

Greater Cleveland Aquarium

AQUATIC TREK

Teacher Guide



Theme: Biodiversity

Grade Band: K-12

Program Length: 1 hour

Overview

Take your group on an underwater adventure! Get up close and personal with seahorses and an octopus, splash around with stingrays, and travel down a 175-foot-long underwater shark sea tube. This underwater adventure transports you from the north coast to the seacoast in a guided tour designed for camps and groups of all ages.

Goal

As we travel through freshwater rivers to salt water coves, students will observe the amazing adaptations animals have to survive in these unique habitats. Students will gain an appreciation for aquatic biodiversity and understand the important role humans play in the conservation of aquatic habitats.

Objectives

1. With prompting and support, explain the definition of biodiversity.
2. Compare and contrast living organisms in salt water and freshwater environments.
3. Identify two ways that humans can help conserve aquatic habitats.

Vocabulary

Biodiversity

Freshwater

Adaptation

Habitat

Conservation

Environment

Saltwater

Human Impact

Pre-Activities

Lessons to help prepare your students and enhance your field trip experience:

1. Introduce the term biodiversity. The prefix “bio” means “life” and “diversity” means “differences.” Biodiversity is all the different kinds of living things that share the Earth.
 - a. Species differ because they have different adaptations. Adaptations are features of an animal that are essential to the animal’s survival. Adaptations can help animals eat, move around, breathe, camouflage, etc.
 - b. As the biotic and abiotic factors of a habitat change, the animals found within those habitats change. Freshwater fish have different adaptations from salt water fish. We will investigate some of these differences at the aquarium.
2. Explain to students that they will be going on a guided tour at the Greater Cleveland Aquarium. They will be completing scavenger hunts as they tour through the exhibits. **We have scavenger hunt cards for different age levels. Please pick your topics from the following list:**
 - a. **All the fish of the rainbow** (preschool to early elementary)
 - b. **What’s in a name – fish named after other animals** (early elementary)
 - c. **Where in the world – freshwater fish geography** (upper elementary)
 - d. **Where in the world– freshwater & saltwater fish geography** (upper elementary)
 - e. **Where in the world – turtle geography** (upper elementary)
 - f. **Indicator or invasive** (middle to high school)

Scavenger hunt cards will be provided upon arrival and will be returned to the tour guide upon completion. **Please inform us upon arrival which hunt(s) you have selected.**

3. Familiarize the students with the aquarium by viewing the aquarium map and by visiting the Greater Cleveland Aquarium website: www.greaterclevelandaquarium.com
4. To preview the animals we have on exhibit, check out our animal facts website: <http://m.greaterclevelandaquarium.com>



Education Department
Greater Cleveland Aquarium
2000 Sycamore Street
Cleveland, Ohio 44113
www.greaterclevelandaquarium.com



OHIO LAKES & RIVERS:
Follow the stone path through our forest and check out our bubbling "brook" and our new reptiles and amphibians including salamanders, newts, snakes and turtles.

LAKES & RIVERS OF THE WORLD:
Enjoy four individual regions through this gallery: Australia, Asia, South America and Africa. On this journey you meet eastern snake-neck turtles in Australia, archerfish, and one very special giant gourami in Asia, ocellated stingrays, and an Amazon river turtle in South America, and spurred tortoises from Africa. Pay

special attention to these tortoises; they are gentle creatures with playful personalities who encourage you to interact with them by touching their shells.

DISCOVERY ZONE:
First, discover facts about water pollution and learn about what you can do to help. We must remember that creating awareness is an incredible challenge; our oceans, lakes and rivers are depending on us. Don't forget to look up at what comes next; the base of one of the Powerhouse's original smokestacks is now home to a moon jellyfish exhibit. Learn about their life stages, from polyps to fully grown jellies, and watch as they "glow" in the dark.

PACIFIC:
Here you see fish from the Red Sea, Eastern Asia, Indonesia and the northern cold water regions. Of the many, pay close attention to the venomous lionfish, the black and white crowdfish eels, the boxfish, sea stars and the giant Pacific octopus.

COASTAL:
Check out our 11,000 gallon Touch Pool, seahorse exhibit, and live coral exhibit in our Coastal gallery. At our Touch Pool, learn the official "two-finger touch" technique and interact with our friendly stingrays.

EXPLORATION STATION:
The Exploration Station is designed as a research vessel and is located on the second floor of the Powerhouse, next to the Cafe. This exhibit features hands-on interactive fun especially for our younger guests. Stop by to meet our most electrifying resident, the electric eel, presented by FirstEnergy.

TROPICAL REEF:
This corridor features fish from Fiji and Hawaii including the playful rabbitfish, the burrfish and angelfish.

SHARK SEATUBE:
Home to four species of sharks and an amazing variety of aquatic life, this gallery is surely impressive. Elegance and splendor co-exist in the exhibit with sand tiger sharks reaching up to 6' long. Let our Seatube fascinate you as you walk through this wonderful subaquatic world, allowing extraordinary viewing access to sharks, moray eels, groupers and more.

