
To determine the initial soil quality and tree parameters in a newly-developed silvopasture system.

A silvopasture was developed by thinning down (3 plots, 1-acre each) the 8- year old mixed species of pines (loblolly, and longleaf,) and hardwood stand located at the Atkins Camp Site of Tuskegee University, Tuskegee, AL. Soil quality (compaction, pH, nutrient status, and organic matter) and tree parameters (height and diameter at the breast height (DBH) were measured after the stand was thinned and plots were tilled.

Among soil parameters, phosphorus was low (7lbs./acre), magnesium high (57lbs./acre), pH low (5.2), median organic matter 2.4%, and average soil compaction was 84 ± 4.0 psi. The median number of trees per acre for loblolly and longleaf pine was 72 and 47 respectively. Both tree height (H) and diameter (D) at breast height were higher for loblolly (H: 23 ± 0.02 ft.; D: 5 ± 0.1 in) than longleaf pine (H: 21 ± 0.3 ft.; D: 4 ± 0.1 in).

This research is ongoing with the incorporation of selected cool-season and warm-season forages, and grazing those forages with meat goats. The expected results will be very useful for goat producers and professionals in the Southeast.