

BRILLIANT BIOMES

TEACHER GUIDE FOR EXPEDITION



PROGRAM OVERVIEW

- This 45 minute to 1 hour program leads students on an exploration of biomes throughout Seneca Park Zoo.
- Students engage in activities and discussions with a Zoo educator to explore the topics of biomes and climate.



LEARNING STANDARDS

NextGen & New York State P-12 Science Learning Standards:

- 3rd Grade: Interdependent Relationships in Ecosystems; Weather and Climate
- 4th Grade: Structure, Function, and Information Processing
- 5th Grade: Earth's Systems



HOW TO PREPARE YOUR STUDENTS

Logistics

- Have your students split into groups of 15 or fewer.
- Assign 2-3 chaperones/teachers per group.
- Make sure that students are dressed for the weather.
- Provide name tags for students to wear.

Content

- It is helpful to pre-teach the definitions of biome and climate.
- Students should be able to name the type of biome that they live in.



WHAT TO EXPECT WHEN YOU ARRIVE

- Your buses will pull up to the drop off area at the Front Gate.
- A Zoo staff person will check in your bus.
- You will check in at the Front Gate. Make sure that you know the total number of guests (students and teachers/chaperones) in your group. Have payment ready unless you have already submitted a purchase order.
- While you are checking in, a Zoo staff member will greet your group and give a brief presentation on Zoo etiquette and safety. Your group will enter the Zoo and wait at a designated flag area.
- The Zoo educator will take your first group and begin your Expedition. Subsequent Expedition groups will meet the Zoo educator at the donor brick benches near Creatures from the River's Edge at the times listed on the schedule provided to begin their Expedition.



ESSENTIAL QUESTIONS

- What are biomes?
- What are the plants, animals, and climate of three different biomes (tropical rainforest, temperate deciduous forest, and Arctic tundra)?
- How does the climate of a biome affect the types of plants and animals that can live there?



WHAT YOU WILL SEE DURING YOUR EXPEDITION



Creatures from the
River's Edge



Genesee Trail

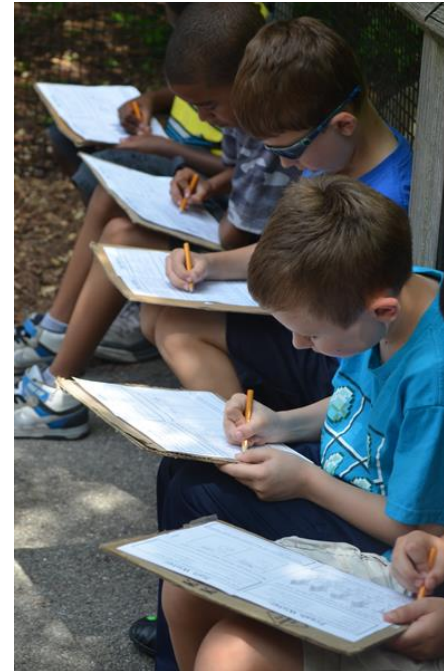


Rocky Coasts



WHAT YOUR STUDENTS WILL DO

- Make observations
- Record observations in Field Guides provided by Zoo educator
- Engage in activities and discussions led by Zoo educator



POST VISIT SUGGESTIONS

Sensory Bottle Biomes:

- Students create sensory bottles about each of the biomes that they observed at the Zoo.
- Students are given materials (plastic animals, leaves, branches, moss, etc.) and they must decide what should go in each bottle to represent the three different biomes.
- See link on Resources page for pictures and a full description of this project.
- Note: Sensory bottles can be used for students that need sensory input or as a calming strategy.



RESOURCES

- Seneca Park Zoo <http://senecaparkzoo.org/>
- Sensory Bottle Biomes Activity <http://parentingchaos.com/sensory-bottle-biomes-kids/>
- NASA Earth Observatory Mission: Biomes
<https://earthobservatory.nasa.gov/Experiments/Biome/>
- Finger Lakes PRISM (Invasive Species) <http://fingerlakesinvasives.org/>
- Blue Planet Biomes http://www.blueplanetbiomes.org/world_biomes.htm/

