

National Park Service  
U.S. Department of the Interior



Manassas National Battlefield Park

# Adaptations

EXPERIENCE YOUR AMERICA

# NPS History

The National Park Service was created by an act signed by President Woodrow Wilson on August 25, 1916. Yellowstone National Park was established by an Act signed by President Ulysses S. Grant on March 1, 1872, as the nation's first national park.



- There are over 400 different National Park Service Sites and 20,000+ employees
- Job opportunities range from: Law Enforcement, Interpreter, Superintendent, Maintenance Worker, Firefighter, Natural Resource Management, Engineers, Architects and more
- How old is the National Park Service today?
  - As of 2016, the National Park Service is 100 years old!
- Here in Virginia there are these NPS Sites:
  1. Cumberland Gap National Historical Park
  2. Brooker T. Washington National Monument
  3. Captain John Smith Chesapeake National Historical Trail
  4. Fort Monroe National Monument
  5. Colonial National Historical Park
  6. Appomattox Court House National Historical Site
  7. Petersburg National Battlefield
  8. Richmond National Battlefield Park
  9. Shenandoah River Valley Battlefield National Historic District
  10. Shenandoah National Park
  11. Cedar Creek and Belle Grove National Historical Park
  12. George Washington Birthplace National Monument
  13. Fredericksburg and Spotsylvania National Military Park
  14. Star-Spangled Banner National Historic Trail
  15. Prince William Forest Park

16. Manassas National Battlefield Park
17. Journey Through Hallowed Ground National Heritage Area
18. Wolf Trap National Park for the Performing Arts
19. Great Falls Park
20. George Washington Memorial Parkway
21. Arlington House the Robert E. Lee Memorial National Memorial
22. Potomac Heritage National Scenic Trail
23. Appalachian National Scenic Trail
24. Harpers Ferry National Historical Park

## The Mission

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.



# Manassas National Battlefield Park

Manassas National Battlefield park was established in 1940 to preserve the scene of two major Civil War battles, the Battle of First Manassas (First Bull Run) and the Battle of Second Manassas (Second Bull Run).



- Manassas National Battlefield Park is 5,000 Acres
- The Battlefield has over 40 miles of hiking trails
- The Battlefield is a Audubon Important Bird Area
- What was the Civil War fought over?
  - Slavery
- The American Civil War began after President Lincoln was elected
- The war lasted from 1861-1865
- The First battle of Manassas was in July 1861
- The Second battle of Manassas was in August 1862

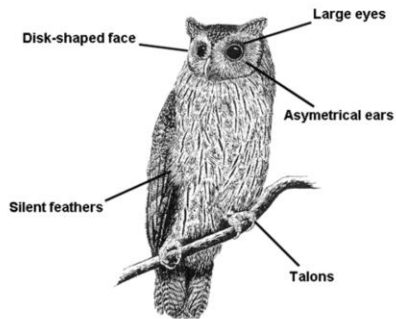
## What is your favorite animal?



- Ask the students what their favorite animal is.
  - Write their answers on the board

# Why are there so many different types of animals and plants in the world?

**Adaptations:** Special features (trait), either a change of form or behavior that allow a plant or animal to live in a particular place or habitat.



- Ask the students why there are so many different types of plants and animals in the world. Answers may range from:
  - Each animal has a specific role- food chain
  - They live in different places etc.
  - **Adaptations- an animals role in the environment and habitat causes and animal to develop traits to increase survival**
    - Adaptations can be passed on from parents for developed from the organisms interactions with its surrounding environment

What are some other adaptations animals and plants have?

- Camouflage
- Gills and fins
- Talons
- Fur
- Flight
- Leaves change colors
- Mimicry
- Night vision



- Some plants have bright colors to attract pollinators
- Turtles have shells to protect them from predators
- Bumble bee moth mimics to trick predators
- Fox camouflages in its habitat



What affects a plant or animals adaptations?

- Diet
- Predators
- Disease
- Human Interaction
- Passed down from parents
- **Where it lives**

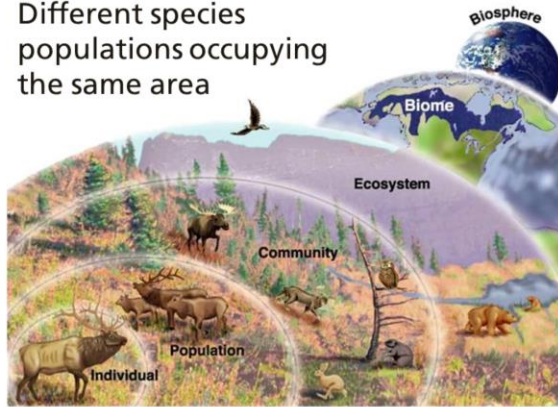
- Asked students what affects and organisms adaptations

**Habitat**

the natural environment where a species lives

**Community**

Different species populations occupying the same area



**Ecosystem**

a complex system of living and nonliving things interacting with one another

**Biome**

An area of the planet that can be classified according to the plants and animals that live in it.

**Biosphere**

parts of Earth where life exists

Ask students if they know the definitions of these terms

# Biomes

There are five types of biomes on Earth.  
What are they?



# Forest

Biological communities that are dominated by trees and other woody vegetation

- Boreal
- Temperate deciduous
- Tropical
- Broadleaf



- Ask students what they know about forest habitats.

# Tundra

The tundra biome is the coldest of all terrestrial eco-systems

- Low biotic diversity
- Simple vegetation structure
- Short season of growth and reproduction



- Artic
- Alpine

- Ask students what they know about tundra habitats.

## Desert

Deserts occur where rainfall is  $< 50$  cm/year. There are relatively few large mammals in deserts because most are not capable of storing sufficient water and withstanding the heat. Little shelter from the sun.

- Hot and dry
- Semiarid
- Coastal
- Cold



- Ask students what they know about desert habitats.

# Aquatic

Lots of water!

- Streams
- Lakes
- Wetlands
- Oceans
- Coral reefs
- Estuaries
- Covers  $\frac{3}{4}$  of Earth!



- Ask students what they know about aquatic habitats.

# Grassland

Lands dominated by grasses rather than large shrubs or trees

- Savanna
- Temperate
- **The battlefield Is mostly grassland!**



- Ask students what they know about grassland habitats.





- Ask the students what animals might be found in the Manassas National Battlefield Grasslands. Ask them what types of adaptations this animal has to survive at the battlefield.
  - Rabbit
    - Fur coat
  - Catfish
    - gills
  - Squirrel
    - Climb trees to find food
  - Eagle
    - Can fly
  - Duck
    - Goes south to escape winter
  - Deer
    - Fur coat
  - Fox
    - Fur coat
  - Butterfly
    - Bright colors

## Let's Review!

What is an adaptation?

What are the 5 biomes we covered?

# Activity Time!

## Create a Creature



Species Name \_\_\_\_\_

Common: \_\_\_\_\_ Scientific: \_\_\_\_\_

Habitat (food, water, and shelter) \_\_\_\_\_

Life History (size, adaptations, how long does it live) \_\_\_\_\_

Trivia: Fun Fact—Did you know that? \_\_\_\_\_

Use this animal as an example for the students

Name: butterose

Habitat: Grassland, Nests in trees, eats grass and aquatic vegetation

Life History: small, can fly, honks to alert danger, lives for 15 years

Fun Fact: butterose migrate south for the winter and pollinate plants

## Adaptations

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<https://www.nps.gov/mana>

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