

Project 10
Gulf State Park Longleaf Pine Restoration

Final Performance Report

State: Alabama

SWG Grant Number: T-3-2

The objective of this Project was to restore approximately 128 acres of storm damaged mixed timber at Gulf State park to Longleaf pine savannah, which will in the future, revitalize high priority plant and animal species and further Parks Division education goals. In reference to the original project narrative pertaining to habitat fragmentation and species diversity, this project address' areas which are close in proximity to pockets of Longleaf pine communities. Zone 2 in the southeast quadrant adjacent to the campground is a good example of this relationship. Further long range planning has identified two other areas comprising two hundred acres total that are located within a reasonable distance from Zone 1 and 2. Habitat manipulation to restore these areas to Longleaf pine will follow a similar plan as in this project.

More importantly for future consideration is a five year project (T-5-P) now at its midpoint, which will allow for the development of a multi species Inventory and Conservation Plan (ICP), as part of the Alabama Comprehensive Wildlife Conservation Strategy, (CWCS), a plan also noted in the narrative of this project. Surveys of greatest conservation need (GCN) species recognized within the Southeastern coastal plain within Gulf State Park have been conducted. Further monitoring of birds, reptiles/amphibians and mammals using standard point count methodology and sight records by season will be conducted by Park staff with assistance from the Natural Heritage Section of the State Lands Division. As research and survey monies become available in the future and as these areas become more mature, GCN species may be more readily identified and efforts to further educate the Park visitor will be met both locally and regionally. This mindset in turn, will help the Parks Division make educated decisions on the management of these lands and the further conservation of species as populations of GCN species and associated plants and animals expand. This benefit could shape the development of private property on the North border of the Park, a zone which currently has not been developed and serves as a buffer. Currently, a new Nature Center and Classroom building are being constructed within the Campground at Gulf State Park and should be completed by January 2011.

The three restoration zones had been previously salvaged and windrowed, post Hurricanes Ivan and Katrina. As in any planning process, consideration was made as to how many viable acres could be planted based on the salvage operation. The Division would have liked to plant more acres during this time frame however, this decision was made after the sites were windrowed and in direct relationship to the disturbance of the sites. This is evident in furrowing, which created deep pockets throughout the three sites which in turn held water and prohibited planting Longleaf in those pockets. Noting this and in consideration of costs involved to grade these areas, budget not allowing, the

project scope changed to address this problem. The final part of this restoration effort was broken into three phases. The final project scope consisted of herbicide application, prescribed burning and planting and was bid to include all three. The first phase consisted of the mechanical application of herbicide to treat woody stems, saplings and grasses within each of the three restoration zones in the Fall of 2009. The herbicide was applied from the ground using a tractor. The second phase consisted of a prescribed burn in each zone coordinated through the Parks Division and Alabama Forestry Commission in March of 2010. The third phase consisted of planting Longleaf containerized seedlings and associated, larger stock in the border and wet areas.

The Alabama State Parks Division feels that this project has been very instrumental in helping to shape a pattern of planning to restore more acres within the Park to Longleaf pine forest. The areas reaching a more mature state in the future should provide significant benefits to GCN and other wildlife species associated within and adjacent to these zones. In addition, this restoration will benefit a large number of neotropical migratory birds by enhancing an important coastal resting, foraging and cover site. Currently, as of this writing, impacts to the Alabama coastal marshes from the oil spill are not known as to long term impacts. By enhancing this project habitat and those associated borders, we may offset a loss in one area while providing a gain in another.

Educational efforts pertaining to this project will be highlighted through the new Nature Center building located in the Campground. This building is expected to be complete in January 2011. A walking trail through both of the larger zones will take visitors through both the planted and regenerated areas as a comparison in habitat types as these areas mature in the future. Currently, guided hikes are given in an area previously mentioned as a Longleaf/Pitcher Plant Bog associated with future Longleaf expansion.