



Current Events



The Newsletter of the Arkansas Stream Team

Volume 15, Number 3

July - September 2011

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

Stream Team Helps Save History and Improve Fish Habitat

As you all may know, the Region III *Stream Team* has not had a coordinator in the Camden office for some time now. Steve Filipek, *Arkansas Stream Team* coordinator, and others are trying their best to cover that area of the state, which is essentially the southwest corner of Arkansas. In August, AGFC *Stream Team* coordinator, Stephen O'Neal, and staff fisheries biologist, Andrea Daniel, along with Education and Information Division's magazine editor, Jeff Williams, and AGFC photographer, Mike Wintroath, drove with Steve to the Toltec Mounds, near Scott, Arkansas, to work with our compadres in the Arkansas Department of Parks and Tourism. Also, as you may know (and if you don't, this place is a 'for sure' visit you want to make when you have time), the *Toltec Mounds Archeological State Park* is an incredible historical state park, right here in Arkansas. In fact, it's easily accessible, as it is located in the center of the state. This state park has approximately 18 mounds constructed by the Plum Bayou Culture; some of the artifacts date back 4,000 years. The park is laid out very well for anyone wanting to visit and experience a piece of history – the nature of which one will discover is hard to find anywhere else in Arkansas or the U.S.



*Volunteering at the Toltec Mounds Archeological State Park
with Erosion Control Matting in Place*

The village is situated on a river scar lake of the Arkansas River, near Scott, Arkansas, just outside of North Little Rock. Since it is next to a lake, wave action and high lake levels began eroding one of the mounds – ‘Mound P’. Park superintendent, Stewart Carlton, and state park archaeologist, Dr.

Elizabeth Horton, contacted the *Arkansas Stream Team* to see if there was anything that could be done to keep them from losing hundreds of pieces of pottery and other artifacts from ‘Mound P’. Stephen O’Neal and Steve Filipek did a quick survey of the area, wrote up a plan and, along with the other AGFC personnel mentioned above, worked with Arkansas Parks and Tourism personnel and several Arkansas Archeological Survey volunteers (names listed below) to “heal” the erosion. The group worked hard throughout the entire day and finished all the work in one day. ‘Mound P’ is now in much better shape, having been covered with some erosion control matting, grass seeded below the mat, and natural logs from the area secured at the bottom of the slope, near the lake, to buffer the edge of the mound from the wave action and high lake levels. Later, native river cane and other shrubs and trees will be planted through the matting to stabilize the lake bank. This will keep the hundreds, if not thousands, of artifacts in ‘Mound P’ where they belong, saving the pottery shards, deer tools, and other historical artifacts in place, while also providing fish cover for the numerous shore spawning species of fish in the lake. We cannot say “thanks” enough to Stewart and Dr. Horton for their coordination and work on the project. State park employees, Robin Gabe and Amy Griffin, worked the entire hot, summer day and helped tremendously. And, possibly, the most “kudos” go to volunteers and archeological buffs Carl Drexler, John Riggs, Don Bragg, Jessica Howe, and Don Higgins who worked in the blistering heat to help save history, all for a Subway sandwich, some water, and a few cookies. Thanks “*team*” for a historical effort in one time period...to save work done in another!

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

Well, it looks as though the heat of summer has finally taken a break here in the Arkansas hill country. Even though fall has barely stuck its head in the door, a fair number of trees already have brown leaves. That is most likely due to the drought this past summer. Personally, several nice, large oaks and one of our shortleaf pine trees are showing the stress of last summer. I’m hoping they make it, especially the pine. Hopefully, your trees have fared better than ours.

In July, Matthew Irvin, the *Stream Team* coordinator from Russellville, and I drove to Omaha, Nebraska to attend a Streambank Restoration and Riparian Area Workshop presented by the Army Corps of Engineers (ACOE). We spent part, if not all, of three days in the classroom, and the remainder of the time visiting project sites around Omaha. The in-class sessions dealt with various stabilization techniques and riparian corridor enhancement practices. On the field trips we looked at several project sites that were in various phases of completion. One of the things that really struck me was the fact that, at one site, the plan called for the removal of all of the vegetation within the riparian buffer. We were told that this is “prairie country,” a natural system in their area that does not have any trees associated with it. I am glad we have trees in our state, and that they play a vital role in maintaining a healthy stream ecosystem.



