

KY River Authority 2007 Watershed Grant:

Final Report:

Dec. 13, 2007

Red River Watershed: Hands-on Biology with Menifee Co High School Biology Classes
Appalachian Heritage Alliance
Contact person: Kim Feeman

The Appalachian Heritage Alliance received a grant from the KY River Authority to give hands-on biology experiences to a biology class at Menifee County High School. The proposal included 2 trips to the Red River with various biologists. Both trips have been accomplished to date. The students were from two Biology I classes from Menifee County High School, Lana Swartz biology teacher. On September 25th John Webb went into the classroom and introduced the students to water chemistry sampling methods and the concept of a watershed. On the following day, Sept. 26th, the students participated in the first hands-on biology field trip where they conducted various water chemistry tests, as well as collected aquatic invertebrates and fishes. Biologist conducting the trip included Matt Thomas (DWF), Paulette Akers (DOW), Ryan Evans (KSNPC), John Webb (DOW) and Kim Feeman. The students were very enthusiastic about the trip and were able to see the interconnection between various water qualities, environmental conditions, and species diversity as well as just see some really cool critters.

The second hands-on biology field trip was conducted on October 10th with Monte McGregor (DWF) and Andy (DWF). Monte McGregor first gave the students an extremely educational presentation on the life history of freshwater mussels and their host fish. Afterwards the students went to the river to look for mussels and were shown how biologists estimate mussel populations. The students sampled a meter square area recording the numbers of individuals of each species. Then, by estimating the total size of the sampling area, they were able to extrapolate the estimated total population size and diversity of native and non-native mussels within the area. These hands-on experiences have given the student a glimpse into the methods biologists use to monitor natural resources in an ongoing effort to maintain the diversity and health of our environment. These experiences have shown the students how vital their efforts are to protect the natural beauty of the Red River.

The students have written an article to put into their local newspaper. The web page of the Appalachian Heritage Alliance has also posted information and photos about the field trips. Their address is www.appalachianheritagealliance.org.

Grant moneys received were \$1,000.00, all of which have been spent to date.

We can not thank you enough for all your support for our hands-on biology field trips in Menifee County, as well as the previous two years in Wolfe and Powell counties. Now, students from all three counties within the Red River watershed have had the opportunity to get in the river, learn

from professionals, and directly experience their own backyard. What a better way to bring home how important it is for us citizens to understand and care about our environment. I know we have enriched the lives of many young people and I hope we have changed at least a few to pursue a career in the sciences.

Thanks you once again,

Kim Feeman

