 500 foot-long LFSTP (longitudinal filled stone-toe protection), and about five rock vanes. We've installed two-thirds of the rocks for the LFSTP, and have begun to backfill parts of the flood bench.



***Long Creek Stabilization Site
Before Work***

We also spent one day cutting willows to plant along the toe of the LFSTP and rock vanes. I knew that soaking the willows in the creek would tempt the beavers to sample the "salad bar," but I never thought they would wipe-out 75% of the willows over the week-end!



Beaver "salad bar"



Long Creek Stabilization Project

Actually, a third project has started in Carroll County. This one is on Mill Creek in Berryville, and is being funded through a partnership between the Arkansas Natural Resources Commission and the Arkansas Game and Fish Commission, and will involve the installation of several grade control structures. Mill Creek runs through the middle of a city park, and is experiencing significant bank erosion, as is often the case in urban areas. A portion of the required rocks have been delivered to the site. As of today, the plans are for the actual construction to begin in February of 2010.

HAS ANYTHING CHANGED?

Please let us know if your address, phone numbers or e-mail information has changed.

Name: _____

Address: _____

City, State, and Zip Code: _____

Home Phone: _____ Work Phone: _____

E-Mail: _____

Mail to: Stream Team Coordinator
2 Natural Resources Drive
Little Rock, AR 72205

(OR)

E-Mail to: sfilipek@agfc.state.ar.us

For those reading a Stream Team newsletter for the first time, Stream Teams are groups of citizens from 6 years old to 96+ who care enough about Arkansas' water resources to form or join a team and adopt a stream or other water body in the state for the purpose of keeping it clean and healthy. Started in 1996, there are now over 500 Stream Teams statewide that carry out a variety of activities in the quest of keeping our state's water more natural. These teams conduct litter pickups, repair eroding streambanks on willing owners' land, plant trees to restore degraded riparian areas, work with local leaders to better manage their watersheds, and a variety of other activities aimed at conserving one of the most valuable of Arkansas' natural resources, its water. Anyone out there who hasn't already joined this winning team and is interested in joining the Stream Team, or learning more about this grassroots way to conserve our state's water resources, can contact Steve Filipek at the AGFC (501) 223-6371, or e-mail him at sfilipek@agfc.state.ar.us. There is no cost to join. Classes on how streams work, what animals live in and around them, and how a healthy stream functions, are offered each year at a reasonable rate.



NEWSLETTER AVAILABLE VIA E-MAIL.

In an effort to conserve resources, Stream Team members with current e-mail addresses were notified of the option to receive the newsletter via

e-mail. If you have not received an e-mail notification and would like to receive the newsletter via e-mail, please notify Steve Filipek at sfilipek@agfc.state.ar.us, or at (501) 223-6371.

► **NEWSLETTER UPDATE:** *Easier access (a direct link) to the Stream Team Newsletter has been made available on the Internet: <http://www.agfc.com/streamteam>*

Stream Team Name: _____

Activity Sheet

Stream Team #: _____

[illegible]

The Process of becoming a STREAM TEAM...

1. Express an interest and request more information: **Send your name, address, and phone number to:**
STREAM TEAM PROGRAM COORDINATOR

Arkansas Game and Fish Commission

2 Natural Resources Drive

Little Rock, AR 72205

2. Sign up. You will get the newsletter and be counted among Arkansas' STREAM TEAM members. This will also get you in the network of those wanting to help out Arkansas' waterways.

3. Adopt a stream. To become more involved in the program you can adopt a stream. Select a stream that you or your group are particularly concerned about. For example...the creek on your land, your favorite fishing hole, or the stream you drive over every day to work or school.

A. Inventory your stream with help from STREAM TEAM coordinators.

B. Decide what you want to do---trash pickup, habitat improvement, water quality monitoring, and/or whatever is of interest to you!



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Arkansas Game and Fish Commission
2 Natural Resources Drive
Little Rock, AR 72205

TO: