



Current Events



The Newsletter of the Arkansas Stream Team

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October – December 2012

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

The final quarter of 2012 came to a conclusion with stream surveys, educational activities and Stream Teams performing water quality analysis. During a float survey in Independence County I sustained a bit of a back injury, so reporting activity will be a bit abbreviated...but, you can bet that the thirteenth year after Y2K will not be as unlucky. ☺

During the last three months, Region II surveyed and designed four streambank stabilization projects that are slated to be installed during 2013.

Claire Daniel of Stuttgart, a member of an *Arkansas Master Naturalists* group, met with Region II Stream Team Coordinator, Stephen O'Neal, to accept a mini-grant check to go towards high-end water chemistry and biology analysis equipment and supplies. Claire and other members of the *Arkansas Master Naturalists* are a very active group of conservation-minded individuals who are highly interested in gathering data at Village Creek, among other waterways in Cross and St. Francis Counties, and performing biological assessments to monitor the health of our rivers and streams in east Arkansas. We salute our teams who have taken such an interest in the state's resources, and thank them for their ongoing efforts to keep our streams in a "Natural State."



◀ *Claire Daniel of the Arkansas Master Naturalists accepts a mini-grant from the AGFC Stream Team Program to initiate a water quality monitoring program in the Village Creek area.*

The *Ahlf Jr. High School Stream Team* in Searcy started their school year off with a bang by getting their feet wet. On one of their outings, a thorough litter pickup was conducted of Gin Creek in White County. This scenic creek has been treated as a dumping area for many years, but with the help of this Stream Team, renewed stewardship awareness in the community and the placement of signs encouraging others to keep our streams clean, the hope is that slowly, but surely, this area can be restored to its original beauty.

The Team also performed water quality testing from a chemical perspective. They found that the creek had an interesting trend throughout the day, as each class that came out had a few readings that were trending. The air and water temperature increased gradually as the day progressed and, interestingly enough, the dissolved oxygen did as well. Actually, this might be counterintuitive, based on the fact that colder water generally has higher dissolved oxygen potential over warmer water. However, the TDS (Total Dissolved Solids) reading was dramatically increasing as the day progressed. It was hypothesized that as the day proceeded and the sunlight reached the creek system, phytoplankton and periphyton (attached algae) was becoming activated in the rather chilly waters. This makes perfect sense as the periphyton and phytoplankton would be carrying on photosynthesis throughout the sunny period of the day and, therefore, the dissolved oxygen content would increase as a byproduct of that photosynthetic process. Who says chemistry/biology can't be fun?!!



◀ *Operating a high-end laser-based HACH Colorimeter is easier than it sounds! If you can read and punch a few buttons and follow directions--we have trained kindergarten-aged students to conduct the tests. Careful attention to detail and accurate record keeping are needed. This young lady from Ahlf Jr. High School makes it look easy on Gin Creek in White County.*

If you would like to get involved in performing water chemistry analysis with your team, or you know of a school or community group who you think might like to be involved—have them get in touch with your local Stream Team Coordinator.

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

This past quarter has been busy with volunteer *Stream Teams* checking water quality around the state. Many schools and clubs like to get in their outdoor field trips before the really cold weather hits. So, October and November were filled with assisting, training, and equipping volunteer Stream Teams in my region of the state.

Shining Stars 4-H Club Stream Team on Depot Creek in Saline County.



Sorting Macroinvertebrates



Tiny little crayfish.



In-between working with my new *Stream Teams*, I setup an exhibit to promote the *Arkansas Stream Team Program* at our annual Outdoor Youth Expo at Lake Sylvia near Ferndale, Arkansas. At this event, 2,000 fifth-graders from surrounding schools came to experience the outdoors and, for some, it was the first time in their life. The exhibit assisted to educate the youngsters about Arkansas streams, water quality, and streambank stabilization techniques. Other exhibits included shooting B-B guns, bows and arrows (archery), tree-stand safety, ATV safety, bear trapping, turkey netting, and the grand fishing derby! I hope all of the teachers who requested the “Ozark Mountain Stream Posters” from me received one in the mail. If you didn’t receive yours, give me a call at (877) 967-7577.

Extreme TEAM Work by the Pottsville Middle Grades Stream Team!



Forty-two students from Pottsville School helped clean-up Galla Creek in Pope County to improve water quality, and used their new HACH kit to monitor water quality.



Never to be “out-done,” Sister Carol Anne Corley and Ms. Rebecca McDaniel, with the *St. John’s Stream Team* in Hot Springs, are always a pleasure to work with. Not to mention...Gupha Creek is a beautiful stream to work in.

