

# <u>What Is Silvopasture? Key Principles</u> <u>Part 1</u>

Silvopasture, means "silva" (forest) and "pastura" (grazing), is a form of agroforestry that describes "the deliberate integration of trees and grazing livestock operations on the same land." This regenerative farming method benefits both the land and animals—think free organic matter (i.e., manure) for the soil and a cool, shady environment for livestock—not to mention the farmer, who may use the trees to supplement income from livestock and vice versa.

Silvopasture has been lauded for its carbon-capture potential.

#### **Key Principles of Silvopasture**

Silvopastures can be established either by introducing trees into a pasture or introducing livestock to an existing woodland. Whichever the case, healthy and successful silvopastures should have these basic principles in common:

### 1. Trees Are Matched to Soil Type and Climate

If planting trees in a pasture, the trees should be suited to the environment. Native species are best because they thrive with as little effort and few resources as possible, plus they benefit native fauna such as pollinators. You also want species that provide valuable fodder for the animals—such as protein-rich black locust (rivaling the nutrition of alfalfa) and willow, whose tannins have been proven to ward off some sheep parasites. The trees should also be diverse, lending to a complex ecology that provides not just diversity in the animals' diets but also wildlife habitat and some resistance to pests and diseases that would otherwise flourish in a monocrop environment.

#### 2. Livestock Is Matched to Trees

Silvopasture is suitable for a vast array of livestock, from the standard—like cattle, sheep, goats, chickens, and horses—to the unusual—such as caribou, bison, and emus. Also, livestock should be matched to the environment, taking into account the forage, climate, and, importantly, the trees' stage of life. Cows, for example, are heavy and prone to trampling the roots of vulnerable juvenile trees. Sheep, goats, and pigs are hungry for bark.

### 3. Focus Is Split Between Forest and Livestock

Silvopasture is not a one-sided system that favors agricultural outputs for farmers; rather, it's a practice that melds animal husbandry with forest stewardship. In a silvopastoral system, outputs may suffer for the forest or livestock to thrive. The work involved here might include amending soil, managing weeds and taking other steps to protect trees, pruning, harvesting hay, and thinning the forest so that light can shine through the canopy and penetrate the forage. It's much more work than rearing livestock in open pastures and often takes more time to reap the economic rewards.

#### 4. Animals Graze on Rotation

Though not essential to a silvopastoral system, a rotational grazing approach is best for plant health and growth. The alternative, continuous grazing, in which livestock graze in a pasture for an extended period, can lead to soil degradation and overgrazing of the most nutritious species. Rotational grazing involves moving the animals to allow the forage to rest, recover, and grow. This method is mutually beneficial, as the animals in turn get more diversity in their diets and less exposure to parasites.

To be continued...

## Soil Lovers say: Silvopasture Is A Win/Win Approach

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