



**Elk Creek Stream Walk
Madison Junior High School
October 11, 2004**

The Elk Creek and its watershed provide the residents of Madison Township with a wonderful educational resource and an insightful look into a number of scientific concepts and environmental conditions. The Butler Soil and Water Conservation District brought these insights to the forefront of students' minds through a challenging, yet entertaining, educational stream walk.

With over 130 students in the morning and afternoon, the traditional program of walking the stream channel was modified to fit the needs of a large group of students. Staff members, in cooperation with 8th grade teachers from Madison Junior High School, led students through a series of stations set up along the stream that demonstrated key attributes to the subject material on hand. Five groups of roughly 12-15 students rotated every 20-25 minutes to each of five stations.

Stations



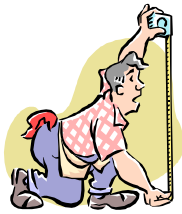
Stream Ecology

Students used seines (nets) to temporarily capture macroinvertebrates, fish, and other aquatic organisms. Our education specialist helped identify organisms and helped assess the biological makeup of the stream and its floodplain.



Fossil Challenge

Students were given background information on the present geology and geologic history of this region and SW Ohio in general. Past life forms can be found throughout this stream, and after a brief overview of Ordovician life, they were given a challenge to find and identify some of these organisms.



Physical Attributes and stream flow challenge

As described in many earth science texts, students were taught the physical components of a meandering stream including the floodplain and its soils, point bars and cut banks, pools and riffles, substrate and hardpan, groundwater and surface water and more. Students were given instructions and a challenge to calculate stream flow using only a yard stick, a tape measure, and an orange – a useful experiment to demonstrate the interaction between math and science!



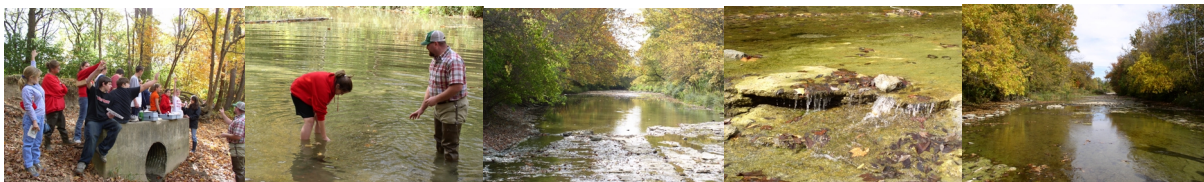
Testing Water Quality

Students were shown how to assess the environmental health of the stream using different types of indexes. A hands-on demonstration of testing water chemistry was done with each group.



The Watershed

Using maps, the watershed concept was demonstrated. Students were able to delineate their watershed using available information, and this station concluded by teaching the interaction between land use, upstream sources of pollution and water quality.



Interested in organizing a stream walk for your school or organization?

Contact the Butler County Storm Water District for more information.

