



THE LONGLEAF LEGACY PROJECT WITHIN SAM HOUSTON JONES STATE PARK

Heritage. Restoration. Rebirth.



LESSON 6

Restoration: What will restoration look like?

In Louisiana's Sam Houston Jones State Park, the Longleaf Legacy Project partners are working to restore more than 70 acres of longleaf pine forest. Restoration, by definition, involves putting things back to the way they used to be. In longleaf pine forests, restoration means helping to refresh the ecosystem, enabling native plant and animal communities to thrive. Longleaf Legacy Project partners are working to restore the ecosystem to its former majestic condition.

Objectives

- To define restoration and to understand the steps of restoration
- To understand the goals of the ongoing longleaf pine restoration efforts in Sam Houston Jones State Park

Goals of Restoration: As discussed in previous lessons, restoration involves putting things back to the way they used to be. One of the ways to understand restoration and the restoration process is to think about a piece of antique furniture. Students may be familiar with a favorite chair or table that has been in their family for decades. It is likely that favorite chair or table has worn over time from use, or from being stored and neglected. Just as a piece of beloved furniture wears over time and can be restored to its former beauty, so too can longleaf pine forests. We often restore things because we treasure them. In whatever we work to restore, the act and labor put into restoration helps to make sure that we can keep that item beautiful for years to come.

The [U.S. Department of Agriculture](#) notes that ecological restoration carries the same theme but can sometimes be a little different from normal restoration projects. Restoration in a longleaf pine ecosystem does not always mean returning it to exactly the same way it used to be. Big changes, such as landscapes altered over time and new species, make going backward through time impossible. Restoration's primary goal is to improve (and re-establish where necessary) the make-up, structure and functions of an ecosystem to benefit present and future generations of longleaf pine.

Restoration of our environment helps to repair ecosystems that have been degraded, damaged or destroyed. Discuss the concept of restoration with your students. At its heart, restoration can teach lessons in problem solving, love of learning and working together in a search for solutions.

Goals of Restoration in Sam Houston Jones State Park: Habitat restoration projects like the Longleaf Legacy Project are important for stopping the decline of wildlife populations and supporting healthy ecosystems. They are also important teaching opportunities. In addition to restoring a local longleaf pine habitat, the [restoration project in Sam Houston Jones State Park](#) aims to raise awareness of and teach about the existence of the longleaf pine forest's unique and biologically diverse ecosystem.

Recall the three areas of concentration for the Longleaf Legacy Project discussed in Lesson 1: heritage, restoration and rebirth. These three areas underscore the restoration work involved in the project. Refer to Lesson 1 for renewed class discussion.

The restoration efforts in Sam Houston Jones State Park are occurring in phases. These phases include clearing the forest of all the plants and grasses that do not belong, conducting planned burns and taking action to prevent unwanted vegetation from coming back.

Longleaf pine forests are an important part of Louisiana's unique and diverse ecology. If more is not done to help protect and restore our longleaf pine forests, we can expect them to decrease in number in the future.

Longleaf Restoration Steps:



Mulching



Burning



Growth

Mulching. The beneficial effects of mulching will be immediately visible. Although this step may look harmful to the forest, mulching removes plants and shrubs that should not be in the forest and makes room for the right plants to grow.

Burning. Planned burns help release nutrients from the mulch back into the ground to fertilize grasses and wildflowers. Longleaf pines are resistant to wildfire. The species is fire dependent, meaning controlled burns are essential to restoring and managing longleaf pine ecosystems. The beneficial effects will appear gradually.

Growth. After planned burns take place, native plants and grasses return, grow and thrive. New vegetation will sprout from existing seeds in the soil in increasing amounts each year.

**Learn more about mulching and removing the underbrush in Lesson 7.*

**Learn more about prescribed burning in Lesson 8.*

Key Words & Concepts:

Ecology: The branch of biology that deals with the relationships of organisms to one another and to their physical surroundings.

Mulching: Mulching removes plants and shrubs that do not belong in the forest and makes room for plants that do belong.

Nutrients: Substances that provide the nourishment necessary for growth and maintaining a healthy life.

Planned or prescribed fire: Fire that is carefully planned and carried out by trained professionals under specific weather conditions for a specific goal. Also called a controlled burn because experts can somewhat predict what the fire will do.

