

Aquatic Resources Education Center (AREC) – School Programs

DOEE Aquatic Resources Education Center | 1900 Anacostia Dr. SE | Washington, DC 20020 doee.dc.gov/arec | doee.arec@dc.gov

Pre-K & Kindergarten

Nature Tales (1 hour)* – Students explore the AREC on a guided tour and learn about the aquatic animals in the District of Columbia through a story, activity, and meet and greet of one of AREC's resident animals. Choose to focus on one of the following animal groups:

AmphibiansFishesInvertebratesReptiles

River Life (1 hour)* – What animals visit the river throughout the day? Students will discover the diversity of life that lives in and around the Anacostia River through a guided tour and lesson.

Lower Elementary School (1st - 2nd)

Nature Tales (1-1.5 hours)* – Students explore the AREC on a guided tour and learn about the aquatic animals in the District of Columbia through a story, activity, and meet and greet of one of AREC's resident animals. See the list of topics under the Pre-K & Kindergarten section above.

River Life (1-1.5 hours)* – What animals visit the river throughout the day? Students will discover the diversity of life that lives in and around the Anacostia River through a guided tour and lesson.

Sensational Skin (1.5 hours)*\$@ – Amphibian skin holds a world of wonders, from anti-microbial properties to allowing some salamanders to live without lungs! Students will practice science inquiry through a series of simulations demonstrating what makes amphibian skin so special.

When I Grow Up (1-1.5 hours)* – 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 and compare life cycles using fish, frogs, and turtles as models.

Upper Elementary School (3rd – 5th)

Amazing Amphibian Adaptations (1.5 hours)* – From scaling walls with sticky toes or breathing without lungs to acting as a beacon for environmental health, the District's amphibians could be considered animal action heroes! Students will examine a variety of adaptations that make our local amphibians special and explore the important roles frogs and salamanders play in our environment.

Curious Comparisons (1.5 hours)*\$ – Ever wonder what turtles and frogs have in common? Or what makes a crayfish different from a sunfish? Students will dive into taxonomic classification by investigating the differences and similarities between vertebrate and invertebrate species, body forms, and functions.

Fabulous Food Webs (1.5 hours)*\$@ – It's a fish-eat-fish world, but who comes out on top? Students will explore food webs and ecological relationships found in the Anacostia River watershed.

Sensational Skin (1.5 hours)*\$@ - Refer to program description under Lower Elementary School.



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Middle School

Conservation Concern: Save the Shad (1-1.5 hours)* – Did you know that the official fish of the District of Columbia is the American Shad and that they leave the ocean to visit the District every spring to spawn? Students will learn about American shad including their ecological rolw and how humans have influenced their populations.

Invertebrate Indicators: Clues to Stream Health (1.5 hours)* – Did you know aquatic insects, worms, crustaceans, and mollusks can be used to examine water quality? Students will learn about these animal indicators and will calculate an index to determine stream health.

Fishable Waters (1.5 hours)* – Fish can be fun to catch, but they can also inform us about the health of our local waterways—including factors that can impact human health! Discover how the choices we make affect fish, their habitats, and the resources we all share.

Watershed Wonders: Helping or Hurting? (1.5 hours)*\$ – What's the big deal with watersheds? Why should we care about them? Students will investigate the Anacostia River watershed and learn about its importance in our environment and our role in its protection.

High School

Amphibian Advanced Inquiry (1.5 hours)* – Students are guided through a STEM investigation using local amphibian and wetland data in order to examine ecological impacts, mitigation, and conservation.

Aquatic Alien Invasion (1.5 hours)* – Many science fiction stories feature otherworldly beings coming to Earth to harvest food, steal resources, exterminate life, and destroy the planet. But what happens when the horror is real and happening to native species right here in the waters of the District? Students will use simulations to gather data to evaluate the impacts of aquatic alien species and explore solutions for combating the invasion.

CSI: Anacostia River (1.5 hours)* – Forget Las Vegas, Miami, and New York, we have a mystery in our own backyard: Where have all the fish gone? Students will work together to investigate fishing regulations in DC, their importance in protecting and enhancing fisheries resources, and their benefit to anglers and the general public alike.

Watershed Wonders: What Would You Do? (1.5 hours)*\$ – Students take on the role of watershed planner to interpret maps and scenarios as they balance the needs of a community with the protection of the environment.

Working for Wildlife & Fisheries (1.5 hours)* – What do DOEE Fish & Wildlife Biologists do? What other wildlife-focused careers are out there? How can I get started today? Students explore select topics in fisheries, ecological monitoring, and zoology to learn about research, environmental education, and citizen science in the District and how they can each contribute to documenting local fauna.