NC STATE College of Natural Resources

TREE IMPROVEMENT PROGRAM

A McIntire-Stennis supported project for over 30 years

The Tree Improvement Program in the College of Natural Resources is a public-private cooperative that conducts vital research and operates an advanced breeding program to increase forest productivity by developing more valuable tree stock.

Genetically improved loblolly pines with increased resistance to disease, improved growth rates, and higher stem quality, among other traits, allow for more flexible management options and yield greater returns for landowners, foresters, forest companies, and the forest products industry.

The Tree Improvement Program hosts annual meetings for members and a number of workshops, short courses, and seminars on topics ranging from grafting techniques to determining the financially optimum varieties to plant under varying silvicultural systems. Program staff advise cooperative members on all aspects of their tree improvement programs and provide detailed evaluations of regeneration activities as well as guidance on optimizing breeding, testing and selection programs.

COLLABORATION

Members of the NC State Tree Improvement Cooperative provide genetic material that is planted on almost one million acres per year.

34 members

Including landowners, nurseries, consultants, state agencies and forest products companies

About McIntire-Stennis

The McIntire-Stennis program, a unique federal-state partnership, cultivates and delivers forestry and natural resource innovations for a better future. By advancing research and education that increases the understanding of emerging challenges and fosters the development of relevant solutions, the McIntire-Stennis program has ensured healthy resilient forests and communities and an exceptional natural resources workforce since 1962.

USDA

Impact

Landowners have never had so many options to plant loblolly pine of outstanding genetic quality.

>60%

Of the pine trees planted in the South come from the program's genetic stock

$1.9 billion

Value in wood across the South comes from genetically enhanced trees

~230

Global and national leaders educated in the field on enhanced breeding