Studying the bugs we found. ►



◄ *Waiting for the results from our HACH kit.*

Other great news from the west-central part of the state... I assisted and attended the Southeastern Association of Fish and Wildlife Agencies 66th Annual Conference in Hot Springs, Arkansas. This conference is hosted in Arkansas once every 16 years. The conference is a great place to find out what scientific techniques work and, equally as important, what does not work in managing fish and wildlife resources of the southeast. Sixteen states were represented in the meeting for four days of sharing information, presentations, and exhibits during the technical sessions. This information is extremely valuable in keeping up with cutting-edge science, and dealing with issues that go beyond the boundaries of our state.

I also attended a Watershed Conference in Fort Smith hosted by the Arkansas Department of Environmental Quality (ADEQ). The knowledge I gained from this meeting included: pollution reduction strategies, urban development and water quality, storm water run-off best management practices, and effects of natural gas development on water quality. I hope everyone in today's society realizes how valuable clean water is, and I urge each and every one of you to join your local watershed advisory group.

Last, but certainly not least, I received an exciting phone call from an engineering firm wanting to look at several streambank remediation sites that they would like to invest in for mitigation credit. I was able to show them several sites that are very much in need of repair, but the landowners simply cannot afford the expense. I also surveyed several sites this quarter for which I hope to get stewardship plans completed, so we can begin construction before the spring high-waters come. Until next time, have a Blessed New Year!

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

It's hard to believe another year has come and gone already. The trees up here in the hills are almost entirely bare of leaves, and this morning they were entirely covered with a sheen of ice, due to the foggy conditions and sub-freezing temperature. It really made for a beautiful landscape.

The prior quarter of the year involved some work with old friends, like the kids and staff at the *Ambassadors for Christ Academy* and *Mt. View High School* Stream Teams. It also involved a couple of meetings with other Game and Fish types from across the nation. The first of these was the SEAFWA (Southeastern Association of Fish & Wildlife Agencies) meeting which was held in Hot Springs. This meeting has not been held in Arkansas for several years, and was attended by a large number of agency representatives and academic types from across the U.S. The second was the annual Missouri/Arkansas Fisheries Divisions Partnership which was held in Branson, Missouri.

I made presentations to a group of *Master Gardeners* in Springdale and a bunch of fourth and fifth graders who were attending a multiple-day camp at Camp War Eagle overlooking Beaver Lake in Washington County. When I was in elementary school I never got to attend this type of outing, especially when it involved a couple of school days. I think it's great that schools are getting the kids out of the classroom and into the world to experience the real world of nature, instead of what they might see on some television show.

A group (four students) at Prairie Grove High School has begun testing the water quality of Bob Kidd Lake in Washington County (Bob Kidd Lake is a small AGFC lake). During our initial visit, we discussed a wide variety of issues that relate to the water quality of any given body of water. We discussed watersheds and how any activities within them may impact water within that watershed. We talked about the importance of DO (dissolved oxygen) within the water, and how it usually enters the water. Other topics included how nitrogen and phosphorus impact water quality and possible sources of these nutrients, the importance of water temperature, TDS (total dissolved solids) and TSS (total suspended solids); how they impact the water's pH and how the pH impacts aquatic life within the watershed. All-in-all, it was a very productive morning which the students and their teacher seemed to enjoy. They told me when we parted company that they were planning to continue testing the lake, and planned to apply for a mini-grant to buy their own HACH test kit.

*The following pictures were taken with the
Prairie Grove High School students at Bob Kidd Lake.*





One Thursday, in mid-December, a group of folks met at Devil's Den State Park to discuss a long-term restoration plan for the portion of Lee's Creek that runs through the park. It was decided that an in-depth survey of the creek would be conducted in order to prioritize the work that needs to be done. Due to the amount of work that needs to be done within the park, this would be a multi-year program that would progress as funds became available. The initial kick-off work will be conducted just downstream of the dam, in the middle of the park. The main purpose of this particular portion of the project will be to save a historical CCC (Civilian Conservation Corps) building foundation that is about to fall into the creek. When possible, locally obtained rocks will be used to conduct the restoration projects. This will allow them to tie in nicely with the existing rock work that was so masterfully done by the CCC boys.

Perhaps the most interesting and rewarding thing I did during the last four months of the year was jury duty. I know that a lot of folks look at this civic duty as a burden, however, I am not one of them. I think that it's great to have a chance to see the legal system at work from the inside. The only trial I ended up on as a juror ended in a mistrial, it was still a very interesting and personally rewarding experience.

The Region III Stream Team Coordinator position remains vacant. The Region III news will continue once this position has been filled; however, in the absence of a coordinator for this region, Steve Filipek (Arkansas' Statewide Stream Team Coordinator), has been working to provide assistance, as needed. In addition, from time-to-time, area Stream Teams in Region III will be submitting articles. Thanks to All!



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:

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 and/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!



Steve Filipek/Debra Dickson
Stream Team News Editors
Arkansas Game and Fish Commission
2 Natural Resources Drive
Little Rock, AR 72205

MAIL TO: