

Program Overview

Please click on each program to view the Maryland Science Standards addressed.

Program Name	Description	Grade	Group Size	Duration
<u>Bird Beak Adaptations</u>	In this playful lesson students discover how much the shape of a bird beak can tell about the bird's diet and habitat. Students then choose an imaginary bird habitat and design their own bird. This class is a great art extension to your unit on adaptations.	K-4	25	60 minutes
<u>Bird Flight</u>	In this class students explore the physics of bird flight through many hands-on experiments. They compare the skeletal and bone structure of birds and humans, take a close look at feathers, study the principles of airfoil design, and try out flight motion.	1-5	30	60 minutes
<u>Local Ecosystems</u>	Coast Kids "Nature Detectives" are non-competitive escape-room-style games. Students study in a playful way which animals live in seven Eastern Shore Ecosystems, and what they need to thrive. The game may be played indoors or outdoors (weather permitting).	2-7	30*	60-90 min.
<u>Oil Spill</u>	An oil spill can greatly affect the animals and plants on land and in the water. In this hands-on class students work in small groups to simulate an oil spill. Mitigation efforts include containment, absorption, several methods of removing oil, cleaning feathers and fur, and encapsulation of oil.	1-7	30	60 minutes
<u>Overwintering Strategies</u>	Coast Kids "Nature Detectives" are non-competitive escape-room-style games. Students learn in a playful way about wintering strategies of local animals such as hibernation, migration, and various winter adaptations. The game may be played indoors or outdoors (weather permitting).	1-7	30*	60-90 min.

<u>Owls</u>	Students study Eastern Shore owl species, their special adaptations, and an owl's diet and food chain. The dissection of sterilized owl pellets reveals what owls have been consuming. It also invites students to learn about small mammal skeletons. Students who are not comfortable dissecting a real owl pellet may use an artificial substitute.	K-5	30	60 minutes
<u>Plankton Microscopy</u>	Plankton is the foundation of every aquatic food web. Students learn how to use a microscope and discover the weird and wonderful world of the Coastal Bays' zooplankton and phytoplankton as the foundation of the bays' food web. We will provide eight student-friendly digital microscopes as well as live plankton.	K-7	24	60 minutes
<u>Green Energy</u>	Students explore solar, wind, and water energy in a series of hands-on experiments and simulations. This class requires outdoor access on a sunny day to test student-built solar ovens and waterpower. Please let us know if any students in your class are allergic to s'mores ingredients (graham crackers, milk chocolate, marshmallows).	K-5	25	60 minutes
<u>The Solution to Pollution</u>	This hands-on class explains non-point-source and point-source water pollution using a tabletop watershed model. Students study the direct and indirect effects of pollution, and what they can do to prevent it. Pre-K to 1 st grade students also learn how to pack a trash free lunch. 2 nd to 7 th grade students measure water quality indicators such as dissolved oxygen, salinity, acidity, and turbidity. Additionally, middle school students explore the water cycle.	PreK-7	16	60 minutes
<u>Sharks</u>	Sharks are fascinating creatures despite often being misunderstood. In this hands-on class students learn facts about the apex predator's size, life cycle, anatomy, senses, diet, and behavior. Younger students create their own shark skin replicas. Older students engage in a hands-on sustainable fisheries activity.	K-7	25	60 minutes
<u>Tree Rings</u>	Tree rings tell a story about a tree's life. They reveal not only the number of years a tree lived but provide answers to more questions: How much light and nutrients did a tree access during different phases of its life? Was it injured or infested with insects? What were the surrounding conditions? Students closely examine cross sections of tree trunks. Grade 2 to 5 students also study the vascular system of plants through digital microscopes.	K-5	30	60 minutes

*A minimum of three groups per day is required due to the extensive set up.