



Students waded into a bubbling spring as WFF Biologist Maurice Jackson explains the benefits of healthy aquatic ecosystems at Tannehill Ironworks Historical State Park.



Creek Kids

This hands-on education
program helps children
learn about stream ecology.

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Photography by Kenny Johnson



Remember the days of old?

Remember exploring the local creek, standing in the water and letting the mud ooze between your toes? Unfortunately, most youth today do not experience the exhilarating feel of a creek or have the opportunity to peek at what is hidden beneath the riffles. In order to have the opportunity to learn hands-on about stream ecology in today's society, most students need to be led by a professional. The Alabama Wildlife and Freshwater Fisheries Division (WFF) has developed an education program called "Creek Kids" to meet this need of Alabama's youth.

Hands-on Education

Alabama is blessed with a diversity of aquatic creatures. Alabama's students need to have an array of programs to learn about the aquatic environment. WFF's Creek Kids program provides Alabama educators and students with hands-on aquatic education. The goal of the Creek Kids program is to teach children in grades 4 through 8 about how stream ecosystems function, why clean water is important, and what a diverse community of aquatic animals Alabama has.

Clean water is necessary for citizens to drink and for many industries to function. Stream critters have specific needs to survive and prosper in their environment. Too little water or too much fertilizer and waste alters the habitat and changes the types of animals that can live in a stream. Too much sediment (dirt) in a stream is the most common reason that Alabama streams are degraded.

The WFF has designed several lessons in accordance with the Alabama Course of Study for Science. Prior to their field trip, a teacher chooses an aquatic education



Students work with an EnviroScape, which is an interactive educational model that illustrates how pollution can move into the aquatic environment.

program. The teacher is then provided a list of scientific terms for students to study before the field trip. During the field trip, terms are reinforced with real life experiences. A model may be used to examine watersheds, and a stream walk used to examine aquatic animals.

An EnviroScape Model, donated by the Alabama Conservation Enforcement Officers Association, shows some of the ways pollutants enter a stream and how to lessen the effects of those pollutants. For example, students sprinkle cocoa, which represents soil, and green Kool-Aid, representing fertilizer, on the 3' x 3' model landscape. Another student sprays water from a bottle onto the EnviroScape, which represents rain falling. The cocoa and green Kool-Aid run down into the low blue areas of the EnviroScape, just as soil and fertilizer are washed into streams. WFF staff members lead a discussion of how runoff affects the aquatic environment. Students brainstorm about ways to reduce the effects of runoff pollution. During a concluding activity, professionals lead students into Mill Creek for hands-on activities such as underwater viewing, aquatic insect sampling, and fish seining. Students then use magnifiers and posters to identify aquatic organisms captured from the creek.

Tannehill Partnership


The Creek Kids program is a partnership with Tannehill Ironworks Historical State Park, which is located between Tuscaloosa and Birmingham. Tannehill is an ideal location to educate the state's youth about stream ecology and factors affecting the aquatic animals living there. Nestled within rolling hills and a developing watershed, the park contains cold water springs, rapids, pools, and a mill dam, which serves as an

example of an upstream obstruction to the migration of aquatic animals.

Teachers who wish to continue exposing their students to hands-on learning at their school are given the option of borrowing stream sampling equipment to conduct a similar stream monitoring program with assistance from WFF. The stream equipment loaner program is similar to another WFF program, the fishing tackle loaner program, in which school groups borrow fishing equipment. A color 3' x 3' watershed poster can be created for a school's watershed. These posters can list threatened or endangered fish, mussels, snails or crawfish for that locale, and include land usage for the area.

Educational Opportunities

The Alabama Division of Wildlife and Freshwater Fisheries began its aquatic education program in 1990. Since 1994, more than 210,000 youth have been exposed to aquatic education in the form of live fish exhibits, community fishing events, fishing clinics, casting classes, hatchery tours, and public talks. In addition, the public has received education through thousands of Web pages and images at www.outdooralabama.com, and via displays set up at boat shows, fairs and other venues.

Alabama's streams are unique and contain the greatest variety of aquatic animals in the United States. For today's students to care about Alabama's aquatic resources, they must experience them. The WFF Creek Kids Program allows students to experience aquatic habitats in a memorable way. 



Microorganisms play a major role in the health of stream ecology by recycling organic nutrients during the breakdown of plant and animal debris.

For More Information

To schedule a Creek Kids field trip for your students contact Maurice Jackson at Maurice.Jackson@dnr.alabama.gov, or Brenda Morrison at Brenda.Morrison@dnr.alabama.gov, or call them at 1-205-477-6301.