No trees at this site



Flooding in Nebraska

The spring floods were rather harsh this year, they impacted a lot of folks in Arkansas. On the trip to Omaha, Matthew and I had to detour (for quite a long way), starting at the Missouri/Nebraska border. The reason for the detour was because the Missouri River was in flood stage. In fact, it had been flooding for quite some time, and the waters were not estimated to recede until late this fall. As you can see from the photo, the area was hit hard.

In early September, the annual *Lee Creek Litter Pick-up* was held at Devil's Den State Park. This event is sponsored by a large group of people who love Lee Creek and Devil's Den Park. This year there were 215 participants that included individuals, school groups, and representatives from over 30 community organizations. These folks spent a beautiful morning picking up trash and bringing it back to the collection site. In all, over one ton of trash was removed from this picturesque area. At noon the participants feasted on barbecued chicken, hamburgers, veggie burgers and hot dogs. Thanks to all of the individuals who made this another successful litter pick-up and, in addition, a special mention goes out to John Pennington, from the U of A Extension Service, for all of his hard work.



Lee Creek Litter Pick-up --- Some of the Trash



The Participants



◀
*Rocky
Raccoon*



▶
*Smokey
the Bear*

The stream monitoring groups in the Ozarks were busy this summer. The *Master Naturalists* held a training session on War Eagle Creek, at Withrow Springs State Park, in Madison County. This particular group is a sub-set of a larger group of mostly retired people who are monitoring a number of streams in northwest Arkansas. Some of the places they monitor include another site on War Eagle Creek, Frisco Springs in Rogers, and Van Hollow Creek in Hobbs State Park. “Way to go, folks! Keep up the good work!” Special “thanks” are owed to Hal Johnson for all of his efforts in coordinating the activities of these *Master Naturalists*.

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

The third quarter *Stream Team* activities in Region II was filled with many stewardship preparation activities in the form of riverine survey work, fisheries baseline data collections, mussel surveys, and other biological assessments necessary prior to performing streamside restoration activities. In the below scene, Sam Henry, assistant district fisheries biologist, readies the truck and trailer for the docking of the electrofishing boat, captained by district fisheries biologist, Jeremy Risley, after an extensive electrofishing survey to collect baseline information on a project slated on the Eleven Point River west of Pocahontas.



Stewardship activities start with a baseline biological assessment. District fisheries biologists, Jeremy Risley and Sam Henry, are the key component in that effort, as they are seen here returning from an electrofishing survey.

Freshwater mussel and crayfish surveys are conducted prior to performing any streambank restoration techniques in order to ensure no *threatened or endangered* aquatic animals are in the immediate area of influence. If animals are found, they are relocated upstream in adequate conditions, near the vicinity, so as to protect them from harm during construction activities. Most generally, the areas that are in need of restoration are under such duress and dramatic transition (in the form of severe erosion) that there is little chance of finding animals in these zones—BUT, extensive surveys are conducted, nonetheless, to ensure no animals are harmed. Once stewardship activities are completed, the areas are much more habitable for these animals, and the amount of sediment deposits being reduced greatly improves the probability that mussels, crayfish, herpetofauna, and the fisheries will inhabit those zones in the future.



The South Fork Spring River, north of Salem, produces some of its bounty after an extensive mussel survey conducted by the state malacologist, Bill Posey. Common names for these mussels are (from the upper-left clockwise): creeper, elk toe, plain pocketbook, and spike.

This area of the Spring River is experiencing a severe erosion issue, and has lost nearly two acres of land since 2011 began. Areas such as this do not typically contain much in the way of freshwater mussel activity, but they are surveyed extensively to ensure that no 'threatened or endangered' animals are harmed during a restoration effort. Once the area has been restored and has adequate habitat components installed, the zone is much more likely to repopulate with mussels and other species of greatest conservation need.





A Hookah outfit pumps air to submerged diver Bill Posey as he surveys a reach of the South Fork Spring River for mussel species which may be present in a zone scheduled for streambank restoration and habitat improvements.

Jeff Quinn, state stream management biologist, and Steve Filipek, assistant chief of the Fisheries Division, conduct an electrofishing sample to determine the health of the local fishery on a small creek in central Arkansas.





Brian Wagner (non-game aquatics biologist) identifies, records lengths, and weighs darter species in a recent biological survey. Experts, such as Brian, are invaluable to the process of determining the overall stream health and status of some of our (often overlooked, but key) species located throughout the state.

