

Ohio River Mussels Workshop

Description and Curriculum Resources

Location:	Ohio River Museum, Marietta (Washington), Ohio
Workshop:	Ohio River Mussels
Availability:	Wednesday, Thursday, and Friday September through April, by appointment
Time Allowance:	45 minutes
Cost:	Add \$3.00 workshop fee to \$3.00 admission per student
Grades:	2 nd , 3 rd , adaptable to all Limit 25 students per program

Description:

In the bottom of many rivers, lakes, and streams live a group of wildlife easily overlooked - Freshwater Mussels. What do they look like? How do they move? Study a variety of shells using magnifying glasses. See a slide show of naturalist completing a mussel study dive in the Muskingum River and paint a plaster-of-Paris shell as a take home item. In conclusion, take a short guided tour of the mussel exhibit.

Science Academic Content Standards Addressed:

Life Science (Characteristics & Structure of Life)

2nd. Explain that animals need air, water, food, living space and shelter to survive

Life Science (Diversity & Interdependence of Life)

2nd. Investigate the different structures of animals that help them live in different environments (lungs, gills)

3rd. Relate animal structures to their specific survival functions (obtaining food, hiding from enemies)

Life Science (Heredity)

3rd. Compare the life cycles of a mussel (birth egg, attaches to fish, falls off, lives on its own)

Ohio River Mussels Glossary:

adaptation. Adjustment to environmental conditions, modification of an organism or its parts that makes it more fit for existence under the conditions of its environment.

bacteria. Unicellular, prokaryotic microorganisms that lack chlorophyll, multiply by fission, and can be seen only with a microscope; they occur in three main forms: spherical, rod-shaped, and spiral. Some bacteria cause diseases such as pneumonia, tuberculosis, and anthrax, and others are necessary for fermentation and nitrogen fixation.

biomass. The amount of living matter.

biome. Major ecological community (tropical rain forest, grassland, or desert).

characteristic. A distinguishing trait, feature, quality, or property.

climate. The average course or condition of the weather at a place usually over a period of years as exhibited by temperature, wind velocity, and precipitation.



community. Interacting populations that live in a defined habitat.

conservation. A careful preservation and protection of something; especially planned management of a natural resource to prevent exploitation, destruction, or neglect.

current. Continuous flow of air, water, or electric charge.

cycle. An interval of time during which a sequence of a recurring succession of events or phenomena is completed.

decomposers. Organism such as bacteria and fungi that feed and breakdown dead organisms returning constituents of organic substances to the environment.

diversity. A great deal of variety.

ecological. The interactions and relationships between organisms and their environment.

ecosystem. The complex of a community or organisms and its environment functioning as an ecological unit.

environment. The complex of physical, chemical, and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival.

evidence. Facts or observations on which a conclusion can be based.

extinct. A species of organisms that no longer exists.

food chain. An arrangement of the organisms of an ecological community according to the order of predation in which each uses the next usually lower member as a food source.

food web. The totality of interacting food chains in an ecological community; interacting food chains in an ecological community.

habitat. The place or environment where a plant or animal naturally or normally lives and grows.

landform. A natural feature of a land surface.

life cycle. The series of stages in form and functional activity through which an organism passes from fertilized ovum to the fertilized ovum of the next generation.

mussel. A kind of clam that has a narrow bluish-black shell. Mussels are good to eat.

naturalist. A person who knows a great deal about animals or plants.

observe. To watch carefully, especially with attention to details or behavior for the purpose of arriving at a judgement.

pH scale. A numerical measure of the acidity or alkalinity of a chemical solution.

photosynthesis. The chemical process by which chlorophyll-containing plants use light to convert carbon dioxide and water into carbohydrates, releasing oxygen as a byproduct.

pollution. A substance that, when added to the environment causes the environment to be harmful or unfit for living things.

precipitation. A deposit on Earth of hail, mist, rain, sleet, or snow.

resource. Industrial material and capacities (as mineral deposits and waterpower) supplied by nature (earth science) and substances used by an organism for survival (biology).

sediment. Mineral deposited by water, wind, or glaciers.

species. A group of organisms consists of similar individuals capable of exchanging genes of interbreeding.

wildlife. Wild animals that live naturally in an area.

The Ohio River Museum is operated by the Ohio Historical Society, a nonprofit organization that serves as the state's partner in preserving and interpreting Ohio's history, archaeology, and natural history. The Ohio River Museum is located on the Ohio River in Marietta, Ohio.

