The Forage Component

The forage component in a silvopasture system serves either as a short term crop itself (such as hay or a seed crop) and/or provides livestock nutrition for the short to medium term. Therefore forage selection, fertilization, and proper livestock management to avoid overgrazing are essential for a successful integrated silvopasture system.
Forage Selection

Selecting forage species that can tolerate the low soil pH that is most amenable to pine production is important. Perennial forage plants must have stored energy to survive the dormant season and begin growth again. The last cutting of forage or pasture should be timed to allow adequate growth and carbohydrate storage prior to a killing frost. This will ensure forage quality for the following year.

Forage Management

The best way to meet a ruminant animal’s nutrient requirements is through the use of a well-managed forage program. The entire concept of silvopasture fits very nicely with the principles of a good forage management program.

In order for this program to be successful the animals have to be controlled and allowed to graze only in the areas that are appropriate for that specific time. Research conducted at the University of Georgia demonstrated the effectiveness of intensive rotational grazing in improving the efficiency of forage utilization. They showed that stocking rate increased 38%, total calf gain per acre increased 37% and rotational grazing required 32% less hay. There was no statistical difference in the calf weaning weight and cow pregnancy rate.

There is no "all-season" plant available that can be effective as a forage year-round. Producers must recognize the limitations of plant seasonality as well as take advantage of its benefits. Forage systems that incorporate both cool and warm season pastures can provide grazing nearly year-round.
Forage Characteristics

Bermuda grass.  Relatively easy to manage
Johnsongrass:  Aggressive, difficult to control
Orchardgrass:  Shade tolerant, long-lived
Bahiagrass (Feb through Oct):  Brood cow maintenance, fair hay
Native WSG (Mar through June):  Brood cow maintenance
Hybrid Berm (Mar thru MidAug):  Versatile
Small Grains (Oct through MidNov):  Spring supplement, growing cattle
White Clover (Oct through MidNov):  pH mid6+, increase forage qual.
Sub Clover (Sept through October):  Fertile sites, shade tolerant

Fescue:  desirable winter forage when (1) initiation of stockpiling begins when the pasture is 4 to 6 inches of leaf by the first of September and it’s fall regrowth is accumulated and nitrogen fertilizer is applied approximately 60 to 90 days prior to the end of the growing season. Over mature fescue does not make desirable stockpiled forage.

Endophyte free tall fescue:  Cannot tolerate close, continuous removal.

Low growing plants like common bermudagrass, bahiagrass, or white clover can withstand close late-season grazing since they hold some leaf area close to the ground and have carbohydrate reserves in their stems and rhizomes. On the other hand, tall fescue, orchardgrass, johnsongrass, and most of the native grasses have less leaf area after close grazing and contain most of their carbohydrate reserves in the stem bases. Thus, if the stem bases are damaged, they are slower to recover.