Silvopasture

The intentional integration of trees, pasture, and livestock, managed as a single system.

BENEFITS

Economic

INCOME STABILITY via diversified production of timber/tree crops, forage, and livestock.

PROFITABILITY: Improved livestock health and production through reduced stress; decreased need for grain for poultry and hogs in forest-based foraging systems.

COMPREHENSIVE LAND UTILIZATION: Provides relatively constant income from livestock sale and selective sale of trees and timber/tree crop products.

Ecological

SHADE AND WIND PROTECTION: Trees offer protection for livestock through shade during summer and wind reduction in the winter.

INTEGRATED MANAGEMENT: Economical control of weeds and brush without pesticides; livestock manure recycles nutrients to trees and forage; tree shade reduces lignin content of forage.

WILDLIFE HABITAT PROVISION: Trees provide structural diversity which increases habitat for birds and wildlife.

CHALLENGES

SUCCESS DEPENDS ON EXPERIENCE AND TIMELY MANAGEMENT. Practitioners must be familiar with the dynamics of managed grazing, forage growth, and tree establishment to time management appropriately and avoid damage.

TRADEOFFS BETWEEN LIVESTOCK AND TREE PRODUCTION: difficult to maximize both at the same time.

LONG TERM COMMITMENT: multi-year commitment and strategy is required to implement.

Frequently Asked Questions

WHAT TREES TO PLANT/SELECT FOR?

Depends on management objectives, site conditions, whether converting pasture or forest to silvopasture, and desired products

PASTURE TO SILVOPASTURE: plant trees (timber, fruit and nut producing trees, or fodder trees) and provide tree protection.

TIMBER STAND/WOODLOT TO SILVOPASTURE: thin and/or prune trees to increase ground exposure to light and establish forage that tolerates shading .

WHAT ARE THE BEST FODDER TREE SPECIES?

LEAF FODDER: poplar, willow, mulberry, black locust.

MAST: oak, hickory, chestnut, pecan, walnut, honey locust, apple, and many other fruit/nut trees.

PLANTING ARRANGEMENT

EVEN DISTRIBUTION: optimizes growing space and light for both trees and forage.

CLUSTERS OR ROWS: concentrates shade root effects while providing open space for pasture production.

WHAT LIVESTOCK TO STOCK?

Cattle, pigs, goats, sheep, chickens, turkeys, and more can all be used independently or as part of a multi-species rotational system.

STOCKING RATE AND ROTATION?

Depends on forage and tree characteristics, livestock type, extent of fencing.

IS THIS JUST "GRAZING THE WOODS?"

No. Woodlot grazing has been shown to have negative effects on forest health. Silvopasture involves managing the stocking rate and timing of grazing through rotational grazing within permanent or semi-permanent fencing arrangements.

FUNDING AND PLANNING ASSISTANCE?

Connect with the local conservation district and extension offices to learn about federal and state cost-share programs such EQIP, CRP, and CSP. These offices can also provide connections with regional consultants and technical service providers.