With the professional help of fisheries biologists, malacologists, herpetologists, non-game biologists, stream biologists, concerned landowners, and *Arkansas Stream Teams*—much is being done to conserve and enhance Arkansas’ water quality, land resources, and aquatic environments. It is truly a TEAM effort!

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

The focus for this past quarter has been construction and installation of streambank stabilization projects. Since water levels have dropped, from the heavy April rains, I have completed four projects totaling 730 feet of streambank rehabilitation and stabilization. I would like to highlight a couple of these projects.

The first project I want to highlight is on Short Mountain Creek in Logan County. This was a cooperative project with the Arkansas Game and Fish Commission (AGFC), the Federal Emergency Management Agency (FEMA), and the city of Paris, Arkansas. This eroding streambank was threatening a nearby road structure, and depositing sediment into a public use fishing area. A combination of stone-toe-protection (STP), bank sloping, and native revegetation was used to restore 422 feet of eroding streambank. Four hundred tons of oversized rip rap (aka: shot rock), greater than 24 inches, and 130 tons of stackable beam rock, greater than 24 inches, were the primary materials used in repairing and stabilizing this streambank. Temporarily, annual vegetation was sown and covered by C-125 coconut matting to help hold exposed soil until native perennial grasses, trees, and shrubs can be planted in the spring. Larry Robberson and his crew, with the city of Paris, were tremendous assets to making this project a success. I was amazed by their incredible cooperation and coordination.

BEFORE...



AFTER...



My most recent project completed was in cooperation with AGFC, Perry County, and the U.S. Fish and Wildlife Service (USFWS) on the West Fork Mill Creek tributary of the Fourche LaFave River. West Fork Mill Creek, and its adjacent floodplain, are primary spawning areas for the alligator gar (the largest fish in Arkansas), among numerous other sport and non-sport fish that spawn at this location. The existing culverts on this county road were collapsing, resulting in decreased volume and bottlenecking of flows, making access by large adult alligator gar (5-7 feet in length; 40-180 lbs.) to the upstream spawning area difficult, if not impossible, due to obstructions and increased velocities. A plan was developed by the USFWS, Perry County, and AGFC to raise the road bed, install larger more durable culverts, and armor the streambank without changing the creek channel morphology to allow for fish passage.

BEFORE



AFTER



On Saturday, July 9, I had a great time working with the *River Valley Arkansas Master Naturalists Stream Team*. Nine of us assessed the biological and chemical properties of the Illinois Bayou in Pope County. Our chemical analysis and biological inventory of the Illinois Bayou, north of Dover, proved to be within the parameters of a clean and healthy body of water.



River Valley Arkansas Master Naturalists

Also, this quarter, I participated in a workshop in Omaha, Nebraska on *Restoration of Streams and Riparian Areas for Water Quality and Ecological Functions*. I learned more about longitudinal-fill-stone-toe-protection (LFSTP), longitudinal-peaked-stone-toe-protection (LPSTP), bend way weirs, engineered rock riffles, the Channel Evolution Model, vadose zone, geotextile filters, rock vanes, and willow waddles and fascines. Until next time, have a great autumn!

HAS ANYTHING CHANGED?

Please let us know if your address, phone number(s) or e-mail information has changed.

Name: _____

Address: _____

City, State, and Zip Code: _____

Home Phone: _____ Work Phone: _____

E-Mail: _____

Mail to: Arkansas Stream Team Coordinator (OR) E-Mail to: sfilipek@agfc.state.ar.us
2 Natural Resources Drive
Little Rock, AR 72205

For those reading an *Arkansas Stream Team* newsletter for the first time, *Stream Teams* are groups of citizens from the age of six years 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 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 ON-LINE ACCESS:** Access (a direct link) to the Stream Team Newsletter is available on the Internet at: <http://www.agfc.com/streamteam>

NOTE: [Under: Arkansas Stream Team Program---Click: Arkansas Stream Team Quarterly Newsletter---then, click on your choice of newsletter(s).]

The Process of becoming a STREAM TEAM...

1. Express an interest and request more information.

Send your name, address, and phone number to:

ARKANSAS STREAM TEAM PROGRAM COORDINATOR
Arkansas Game and Fish Commission
2 Natural Resources Drive
Little Rock, AR 72205

2. Sign up. You will receive 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 everyday going to work or school.

A. Inventory your stream with help from the *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 or your group!



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MAIL TO: