Mussels in the Classroom growing Ohio River Foundation's education reach

Excited students gather to welcome the visitors who will spend the next two weeks in their classroom. They've just learned a whole lot about these surprisingly fascinating visitors - freshwater mussels, an extremely important species the children likely hadn't even heard of when they arrived at school that morning.

Ohio River Foundation's (ORF's) Mussels in the Classroom (MIC) program was the vehicle for the introduction. Founded in 2007, it's the only program of its kind in the country and takes this important but often overlooked species to schools in Greater Cincinnati, Columbus, Lexington and Frankfort.

An Ohio River Foundation educator kicks off the program by teaching children about freshwater mussels' importance to area ecosystems and the threats they face. Mussels serve as our rivers' natural filters, straining the water and eating everything from dead leaves to algae. But pollution, habitat destruction and overfishing are taking a toll: Nearly half of the 127 mussels once found in the Ohio River Basin are now considered extinct, endangered or species of concern.

Following the initial in-class presentation, Ohio River Foundation's mussels remain in the classroom for at least two weeks, serving as ambassadors for their species while helping students learn important Science, Technology, Engineering and Math (STEM) content that relates to state standards. Students have the opportunity to take care of the mussels and participate in provided activities or come up with their own creative projects.

"We hope that participating students come away with not only a better understanding of complex aquatic ecosystems, but also an appreciation for freshwater mussels," said Rich Cogen, ORF's executive director. "With increasing scientific interest in repopulating rivers with native mussels, it's critical for the public to understand the important role they fill."

MIC is open to grades K-12, and applications are accepted on a rolling basis on the program's web page.

In addition to MIC, ORF offers its perennially popular River Explorer program in Greater Cincinnati and
Columbus. The inquiry-based field trips let students be junior scientists for a day as they learn about the ecology and importance of the Ohio River and its watershed at area creeks, streams, and rivers.

Open to grades four through 12, River Explorer includes three hands-on stations: 1) Catching, examining, and identifying fish; 2) Collecting and identifying macroinvertebrates; and 3) River chemistry (grades 6 through 12) or water use and the water cycle (grades four and five). All but the youngest students also take part in habitat assessments as part of their day, and ORF educators touch on issues such as water pollution and environmental stewardship with all students.

The River Explorer program is offered in April, May, September and October. Greater Cincinnati field trips take place at Nisbet Park and Lake Isabella Park in Loveland; Sycamore Park in Batavia; Sharon Woods Park in Sharonville; Pioneer Park in Covington; and Guilford Covered Bridge Park in Guildford, Indiana. Columbus programs are at Highbanks MetroPark and Gahanna Friendship Park. Registration for spring River Explorer field trips is open through March 1 on the program's web page.

In 2019 alone, some 5,500 students from 43 schools have taken part in ORF's education programs. More than 45,000 students have participated in ORF education programs.


Ohio River Foundation (ORF) is dedicated to protecting and improving the water quality and ecology of the Ohio River and all waters in its 11-state watershed. ORF works towards those goals through environmental education and conservation activities that serve to inspire environmental stewardship for the benefit and enjoyment of current and future citizens. For more information, visit www.ohioriverfdn.org.

Rich Cogen, Ohio River Foundation