Richfield HERITAGE PRESERVE

Discover your Outdoor Experience at

BWU Students Study Invertebrate Natural History & Geologic Field Methods @ RHP

Wearing masks, and carrying notebooks and various collection tools such as jars and nets, Baldwin Wallace University students were seen in large numbers throughout Richfield Heritage Preserve last summer and fall. Thanks to a partnership with BWU and our park, BWU faculty and students utilize our vast park property as an experiential classroom, observing and collecting samples for their studies and independent projects.

This past fall students, who took the Invertebrate Natural History taught by Dr. Andrew Merwin, spent four beautiful, rainless afternoons studying everything from mayflies to grasshoppers. Among the many findings, students observed things like honeybees prefer taller goldenrod inflorescences and that chirping katydids cease chirping in response to visual cues, but not to auditory cues such as hand-clapping. These self-guided experiments led to student hypotheses which they developed throughout the course.

During a LIVE!@RHP video shoot which aired on Facebook last fall, Dr. Merwin shared, “Its been a real thrill to come out one day every week to see the changes in the season and to explore the different habitats at Richfield Heritage Preserve. It’s a luxury many universities don’t have an option for so we are very grateful to be able to to bring our students here to learn.”

Many specimens gathered by Dr. Merwin’s students were submitted, along with their collections, to the Cleveland Museum of Natural History.

In addition, Dr. Carrie Davis-Todd brought students from her Geologic Field Methods course out to learn mapping techniques and how to describe the rock formations present at different locations throughout the preserve. Two of Dr. Todd’s students conducted observations for their independent project on the stream near Cook’s Cabin, a waterway known to many as Oxbow Creek. The data her students collected last summer was analyzed and presented in a poster and presented at BWU this past fall.

The following is an excerpt from the students’ study. “Streams are an essential part of ecosystems. Healthy meandering streams yield diverse communities while plants on the riverbanks prevent erosion and improve water quality by taking up nutrients. A functioning stream will be storage for water, connected to its floodplain which protects against flood events, and provide habitat for a variety of different organisms depending on the composition of the stream bed.”
According to David Green, RHP Park Director, “The detail gained by the students also helps the park understand the health of the park’s assets, what areas need watching or improving, and what areas may need some intervention for the betterment of the ecosystem.”

To read more about the biological and geomorphological classification of the stream as determined in the student poster, and to learn about the stream’s overall functionality, please click on the link below.

STUDENT RESEARCH