Restoration: Putting things back the way they used to be. In the case of longleaf pine forests, restoration refers to getting back the trees, the understory community and the animal communities that once inhabited them.

Underbrush: Shrubs, plants and small trees found under trees in a forest.

LongleafLegacy.com



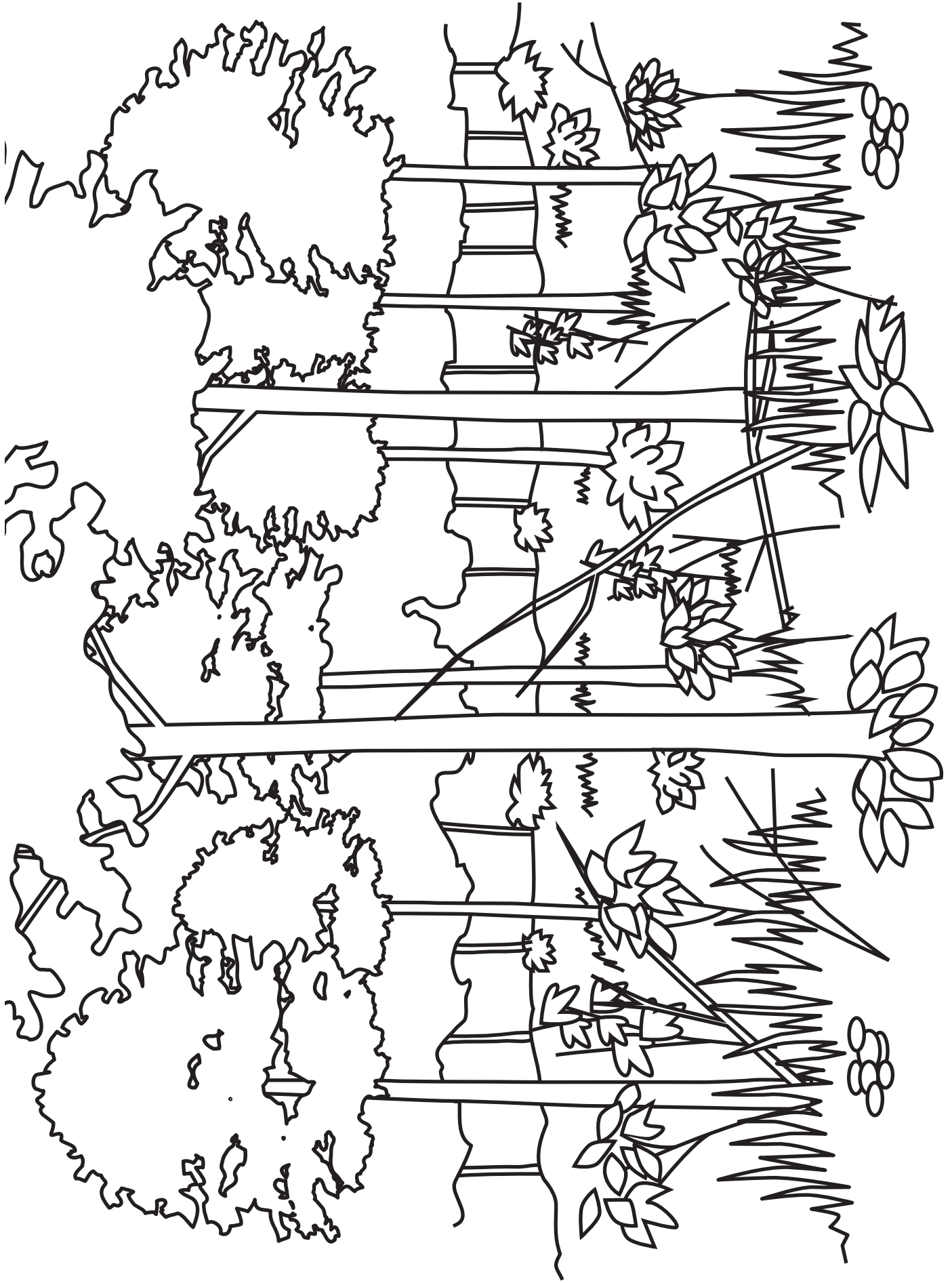
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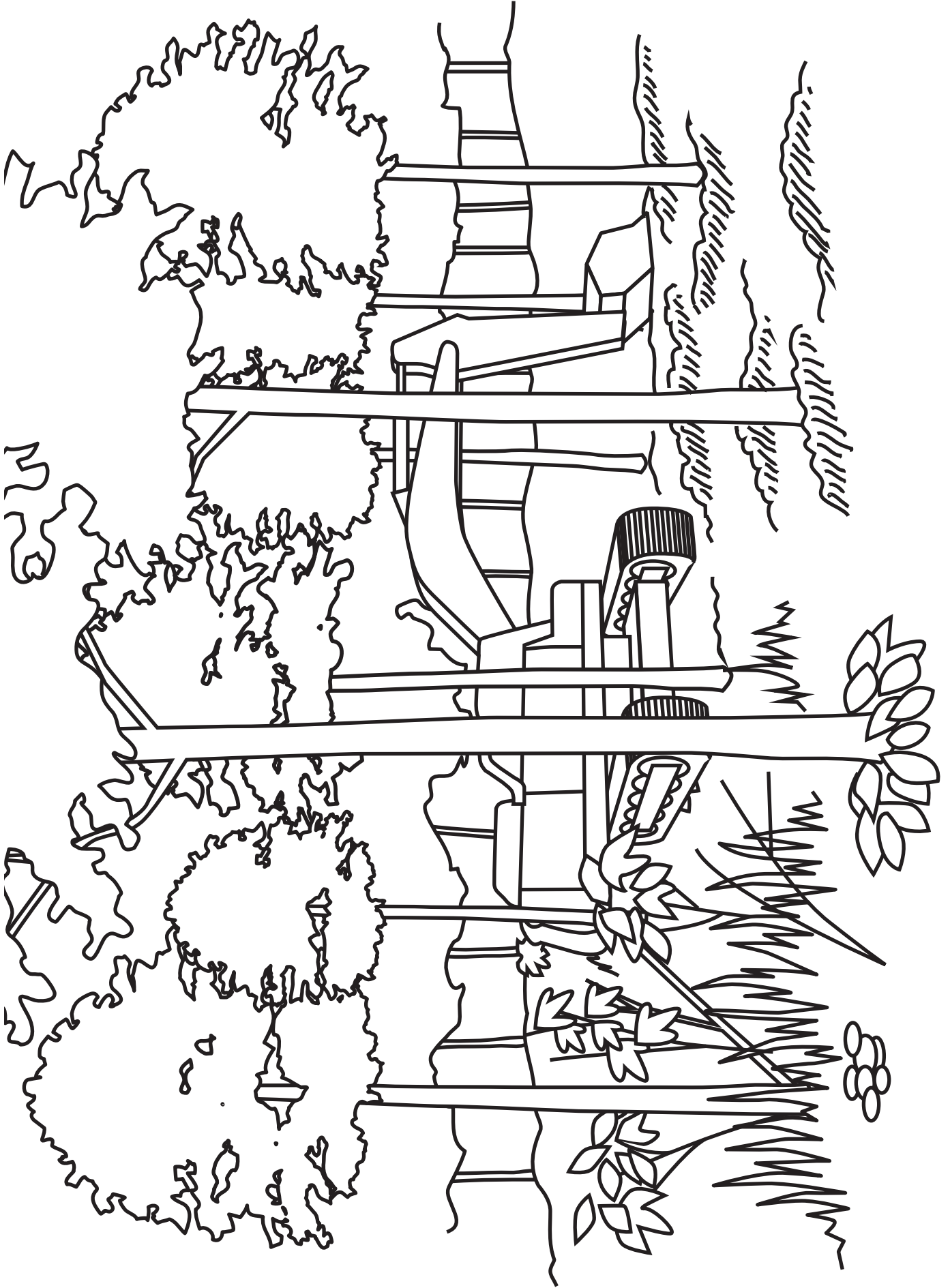
SUGGESTED ACTIVITIES:

- Lead a discussion with students on the importance of restoration. Discuss natural resources and why they are important. Talk about other types of restoration and conservation in your community to draw parallels.
- Provide students with the coloring sheets on the following pages that show the before, during and after stages of restoration in a longleaf pine forest.

BEFORE RESTORATION: HEAVY AND OVERGROWN UNDERBRUSH



DURING RESTORATION: MULCHING HELPS TO MAKE ROOM FOR NATIVE PLANTS



AFTER RESTORATION: A CLEAR AND CLEAN FOREST

