



Request For USDA State & Private Forestry Grant

Applicant: Georgia Forestry Commission P.O. Box 819 Macon, GA 31202

Project Name: "Longleaf-Wiregrass Seed Orchard"

Project Lead: Russ Pohl, Macon, GA 478-751-3520, rpohl@gfc.state.ga.us

Project Proposal Abstract: This project proposes to establish 15 -20 acres of longleaf seedling seed orchard in central Georgia. Wiregrass will be established as a ground cover. Management will consist of frequent burning to encourage seed production from the wiregrass. The Georgia Department of Natural Resources is cooperating in the establishment of the wiregrass and harvesting of its seeds. The seeds will be propagated and used in reforestation efforts by DNR. The longleaf seedlings will be chosen from superior families supplied by the Florida Division of Forestry. As they mature, the best individuals will be favored as the stand is thinned. Ultimately, the final stand composition will be the best trees from the best families and can be used as parent trees for longleaf reforestation.

Partnering Agencies and Groups / Individuals: USDA, Forest Service, Region 8; Florida Division of Forestry; Georgia Department of Natural Resources

Project Location: Arrowhead Seed Orchard, Pulaski County, Georgia

Expected Completion Quarter: Q4, 2010

Total Federal Funding Request: \$ 147,000.00

Total Proposal Budget (Including Matching Funds):

Cost Category	Requested Funds	Matching Funds	Total
Personnel	\$36,000.00	\$102,000.00	\$138,000.00
Materials & Supplies	\$40,000.00	\$5,000.00	\$45,000.00
Travel	\$2,000.00	00.00	\$2,000.00
Consultants	\$2,000.00	00.00	\$2,000.00
Overhead / Administration	\$15,000.00	\$24,000.00	\$39,000.00
Equipment	\$40,000.00	\$30,000.00	\$70,000.00
Printing	00.00	00.00	00.00
Other	\$12,000.00	\$2,000.00	\$14,000.00
TOTALS	\$147,000.00	\$163,000.00	\$310,000.00

Project Description and Benefits:

The Longleaf/wiregrass seed orchard project proposes to establish approximately 15-20 acres of longleaf pine seedlings of known genetic sources with a ground cover of wiregrass. The plantation will be designed to accomplish multiple purposes. First, seedlings from identified superior families will be planted with the expectation that they will be thinned to the best individuals. These trees will eventually be a source of superior longleaf pine seed for reforestation. Second, wiregrass will be established simultaneously. The wiregrass will provide ground cover, and with appropriate the burning schedule, will be a source of seed for habitat restoration. Third, the site will provide a demonstration area of the longleaf/wiregrass ecotype.

The Longleaf/wiregrass Orchard project is designed to benefit the forest in the following ways relative to our national interests:

Enhance Working Forest Landscape – Many landowners across the Southeast are interested in reestablishing the longleaf/wiregrass ecotype. Both species are in high demand as planting stock. There is a shortage of reliable seed sources for both species. This project will help to satisfy some of that demand.

Protect Forest From Harm – Both longleaf and wiregrass are fire adapted species and their reestablishment will reduce the threat of catastrophic wildfire.

Enhance Benefits Associated With Trees & Forests – The longleaf-wiregrass ecotype is one of the most diverse and productive ecotypes of the eastern forest. The benefits to wildlife and the southern ecosystem are well documented.

The proposed project will have a positive impact on the following regional issues:

Fractured Forests – Adding value to forest systems makes them more desirable to landowners and encourages their establishment and preservation. The longleaf-wiregrass ecosystem is one of the most important types known in the South. Wildlife habitat and genetic diversity are among the benefits generated by this forest type. Productive seed sources of these species are necessary for their re-establishment.

Wildland Fire and Forest Fuels – Both longleaf pine and wiregrass benefit from frequent fires as part of a management regime. Frequent fire reduces fuel loads to manageable levels and prevents the occurrence of catastrophic wild fire. Efforts to increase the frequency of this ecotype should reduce wildfire danger.

Changing Forest Products' Markets – The emphasis on benefits other than wood fiber provided by forest systems is supported by this proposal. Though wood products can be a substantial benefit from longleaf-wiregrass forests, other benefits such as carbon sequestration, wildlife habitat, and ecosystem preservation are of substantial value.

Forest Health – Longleaf forests are important components of the southern forests. They are natural, healthy, vigorous forests. As such, they are relatively resistant to large scale pathogen infestation.

Project Evaluation Criteria Discussion:

The Longleaf/wiregrass Seed Orchard project meets the established criteria in the following ways:

National and Regional Relevance – The original range of the longleaf-wiregrass ecotype stretched across the entire Southeast. Restoration is a regional endeavor.

Prioritization – Restoration of this diverse, valuable, and diminished ecotype is vastly important to state, local and federal jurisdictions.

Meaningful Scale – The seeds ultimately harvested as a result of this project will be appropriate for restoration efforts in Georgia, South Carolina, Alabama and Florida.

Collaboration – The Georgia Department of Natural Resources will assist with the establishment of the wiregrass ground cover and harvesting of the resulting seeds. The Florida Division of Forestry will assist with the acquisition of seed sources for the longleaf seedlings. The USFS, Region 8, will be providing expertise and advice.

Outcomes – Within a few years the site should be producing wiregrass seed that will be used for restoration efforts on public lands in Georgia. The longleaf seeds produced will be planted in GFC nurseries and distributed to Georgia landowners.

Integrated Delivery – Throughout its existence the longleaf-wiregrass area will be used to demonstrate the use of fire as management tool in this ecotype.

Leverage – Currently, federal money is available for ecosystem restoration and management, and this project supports those efforts.

Influence Positive Change – The site will function as a teaching and demonstration site in middle Georgia providing usefulness long after the project is completed.

Timelines –

- Year 1: Identify and collect appropriate longleaf seed sources
Establish wiregrass ground cover
- Year 2: Grow longleaf seedlings in shade house
Use fire to manage wiregrass
- Year 3: Continue the use of fire
Plant longleaf seedlings