



SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

South Central Soil Survey Region

Ruston, Louisiana, Major Land Resource Area (MLRA) Soil Survey Office (SSO)

Forest Inventory for Technical Assistance

Purpose

Forest inventories are an integral component of conservation planning. These inventories are required by field office staff for program compliance. However, they also serve as valuable resources for customers and partners when making informed decisions that will best conserve and protect the private lands of our nation's natural resources.

Background

From the fire-primed piney hills to the cypress bottoms, Louisiana Resource Unit (LARU) 2 boasts the state's natural beauty—a true sportsman's paradise. Located in North Central Louisiana (fig. 1), LARU 2 includes Webster, Claiborne, Lincoln, Jackson, Union, and Ouachita parishes. With four Natural Resources Conservation Service (NRCS) field offices, this resource unit provides most of its assistance for property occupied by cattle and timber and has serviced roughly 134,000 acres of forestland during the 2022 and 2023 contract years. As the number one crop in Louisiana, timber is a popular resource for private landowners in the region. Although the commercial value of timber is arguably the most important for some landowners, a vast majority still prefer to manage their property for a secondary purpose that yields dual benefits.

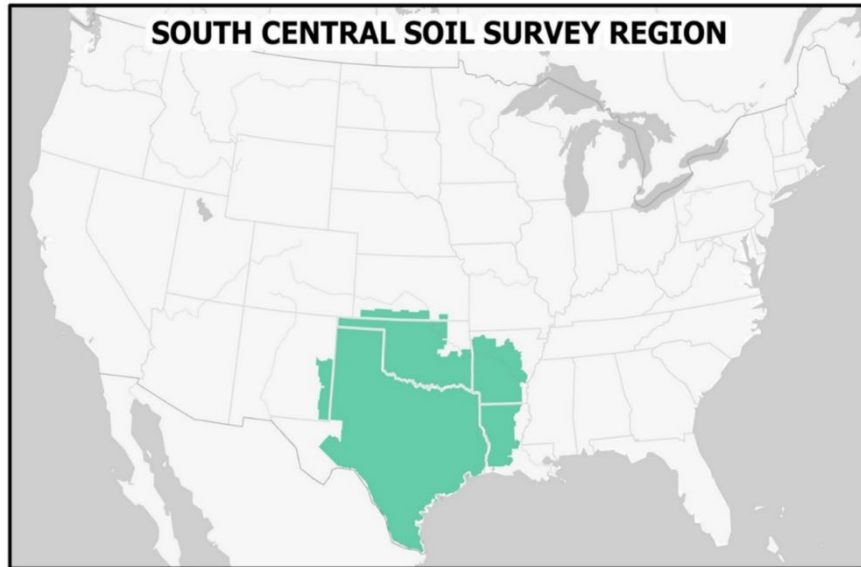


Figure 1.—A map of the South Central Soil Survey Region.

On April 22, 2024, Rustin SSO Ecologist Chris Stelly, traveled to Claiborne Parish to assist LARU 2 Soil Conservationist David LaMay, with a forest inventory. Stelly offered recommendations of plant species that would function best on the available ecological sites for a landowner interested in participating in NRCS cost-sharing programs.

Key Outcomes

Grossing nearly 1,200 acres, the property in question had a single main ecological site—Loamy Over Clayey Upland. Having just received its first thin, 15-year-old stand of loblolly pine (*Pinus taeda*), the property reduced to 70BA (basal area) on a Loamy Over Clayey Upland ecological site (fig. 2). Now, with an ample amount of sunlight, the understory of this stand released and began to flourish with a multitude of herbaceous species such as broomsedge bluestem (*Andropogon virginicus*), longleaf woodoats (*Chasmanthium sessiliflorum*), deertongue (*Dichanthelium clandestinum*), and needleleaf rosette grass (*Dichanthelium aciculare*).

As the thinning allowed for an increase in herbaceous growth, the timber stand showed potential for a cattle producer who believed the pine plantation next to his pasture is disadvantageous to his current grazing system. With the help of Louisiana NRCS staff, this producer plans to manage this timber stand as silvopasture. The producer will integrate short cattle grazing periods, after establishing more palatable forage that will flourish on the ecological site, such as purpletop tridens (*Tridens flavus*), little bluestem (*Schizachyrium scoparium*), and the multitude of forbs that will follow with proper management.



Figure 2.—Recently thinned 15-year-old loblolly pine stand.