

Aquatic Resources Education Center Education Programs



Amazing Adaptations (1st – 8th Grade)

What is an adaptation? How are aquatic animals able to survive? Students will explore the adaptations of aquatic animals found in Washington, DC and use what they learn to create their very own aquatic animal. You can choose a general adaptation lesson or an amphibian or fish specific adaptation lesson tailored to grade band.

Amphibian Advanced Inquiry (9th Grade and up)

Students are guided through a STEM-based investigation using local amphibian and wetland data in order to examine ecological impacts, mitigation, and conservation.

Aquatic Bird Bonanza (2nd – 7th Grade)

Birds that soar and wade in water, legs like stalks, toes with talons, and beaks and bills galore – The Anacostia River and waters of the District host an array of beautiful birds. Students learn to recognize local species, their adaptations to aquatic environments, and some of the challenges our water birds can face.

Careers in Fisheries (6th Grade and up)

Students will get a chance to learn about the wide variety of careers in the field of fisheries biology including government biologist, fisheries management, and law enforcement.

CSI: Anacostia River (6th Grade and up)

Forget Las Vegas, Miami and New York, we have a mystery in our own backyard: Where have all the fish gone? Students will put their STEM skills to the test as they investigate the fishing regulations in DC.

Fabled Frogs (Pre-K – 2nd Grade)

Learning takes literal leaps and bounds as students see how their own jump measures up to several local frog species. Students will gain knowledge about frogs and other amphibians through a story and close encounters with live animals.

Fabulous Food Webs (2nd Grade and up)

What does a Longnose Gar eat? Or a Blue Crab? Find out! Students will explore the food webs found in the Chesapeake Bay.

Fantastic Fish (3rd – 5th Grade)

What makes a fish a fish? Where are fish found? How do they move? Students will answer these questions and more through games and an interactive scavenger hunt.

Freshwater Fish Families (4th – 8th Grade)

What do minnows and sunfish have in common? How does appearance influence behavior? Students will take on the role of an aquatic biologist to study the morphology and behavior of several major types (families) of fish that can be found in the streams and rivers of the District.

Frog Symphony (1st – 5th Grade)

Did you know that not every frog goes “Rib-bit”? Students will engage in a sensory experience to learn why frogs and toads call and receive an introduction to identifying several local species by recreating the sounds of a pond at night.

Herpetologist for a Day (4th – 8th Grade)

Students will explore the world of slithery, scaly, and slimy as they become specialized scientists that study amphibians and reptiles and learn how to recognize species local to the District.

Macroinvertebrate Mayhem (Kindergarten and up)

Students will learn about aquatic benthic macroinvertebrates and their value in determining the health of a stream. There are three different variations of this based on grade band.

Marvelous Mammals (1st – 6th Grade)

Did you know the District is home to many semi-aquatic mammals? Students will learn about the similarities and differences between different semi-aquatic mammals and what distinguishes mammals from other animals.

Metamorphosis (Pre-K – 2nd Grade)

Students are guided through the process of amphibian metamorphosis using a story and an art project where a tadpole transforms right before their eyes! Egg masses and larval amphibians are on display seasonally.

One Fish, Two Fish (K – 3rd Grade)

Why does a turtle have a shell? Why don't fish have shells? Students will use their senses to explore the similarities and differences of the aquatic life in Washington, DC.

Sensational Skin (1st - 5th Grade)

Amphibian skin holds a world of wonders, from possessing anti-microbial properties to allowing some salamanders to live without lungs! Students will practice science inquiry and investigate why amphibians can serve as indicators of environmental health. Extension to EiE lesson "Just Passing Through: Designing Model Membranes".

Story Hour (Pre-K – 2nd Grade)

Students will explore the AREC on a guided tour and learn about the aquatic animals of Washington, DC through a story, craft and hands-on meet and greet of one of AREC's resident animal. There are three different variations of this lesson in the lesson plan.

Talking Trash (4th Grade and up)

Ever wonder how trash gets into our waterways? Do you know what the most common aquatic debris item is? How long does it actually take for different trash items to decompose? These questions and many more will be answered in the Talking Trash lesson. Lesson variations are based on grade band.

The Power of Plants (Kindergarten and up)

Do plants live in the water? Students will learn the role of plants in aquatic systems and their benefits to the Chesapeake Bay Watershed. Lesson variations are based on grade band.

Walking Through Your Watershed (3rd Grade and up)

What's the big deal with the Anacostia River and the Chesapeake Bay? Why should I care? Students will investigate the two watersheds and learn about their importance in our environment and our role in their protection.

Who Am I? (K – 3rd Grade)

Fins for swimming and shells for safety – learn to recognize some of the District's aquatic animals and how they are born and grow. Students will investigate life cycles using fish, frogs, and turtles as models.

Working for Wildlife (6th Grade and up)

Are you interested in a career working with wildlife? Did you know that wildlife careers aren't just for scientists? They also include jobs like law enforcement officers and communication specialists. To find out more about these careers and to learn important job skills for any job, join us for our Working for Wildlife activity.