



Silvopasture is an agroforestry practice that intentionally integrates trees, and pasture and forage crops into a single system for raising livestock. Research shows that pastures with trees sequester five to ten times as much carbon in biomass and in the soil as same-size operations that have no trees. They also provide multiple benefits to farmers in terms of providing shade for the animals and diverse food sources, added income through the production of nuts, fruit, timber, and forest products like mushrooms, improved soil fertility and biodiversity. The animals and land seem to be healthier with higher meat and dairy yields, and the farms are more resilient due to the diversity of income possibilities. There are challenges in this approach, however, that require relearning how farming is done. In particular, it is important to incorporate managed grazing techniques where the animals rotate through different sections of the land for true success.



Benefits

- Increases biodiversity
- Improves ecosystem function and resiliency
- Trees provides a windbreak, preventing erosion
- Provides shelter and food for livestock
- Can provide an additional cash crop
- Increases carbon sequestration
- Lowers risk through diversification

Potential Considerations

- May need to learn a new approach to farming that embraces diverse practices
- Expense to add trees and paddocks if not there already
- Research and time to learn what will work on your particular property
- Increased ongoing management needs—rotational grazing should be considered a requirement



Resources



Six key principles for a successful silvopasture

Tips by Steve Gabriel of the Cornell small farms program. <https://bit.ly/3vl4Bzv>



Silvopasture—National Agroforestry Center, USDA

Multiple silvopasture resources including info sheets, publications and the latest research. <https://bit.ly/2SmaG1l>



Silvopasture: An Agroforestry Practice

Guide to Silvopasture practice by Oregon State University Extension. <https://bit.ly/3gvqMol>



Considerations for Establishing and Managing Silvopastures

Shifting your thinking to managing complexity instead of reducing complexity is the key. <https://bit.ly/3vfPhUJ>



Trees in silvopasture are not created equal

Useful information about choosing the right trees by John Fike. <https://bit.ly/3yZoMSI>



Savanna Institute

Website for agroforestry information including silvopasture and other regenerative agriculture practices. <https://www.savannainstitute.org/>

Research

Nair (2012). *Climate Change Mitigation: A Low-Hanging Fruit of Agroforestry*. In *Agroforestry - The Future of Global Land Use*, Nair, and D. Garrity, eds. (Dordrecht: Springer Netherlands), pp. 31–67. <https://bit.ly/3pOVwO5>

Paciullo, D.S.C., et al (2011). *Performance of dairy heifers in a silvopastoral system*. *Livest. Sci.* 141, 166–172. <https://bit.ly/3cBVrZ4>

Schoeneberger, M.M. (2009). *Agroforestry: working trees for sequestering carbon on agricultural lands*. *Agrofor. Syst.* 75, 27–37. <https://bit.ly/2SmeXlr>

Shibu, Jose, and Dollinger, Jeanne (2019). *Silvopasture: a sustainable livestock production system*. *Agroforestry Systems* volume 93, pages 1–9. <https://bit.ly/3vjJOfu>

Learn More About Silvopasture at The Center for Regenerative Agriculture and Resilient Systems
<https://bit.ly/3wmT04t>