

Lycoming Researcher Receives Grant to Study Hellbenders

They are ugly and prehistoric-looking, but the eastern "hellbender" salamander may be a harbinger of the health of the Susquehanna River basin.

Dr. Peter Petokas, a research biologist with the Clean Water Institute at Lycoming College, has received a \$49,000 grant from the Pennsylvania Fish and Boat Commission to study this giant salamander that is only found in the drainage areas of the Allegheny, Ohio, and Susquehanna Rivers. The hellbender—also known as the waterdog, mud devil, mudpuppy and Allegheny alligator—is the largest salamander in North America, growing to a length of 27 inches.

Petokas will use the grant money for a two-year project that will identify areas in the streams where hellbender populations occur; assess these habitats; establish long-term monitoring of hellbender populations; and compile comprehensive, detailed, and meaningful information useful in the development of a hellbender management and conservation plan for the Susquehanna River West Branch watershed, and potentially for the Commonwealth of Pennsylvania.

"What we learn about species like hellbenders...is important in itself, but expanding our knowledge about these animals can have larger implications for humans as well," said PFBC Executive Director Dr. Doug Austen in a press release. "Many animals are sensitive to changes in habitat, water and air quality, and thus can be good indicators of environmental health. The condition of fish and wildlife populations is often an early indicator of pollution that affects us all."

Hellbenders may have existed for millions of years. They are thought to live from 20 to 30 years but these shy and secretive salamanders are very difficult to spot.

Petokas has been interested in the hellbender for a long time. He and Lycoming College graduate Jim Rogers have conducted informal research on hellbenders over the past two years – locating areas where hellbenders occur and their preferred habitat in North-Central Pennsylvania streams.

With the \$49,000 grant, they can formalize the research. "For Lycoming students, this is an incredible opportunity to do original research and discover a river native that few people have heard of," said Dr. Mel Zimmerman, Director of the Clean Water Institute.