

Tool:	Treasure Hunt for Life in First Creek
Category:	Classroom/Community
Urban Specialist:	Mary Jane Kirkham
School Level:	High School
Target Audience:	Students and School Community Members
References:	

Rationale: Fulton High is located in the First Creek Watershed and the creek itself runs right by the school. The creek comprises an important sector of the Tennessee River Watershed from which the drinking water for this region is drawn. Monitoring the biotic integrity of this creek is an essential component of water quality control in the Knoxville area as the diversity of life in the stream correlates to its overall health. As such, the Science Department of Fulton High School believes that it is important to involve the students in the maintenance and monitoring of First Creek. This activity ties our students to the community and its leaders and thus promotes civic responsibility.

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Materials Needed:

- Professionals to perform fish shock
- Benthic collection pans
- Alcohol (70%) for sample preservation
- Fish Shock Equipment
- Benthic identification mats
- Waders or hip boots
- Specimen bottles
- Benthic Nets
- Hand lenses
- Forceps
- Latex Gloves

Buckets

Students

This activity can accommodate between 25 and 75 students from various grades and levels of academic ability, providing for the presence of enough adults to provide adequate supervision.

Teacher Activities

1. Professionals from a local wildlife agency will shock the fish in the creek.
2. The teacher will aid in the collection and identification of samples.
3. The teacher will set up outdoor lab areas for fish and Benthic invertebrate identification.

Student Activities

1. Students will don rubber boots and waders and venture out into the creek. Following the fish shock, students will collect samples of the fish and macro invertebrates using nets and collection pans.
2. Using Benthic mats, students will identify samples to the Order level.
3. Students will log the data collected into the Riverbank database.