

Silvopasture Works On Sudduth Farm

By *Tilda Mims*, Information Specialist, Alabama Forestry Commission

John and Mary Sudduth of Winston County took multiple-use forest management to the next level when, in 1985, they introduced silvopasture to their Double Springs farm. Almost 20 years later, Charolais cattle successfully graze in a healthy pine plantation, increasing productivity of both practices.

Although some form of silvopasture – the combination of trees with livestock production – has been practiced for centuries worldwide, woodland grazing declined in the South during the last 30 years. Timber growers felt that growing trees alone was more economical than a multiple-use system.

The Sudduth family experimented with managing timber and pasture as a single integrated system and demonstrated that, if managed properly, forage production can be maintained while producing high value timber. Scientists in this field consider silvopasture successful when more production is obtained by the trees and livestock than could be obtained on the same piece of land with only a commodity. For John and Mary Sudduth, the integrated system has produced a “double crop.”

“People in the community were curious and thought it odd at first, but it worked out fine for us,” John said. The Sudduths allow 60 registered Charolais cows and heifers freedom to graze on about one-third of their 300-acre TREASURE Forest. He notes that although the cows graze the areas under the trees last, preferring the pasture grass, they make good use of the silvopasture over time. “We have a double crop and both are doing well,” he stated.

The Sudduths began buying land in 1975 to make a home for their children – Johnny, Sanda, and Carla – and to manage for timber and recreation. In 1985, John noticed an area in a thinned pine

plantation open enough to graze cattle and he decided to plant pasture grass for grazing. As an agri-business teacher at Winston County High, he had frequent access to specialists at Auburn University, learning from their research.

Silvopastures may be developed by (1) introducing forage after a thinning to reduce tree canopy or (2) establishing trees in open fields. The Sudduths converted a thinned pine plantation into a silvopasture. Loblolly, longleaf, and slash pine are compatible with forage production and livestock grazing when properly managed because they adapt to diverse



John and Mary Sudduth are retired teachers from Winston County High School.

growing sites, respond rapidly to intensive management, and permit more light to reach the forest floor.

Trees are widely and evenly distributed over the area to optimize growing space and light for both trees and forage. Lower tree densities allow forage to grow longer into the timber rotation. Young trees often benefit from two to three years of vegetation control after planting. Some silvopastures group trees into rows or clusters to concentrate shade and roots while providing open spaces for pasture production. Either way is acceptable.

Once the terminal bud of the trees is above the grazing height of livestock (six to eight feet), grazing can proceed without damage to the trees.

John carefully disks lightly around the pines to protect roots from damage. He recommends fescue, orchard, and pasture grasses as the forage component because it is productive under partial shade and moisture stress, responsive to intensive management, and tolerant of heavy utilization. Research indicates that some forage species tend to be lower in fiber and more digestible when grown in a tree-protected environment.

The Sudduth’s silvopasture system enhances productivity of several aspects of their TREASURE Forest: Grazing controls competition for moisture, nutrients, and sunlight. Production of both crops is sustained while conserving soil and water resources. Potential fuel hazards are removed; fire ladder fuel conditions are eliminated. Trees use fertilizer applied for forage. Agroforestry scientists claim wood production may increase by 20 to 30 percent in response to fertilizer management for forage production. Livestock manure recycles nutrients to trees and forage. Promotes park-like appearance – perfect for

annual Capture the Flag games hosted for FFA and church youth groups. Forage attracts white-tailed deer, turkey, rabbit, and bobwhite quail.

Just as a TREASURE Forest system is more productive than managing for a single objective, forage productivity of silvopastures may substantially exceed that of pastures grown alone. The Sudduth family’s silvopasture has been successful for almost twenty years because they are equally committed to forage, livestock, and timber management. 🌲

Sources:

www.unl.edu/nac/silvopasture.html
www.agroforestry.et