the longleaf legacy project within sam houston jones state park Heritage. Restoration. Rebirth.



LESSON 1

Overview: The Longleaf Legacy Project in Sam Houston Jones State Park

This lesson introduces the unit on longleaf pine forests and the Longleaf Legacy Project. Key concepts are provided in this foundational lesson to guide students through the unit.

Objectives:

- To become informed about the Longleaf Legacy Project and its goals
- To understand terms essential to the project (heritage, restoration and rebirth)
- To recognize and identify the characteristics of longleaf pine trees

Overview:

The Longleaf Legacy Project is dedicated to the heritage, restoration and sustainability of an endangered American treasure – the longleaf pine forest. The project aims to preserve the iconic tree's rich history, restore the splendor of local forests and ensure the resiliency of habitats therein for generations to come. The Longleaf Legacy Project partners are implementing a restoration project in Sam Houston Jones State Park to restore degraded areas of longleaf forest to their former majestic conditions and to reduce wildfire hazards. The goal of the project is restoration and rebirth of the invaluable longleaf pine ecosystem.

Funded by Sasol, this project is a collaborative effort by the Louisiana Office of State Parks, the Office of the Louisiana Lieutenant Governor, The Coastal Plain Conservancy, the Community Foundation of Southwest Louisiana and Patagonia. Together, these partners aim to help restore the longleaf pine habitat in Sam Houston Jones State Park in Lake Charles, La.

Each of the lessons in this unit focuses on one of three key areas of the Longleaf Legacy Project.

Heritage: The Longleaf Legacy Project aims to preserve the iconic tree's rich history, restore the splendor of local forests and ensure the resiliency of habitats therein for generations to come.

Restoration: The Longleaf Legacy Project partners are implementing a restoration project in Sam Houston Jones State Park to restore degraded areas of longleaf forest to their former majestic conditions and to reduce wildfire hazards.

Rebirth: The goal of the Longleaf Legacy Project is restoration and rebirth of the invaluable longleaf pine ecosystem.







Heritage Restoration Rebirth

continued

Sam Houston Jones State Park: Originally named for the Texas folk hero who traveled extensively in the western reaches of Louisiana, Sam Houston Jones State Park was given its current name in honor of the state's 46th governor, who was instrumental in setting aside this tract of land for the public to enjoy. Because the caretakers of this 1,087-acre park have worked to keep the land in its natural state, abundant wildlife inhabits the area. Tree-filled lagoons and a mixed pine and hardwood forest combine to create a unique natural environment. The park is located in Lake Charles, just north of the most productive birding region in Louisiana. The bird watching is always excellent, but at certain times of year, nearly 200 species of birds can be seen at or within 30 miles of the site.

Sam Houston Jones State Park is located within the historical range of the longleaf forests, and the park property includes areas of degraded longleaf forests. The longleaf forest areas within the park have become heavily vegetated with undesirable underbrush, which not only decreases the ecological value of the habitat but also increases the hazard of devastating wildfires. Through the Longleaf Legacy Project, partners are implementing management practices to restore these degraded areas to their former majestic conditions and to reduce wildfire hazards.







Longleaf Pines: The longleaf pine (Pinus palustris) was once one of the most abundant tree species in the United States. Its realm — vast savannas shaped by thousands of years of frequent fires set by lightning and Native Americans — stretched some 90 million acres (roughly the size of the state of California) across the American South from Virginia to Texas. But as America grew, so too did the pressure on longleaf pines and by the early 20th century, most mature trees had been harvested for timber. Today, with land-use practices such as logging, farming, development, urban encroachment and fire exclusion, less than 4 million acres of longleaf pine habitat remain, making it one of the most endangered ecosystems in North America.

These southern longleaf pine forests are among the world's most biologically diverse systems, home to some 300 species of birds and 2,500 species of plants. Their traditionally open canopy structure and understory of grasses and forbs can contain up to 40 plant species per square yard, along with a unique compliment of wildlife, several of which have been listed by the U.S. Fish and Wildlife Service as threatened or endangered, while several others are being considered. Longleaf pine habitat also plays a vital role in maintaining the long-term health of the region's rivers, aquifers and freshwater springs. Habitat restoration projects are critical to stabilizing declining wildlife populations and maintaining healthy ecosystems.







Key Words & Concepts:

Acre: A unit of measure used to describe large areas, equal to 43,560 square feet. A square acre would be approximately 209 feet by 209 feet, and a circular acre would have a radius of 117.75 feet. Visually, one acre is about the size of a football field.

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.

Canopy: A general term used to describe the area at the tops of trees. The term can mean all the treetops in a forest area or parts of an individual, mature tree that are green. As longleaf pines reach maturity, this canopy stops growing in height and flattens out – it is not beneficial to be the tallest tree in an environment dominated by lightning. Such a canopy in an old longleaf pine forest is called "flat-topped."

Ecosystem: Plant and animal communities, their environment and the resulting interactions. An ecosystem can be as simple as a mud puddle or dead log or as complex as a forest containing thousands of acres.

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.

Groundcover: A generic term used to describe the mat of plants found on the forest floor. In longleaf pine forests, this groundcover is usually dominated by a species of grass like wiregrass or split-beard bluestem.

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

Longleaf Pine: A southern pine species which once dominated the uplands of the southeastern United States. It is the state tree of Alabama. Also called: The Fire Forest, Pine Barrens, Pineywoods, High Pines, Flatwoods, Mountain Pine, Yellow Pine Forests, etc.

Range: An area where a species can naturally occur. Range can be limited by geography, climate, soils, elevation, aspect, etc. Also can be used to describe areas where livestock are grazed. May also be used to describe a collection of mountain peaks like those found in north Georgia and Alabama where longleaf pine forests once thrived.

LongleafLegacy.com











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SUGGESTED ACTIVITIES:

- Bring pine cones and/or pine needles to class and pass them around to familiarize students with pine tree characteristics. These materials could also be used as a crafting activity.
- Have students complete coloring sheets that show longleaf pine forests. Discuss the colors and media students use to complete the activity and how they reflect the forest. A coloring sheet is provided on the next page.