

# THE LONGLEAF LEGACY PROJECT WITHIN SAM HOUSTON JONES STATE PARK

## Heritage. Restoration. Rebirth.



### LESSON 4

## Heritage: Biodiversity – Resilient Habitats for Wildlife

The longleaf pine forest is home to many different types of fauna. Fauna refers to the animals in a certain area, habitat or time period. The plentiful plants and grasses throughout the forest also provide shelter to amphibians, reptiles, mammals and other animals.

### Objectives:

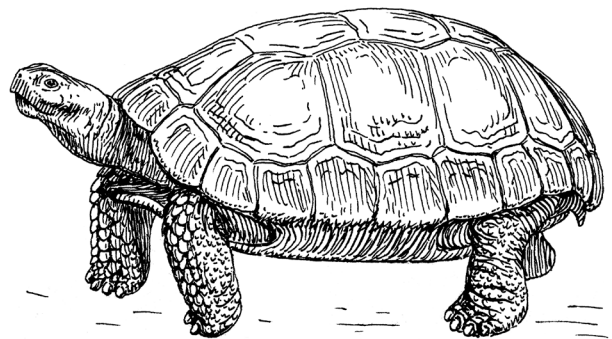
- To identify animal species featured in this lesson and understand their role in forest biodiversity
- To understand the concept of a habitat and how the longleaf pine forest is a habitat to many species
- To appreciate the concept of ecosystems and how the plants and animals interact with each other and within the longleaf pine forest ecosystem

**A Habitat for Many Species:** A habitat is where an animal lives. This habitat, or home, must meet all of the animal's needs, including providing food and comfortable shelter. Wildlife is a word used to describe wild animals. The longleaf pine forest is a habitat for many different forms of wildlife, including birds, reptiles and small mammals. Some areas of the longleaf pine forest in the United States are home to roughly 200 types of birds, including endangered species like the red-cockaded woodpecker. When a species is endangered, it is at risk of becoming extinct, which means it is in danger of disappearing from the population.

In addition to a multitude of bird species, longleaf pine forests contain hundreds of other animal species. Some animals like the gopher tortoise and the Louisiana pine snake live in shrubs, grasses and other plants on the forest ground. The [LSU AgCenter](#) notes that more than 25 species that live in longleaf pine forests are on the Louisiana Department of Wildlife and Fisheries' list of Species of Conservation Concern.



Red-Cockaded Woodpecker



Gopher Tortoise

**Wildlife Depend on the Forest:** More than simply a home, animals use the plants, grasses, and branches in longleaf pine forests for shelter, food and protection. The forest is a living ecosystem of interactions between the animals that live there and their surrounding environment.

For example, the endangered red-cockaded woodpecker interacts with the longleaf pine trees and the animals of the forest. Most woodpeckers live in dead trees because the wood is rotten and soft. This makes it easier for the woodpeckers to dig holes called cavities into the tree trunk. The red-cockaded woodpecker, however, is the only bird in North America to make its home in living pine trees. The birds pick older trees with softer spots in them. It can take 1-3 years for the birds to finish making their homes. More than shelter, the resin (a sticky and gooey substance in the trees) helps to protect the woodpeckers from predators like rat snakes. Predators are animals that hunt and capture other animals for food. Red-cockaded woodpeckers dig holes into the trees and resin seeps out of these holes. When the sticky substance touches the snake's scales, the snake retreats and climbs back down the tree. Longleaf pine forests are full of interactions like these.

### Key Words & Concepts:

**Biodiversity:** The number of different plant, animal and insect species found within a particular area. Longleaf forests are high in biodiversity. Biodiversity is often found not by looking up to the tree canopy but by looking down at your feet at the forest floor.

**Endangered:** A plant, animal or insect that is in imminent danger of becoming extinct. Species can be federally endangered (in peril of global extinction) like the red-cockaded woodpecker or American chaffseed plant, or state endangered (in peril of extinction from a region) like the gopher tortoise in Mississippi.

**Extinction:** Ceasing to exist. Extinct species will never reappear on the earth. Also called globally extinct. Longleaf forest examples include: passenger pigeons, the Carolina parakeet, Bachman's warbler and possibly the ivory-billed woodpecker.

**Fauna:** The animals of a particular region, habitat or time period.

**Flora:** The plants of a particular region, habitat or time period.

**Habitat:** An animal's environment (where it lives). This area must supply all of the animal's life needs.



Biodiversity



Red-cockaded Woodpecker



Predators

**Predators:** Animals that hunt and capture their food.

**Red-cockaded woodpecker:** An endangered species of woodpecker that nests only in living pines and prefers mature, open and park-like longleaf pine forests. Also called a peckerwood by Georgians.

**Species:** A species is a group of similar organisms that are usually capable of reproducing.

**U.S. Fish and Wildlife Service:** A federal agency whose mission is to conserve, protect and enhance fish and wildlife and their habitats for the continuing benefit of the American people.

