

Do You Have Problems With:

- Lack of annual income while long-term timber stands are maturing
- Economic risk and lack of income diversity in your timber or livestock operation
- Controlling weedy vegetation in your timber stands
- Providing shade or shelter for grazing livestock

Silvopasture Can Solve These Problems

Purposes and Benefits of Silvopasture:

- Silvopasture means the production of trees, forages and livestock on the same acreage at the same time.
- Trees provide long-term returns, while forages and livestock generate an annual income.
- Economic risk is reduced because the system produces multiple products (trees, forage and livestock), which have an established market.
- Livestock grazing helps control vegetation under trees, reducing the need for chemical or mechanical treatment and the risk of fire.
- Trees provide shade and shelter for livestock.
- Tree thinning, spacing and a more open canopy results in high-value saw timber.
- Plant diversity improves wildlife habitat and increases opportunities for hunting leases.
- Silvopasture offers farmers an opportunity to partner and share land resources and management experience.



Silvopasture combines livestock, forage and tree production on the same acreage.



An example of turning a stand of pines into a Silvopasture system with row thinning.

Cost to Establish Silvopasture:

The cost to apply this practice will depend on if you are starting with pasture or a stand of trees, the type of trees or forage that will be established, and intensity of management. The major costs associated with establishing a silvopasture system are:

- Site Preparation
- Fertilizer
- Tree seedlings or forage seed/sprigs
- Pesticides
- Pruning
- Thinning
- Fencing
- Watering Facilities

Silvopasture

How to add trees to existing pasture:

Step 1

Tree planting into an existing sod will require site preparation prior to planting. Prescribed burning, scalping, bedding, and chemical spaying may be required to establish a stand of trees.



Step 2

Row spacing should be adequate to accommodate farm equipment. Plant trees at their recommended spacing.



Step 3

Livestock should not graze silvopasture fields until the growing point of the trees exceeds the browsing height of the livestock and until the trees are of sufficient size to resist trampling damage and being broken. Hay or silage can be harvested during this period to take advantage of forage production.

Step 4

When trees reach a 5 inch stump diameter, prune lower limbs up to the 4 inch stem diameter to reduce livestock damage, provide equipment access, and to improve wood quality.



Step 5

Tree thinning will be needed as trees mature. Pruning should be to a minimum of 20 feet.



Photos pages 2 & 3: USDA NRCS unless otherwise indicated.

Silvopasture

How to add pasture to an existing stand of trees:

This example is for pine trees; however, silvopasture also works for hardwood trees, such as oak, pecan, walnut, and locust.

Step 1

Evaluate density of existing trees. Thin and/or prune trees to allow sufficient light for grass establishment and growth. Two initial thinnings over several years may be necessary on severely overstocked stands to avoid wind damage or top breakage. Generally, a canopy cover of about 35 percent for warm-season grasses, and about 50 percent for cool-season grasses is recommended.



Step 2

Conduct a prescribed burn to remove trash and debris.



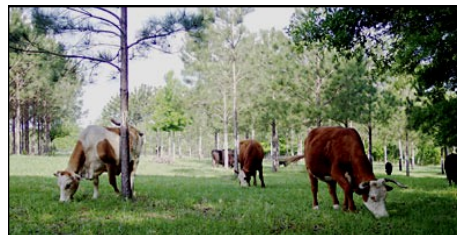
Step 3

Prepare a seedbed and seed or sprig the desired forage species.



Step 4

Manage the forage crop to optimize livestock production. Additional thinning will be needed as trees mature. Pruning should be to a minimum of 20 feet.



Cattle grazing intensively managed silvopasture. Photo: USDA National Agroforestry Center



Goats browsing silvopasture provide brush control. Photo: silvopasture.com

Silvopasture Maintenance:

- Control competing vegetation until trees are established
- Fertilize for forage production according to soil test results
- Replant when stands do not meet production objectives
- Periodically thin trees.

SMALL SCALE SOLUTIONS FOR YOUR FARM

Technical Help Is Available

Your local Natural Resources Conservation Service (NRCS) office has experienced conservationists that can assist you with designing a silvopasture system. They can also help you develop a Conservation Plan to solve other problems you have identified on your farm.

There is no charge for our assistance. Simply call your local office at the number listed below to set up an appointment and we will come to your farm.

You may also be eligible to receive financial assistance, through a state or federal program. Your NRCS office will explain any programs that are available so you can make the best decision for your operation. All NRCS programs and services are voluntary.



Helping People Help the Land

For More Information Contact the:

Natural Resources Conservation Service

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