

Coal Mining History and Environmental Stewardship Field Trip in Northumberland County

On October 17th, several school classes from the Mt. Carmel and Shamokin area spent the day learning about local environmental issues and wrapped up the day by planting trees and shrubs along Quaker Run, a tributary to Shamokin Creek. The event focused on teaching local students about local land use practices and their impacts on water quality. The Kulpmont Borough partnered with Shamokin Creek Restoration Alliance and Northumberland County Conservation District to organize the day long field trip educating students about water quality issues.

The day started with students rotating through 3 stations within the town of Kulpmont. One presentation was atop a hill above the Veteran's Memorial Field. A local borough councilman explained this location was home to the Scott Colliery, an active coal mining establishment, dating back to 1905. The site was reclaimed in the 1980's using funds from the Rural Abandoned Mine Program. Now the site offers a baseball field, walking track, and open space for community activities. A second presentation was in a local bank that displays a mural of the original Scott Colliery. Here, a local watershed member explained the history of coal mining and the significant role it played in supporting this local town. A final stop took students to a site with a bird's eye view of Quaker Run. Another local watershed member described how this stream, and many others within the Shamokin Creek watershed, suffer from



Acid Mine Drainage (AMD) and permanent channel changes due to past mining activities. AMD impacted streams cannot support aquatic life because of low pH, high iron, manganese, and/or aluminum levels. She also explained how it is the watershed group's goal to return the local creeks to a healthy state so they can sustain native fish and aquatic life in the future.

Next, students were transported to Weiser State Forest where they rotated through another 3 stations. Station 1 focused on riparian buffers. Students learned how buffers help to protect water quality by acting as a filter, holding soils in place with mature root systems and keeping stream waters cool with large overhanging canopies. Station 2 explained how macroinvertebrates can determine water quality. A kick net was used to collect macros from the South Branch Roaring Creek where students used identification sheets to name the



macros and classify them as Tolerant, Facultative, or Sensitive. Finally, station 3 talked about watersheds. Students learned that we all live in a watershed and that land use can impact the water quality of our local streams and rivers.

Conservation district staff provided information at all 3 of these stations.

Students returned to Kulpmont where they planted 50 trees/shrubs along Quaker Run to enhance its riparian buffer. In addition, several students helped install 5 bird houses along the walking track around the field. Students commented the best part of the day was planting the vegetation.

A host of partners provided support for this successful day. Funding was provided by the PA Department of Environmental Protection's Environmental Education Grant. Grant activities were organized by Kulpmont



Borough, Shamokin Creek Restoration Alliance, and Northumberland County Conservation District. Landscape Services, Inc. of Locust Gap provided the trees/shrubs, related supplies, and a planting demonstration for the students. Cole's Hardware of Mt. Carmel provided supplies for building the bird houses. Finally, Church of Holy Angels, Kulpmont Knights of Columbus, Kulpmont Sportsman Association, and Scicchitano's Buono Pizza all helped to provide lunch. Thank you to this team of people for dedicating their time toward creating informed young citizens within our local community.