

CREEK EXPLORATION

- 3rd grade students
- 45 minutes
- Park recommended area



OVERVIEW

In this experience, students will explore a portion of Mill Creek to observe the adaptations of native plants and animals. Students will use their senses and tools to find and examine two (2) different organisms and discuss how they use their adaptations to survive in and around Mill Creek.

SAFETY + SETTING

- Students will explore from the bridge to the large fallen tree on the left side of the creek.
- We recommend that students and adults lift rocks *towards* themselves, not away. This keeps a barrier between you and the animals, and also prevents rocks from falling onto you if you slip.
- A reusable trash bag is included in the backpack. Please pick up any litter you may see!

ACADEMIC STANDARDS

3.LS1.2 - Analyze the internal and external structures that aquatic and land organisms have to support survival, growth, behavior, and reproduction.

CREEK EXPLORATION

STEPS

1. Lead students down the stairs at the Blue Hole to the creek.
2. Ask students what they think, notice, and wonder about the creek, spring, and forest to encourage discussion about this habitat.
3. Introduce safety information and set boundaries. Model how to properly lift rocks and use tools for exploration.
4. Allow students to freely explore within the boundaries. Assist with rock lifting and critter catching as needed. Gather students together to observe and discuss aquatic animals and plants discovered. (ex. "How do you think this plant keeps itself from floating away?")
5. Near the end of your time, group students up to share observations and hypothesize how these organisms survive in the habitat. (ex. "How do you think salamanders keep themselves safe from predators?")

RETURN MATERIALS

After you have finished your teacher-led experience, please return all materials to the clerk at the Visitor Center front desk.



DON'T FORGET!

- Rocks can be heavy! Adults should assist students with lifting and laying down rocks.
- Leave No Trace! All rocks must be left where they were found.
- Handle living things with care! Use nets, buckets, and observation containers to keep animals safe.

SALAMANDERS

Salamanders are a group of amphibians that possess smooth, permeable skin that is usually kept moist. Some species rely on their skin to breathe, while others may have gills or lungs. They typically lay their eggs in or near water and have aquatic larvae.

Salamanders can also regrow lost limbs!

Spotted Dusky Salamander (*Desmognathus conanti*)

A tan to brown or black salamander with 6 to 8 pairs of golden or reddish dorsal spots and a white eye line.

Invite students to compare the color of the soil to the color of any spotted dusky salamanders you may find. **How might this help them survive?**



Other Common Species

Slimy Salamander



Brownback Salamander



Red Salamander



FROGS

Frogs are a group of amphibians characterized by their short bodies, protruding eyes, and strong folded legs. Frogs lay their eggs in or near water, which hatch into aquatic larvae called “tadpoles.” Tadpoles have tails and internal gills that are replaced with lungs and legs as the tadpole matures into an adult.

Green Frog (*Lithobates clamitans*)

Green frogs are mid-sized frogs with green heads and bodies that range in color from brown to gray to dark green. Their bellies are white with black mottling.

Like most amphibians, green frogs lay their eggs in water, which will hatch into tadpoles. Green frogs prefer habitats with water sources close to open areas. **How might an open area benefit these critters?**



Other Common Species

Spring Peeper



Green Treefrog



Northern
Cricket Frog



MACROINVERTEBRATES

Aquatic macroinvertebrates are small organisms that have no internal skeletal structure and live all or part of their lives in the water. These aquatic animals play an important role in nutrient cycling and provide food to animals higher up the food chain.

Dragonfly Nymph



Damselfly Nymph



Hellgrammite



Watercress Snail



Blackfly Larvae



Coosa Crayfish



Caddisfly Larvae



Cranefly Larvae

