

Habitats of Virginia

LESSON OVERVIEW

EDUCATION STANDARDS

1.5	1.8	2.5	2.7	3.4	3.5	3.8	4.2	4.3
LS.6		LS.7		LS.8		LS.9		BIO.8

OVERVIEW & PURPOSE

Driving Question: What are the major animal habitats in Virginia and how are they impacted by both human activity and natural events?

Students will understand the key elements of a habitat by exploring some of Virginia's animal habitats:

- Part 1: Define what a habitat is and understand that different animals need different habitats to survive and understand how habitats change.
- Part 2: Assess a local habitat and learn about ways we can lower our ecological footprint and provide basic wildlife needs.
- Part 3: Students develop projects that help dive deeper into animal habitats and interdependent relationships.

OBJECTIVES

- Provide students with inquiry-based learning opportunities.
- Use scientific processes to safely investigate the natural world.
- Help students become familiar with primary and secondary research sources, conduct experiments and collect data.
- Engage students through project-based learning and STEM where applicable.

ESTIMATED TIME

PART ONE

Approximately 45 minutes as written, but additional time can be spent with large or small group discussions. This lesson plan is compatible with a virtual learning model.

PART TWO

Approximately 45 minutes as written, but additional time can be spent with large or small group discussions. This lesson plan is compatible with a virtual learning model.

PART THREE

This project should take place over several class periods. Virtual project options are available in the project choice boards.

MATERIALS NEEDED

PART ONE

- Google folder for your class to use.
- Student Page 1 – Each student should have access to this page in order to complete the activities and links to supplemental resources. Younger students may need assistance with reading the directions or completing the activities.
- Habitat Word Cloud – Have students think of at least 3 words they associate with a habitat. Ask students to submit words prior to lesson. Find the word cloud generator here: <https://www.wordclouds.com/>. On the website, select "File" and then "Create New Word Cloud". Under "File" you can also type in or paste the students' word choices. You can use the finished image to start a discussion about what a habitat is and point out some of the more interesting words that students came up with.
- You can watch the Habitats of Virginia video with your students or instruct them to view it separately. The video will introduce the concept of habitats, introduce them to specific habitats of Virginia, discuss what animals might live in specific habitats, and how a habitat might change.

Habitats of Virginia

LESSON OVERVIEW

MATERIALS NEEDED CONTINUED

PART ONE CONTINUED

- Animal and habitat videos
 - [Diamondback Terrapins Video](#)
 - [Amphibian Video](#)
 - [Sturgeon Video](#)
 - [James River Video](#)
 - [Choose Your Own Adventure: Muskrat Mission](#)
 - [Wetlands Exploration](#) – Google 360 experience
 - [Choose Your Own Adventure: Sea Turtle Resiliency](#)
 - [Habitats Game](#)
 - [Migratory Flyways](#) – Virginia is part of the [Atlantic Flyway](#) and habitat loss is a big concern
 - [Migratory Connectivity Project](#)
 - [Monarch Migration](#)
 - [StoryMap](#) – Tour oyster reef restoration in the Chesapeake Bay (5 locations in Virginia)
- [Interdependence](#) – explore relationships between organisms and learn about [symbiotic relationships](#)
 - [How Wolves Change Rivers Video](#)
 - [How Whales Change Climate Video](#)
 - [How Beavers Engineer the Land Video](#)
- Reading Selection – [Thinking Like a Mountain](#) by Aldo Leopold, [A Sand County Almanac](#)
- [Virtual Discussion](#)

PART TWO

- [Student Page 2](#) – Each student should have access to this page in order to complete the activities and links to supplemental resources.
- [Habitat Assessment](#) – This activity allows students to go outdoors to answer questions about their yard, a park or school yard. Students collect information about the outdoor habitat and can make recommendations of ways to improve it. Remember to follow the [Leave NO Trace](#) principles for outdoor ethics.
- What you can do:
 - [Ecological footprint calculator](#)
 - [Rain Garden exploration](#) – Google 360 tour
 - [Pollinator Garden Video](#)
 - [Habitats at Home](#) – Department of Natural Resources online booklet
 - [Recycling video](#)
 - [Rain Barrel video/resources](#)

PART THREE

- [Student Page 3](#) – Using the resources or habitat assessment data students collected, students will create a product showcasing their understanding of habitats and how habitats change for a project of their choice.
- [Guiding Questions](#) for students to use in the project type of their choice.
- [Project Choice Board](#)