

OKLAHOMA DEPARTMENT OF AGRICULTURE, FOOD AND FORESTRY



FORESTRY SERVICES

FOREST TREE IMPROVEMENT CENTER



Improving The Forest Resources of Oklahoma Through Proven Tree Improvement Practices

Mission

The mission of the Forest Tree Improvement Center Program is to help Oklahoma landowners by breeding and propagating genetically improved trees for seed production. The program emphasizes a natural approach to the mission of both improving and increasing the genetic diversity of several forest tree species. The program provides:

- ◆ The only source of native Oklahoma and adaptable seed sources maintained for the Oklahoma region for southern pines.
- ◆ Technical assistance to landowners, and environmental education service to schools, civic groups, and other organizations.
- ◆ The primary distribution point for the major southern pine reforestation efforts in eastern Oklahoma.
- ◆ The only program in the state devoted to the improvement and maintenance of the genetic resources of the diverse Oklahoma ecological species base.

Oklahoma's Natural Resources

Families and individuals, i.e. non-industrial private forest landowners (NIPF), own 74 percent of Oklahoma forests. Unfortunately, these NIPF lands are generally under limited, if any, professional management. Much of the "original" rich forest resources found by early settlers was over-harvested, high graded, and generally abused. Our seemingly abundant forests were seriously degraded. The Tree Improvement Program is designed to reverse this damage as much as possible by "recapturing" the genetic diversity and redeploing high quality trees in Oklahoma reforestation efforts.

The Need for Proper Stewardship

Our forests and natural resources greatly contribute to the economic, ecological, and social value of the land and people. Key resource values include:

- ◆ Clean air and water
- ◆ Timber based industry
- ◆ Erosion control
- ◆ Recreational opportunities
- ◆ Wildlife Habitat

The Tree Improvement Program

The Forest Tree Improvement Center at Idabel offers citizens a variety of natural resource programs and services, and a consistent and dependable supply of quality conservation tree seed. In conjunction with Oklahoma State University and the Western Gulf Forest Tree Improvement Cooperative, research-based cooperative programs are carried out to continually evaluate and improve seed sources to ensure that landowners receive trees that are highly adaptable to the often harsh and diverse Oklahoma climate and environment. This cooperative approach to forest tree improvement has proven very successful as members throughout the region share the intensive workload needed to breed, test, and deploy high quality adaptable trees.

Benefits to Oklahomans

- ◆ The program provides a dependable and reliable source of proven seed for reforestation. Prior to the advent of federal and state forestry organizations, the pattern of natural resource destruction became clear. Government programs such as the forest regeneration and tree improvement initiatives have proven to be essential and much needed public natural resource programs.
- ◆ The value of improved reforestation efforts translates to direct economic benefits for forest landowners in Oklahoma. Currently the FTIC seed orchards are producing loblolly pine seed offering growth rates that are 15-33% greater than non-improved seed. Oklahomans can now grow the same volume of loblolly pine timber on 4 acres that just a few years ago took 5 acres. Shrinking forestland bases dictate that we maximize reforestation efforts to sustain a viable and progressive forestland based economy that is prevalent in much of the eastern part of the state.
- ◆ The program has an average annual production of approximately 500 pounds of southern pine seed and this represents an added present day value of \$900,000 per year. The FTIC annual budget is approximately \$180,000 and the net value to Oklahomans is a benefit to cost ratio of approximately 5 to 1.
- ◆ Increasing pressures on natural resources is a fact of life in today's complex sociopolitical arena. The application of proven forest tree improvement principles has been found to be one of the most effective and ecologically sound methods of increasing forest productivity and maintaining genetic diversity in forestlands.