**Wildlife:** A general name for species of plants and animals.

[LongleafLegacy.com](http://LongleafLegacy.com)



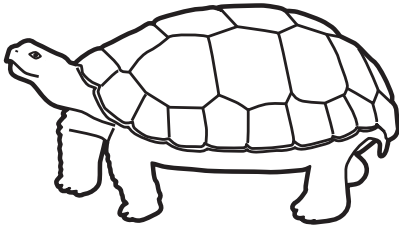
## LESSON 4

### Heritage: Biodiversity – Resilient Habitats for Wildlife

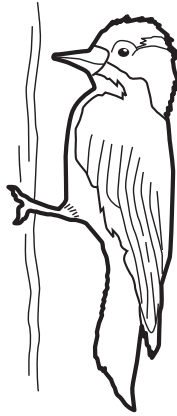
#### **SUGGESTED ACTIVITIES:**

- The more biodiversity in an ecosystem, the stronger it is. A healthy forest has balance among all that lives within it. Gather students around a tree near the classroom. Ask students to observe and record all the living and non-living things they find on and under the tree (and take samples if possible). Discuss the components of the tree's ecosystem.
- Engage students in an activity where they detect which animals do and do not belong in the longleaf pine forest. For example, from the worksheet provided, have students find and color the animals that belong in longleaf pine forests. Once colored, the students can cut and paste these animals onto the coloring sheet from the Lesson 1 activities page.

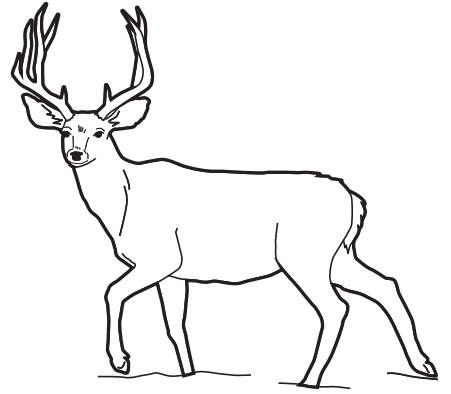
WHICH ANIMALS ARE FOUND IN A LONGLEAF PINE ECOSYSTEM?



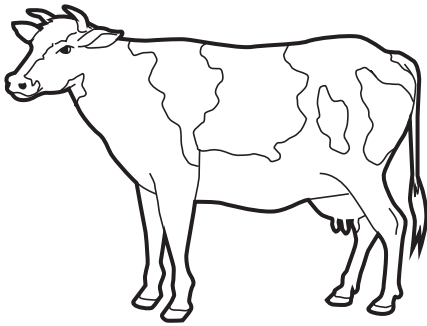
Tortoise



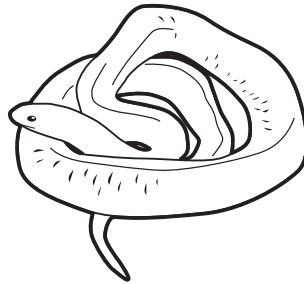
Woodpecker



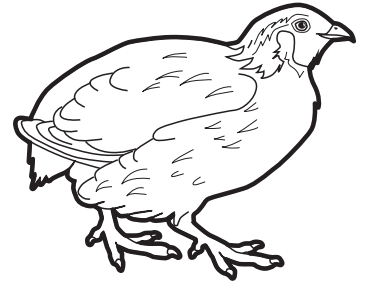
Deer



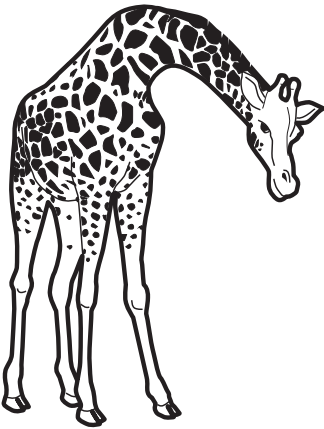
Cow



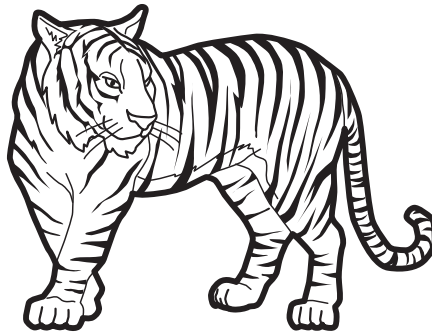
Snake



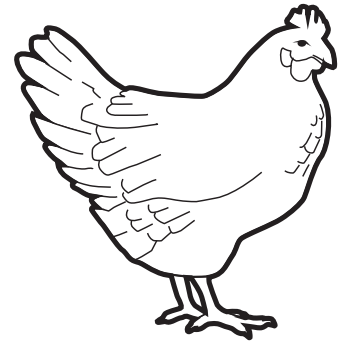
Quail



Giraffe



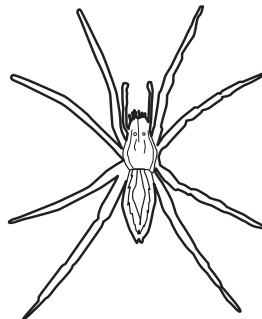
Tiger



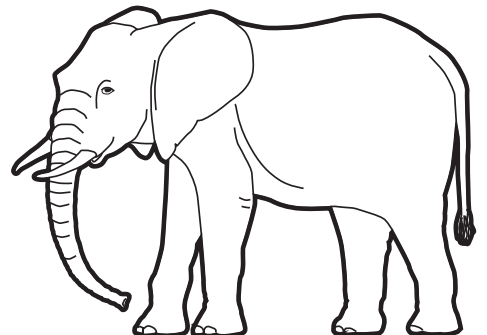
Chicken



Monkey



Spider



Elephant