

Silvopasturing in the Northeast

Prepared by Brett Chedzoy (bjc226@cornell.edu), revised 9/28/2012

Grazing domestic livestock in wooded pastures is a common practice in many parts of the world, but became taboo in the Northeast over the past half century when foresters and conservationists began to educate farmers on the negative impacts of allowing unmanaged livestock grazing in the woods. Damages included soil compaction, injuries to valuable trees, and the loss of regeneration due to browsing.

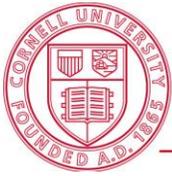


But in the modern world of invasive plants, high land ownership costs, and mounting challenges to healthy and sustainable woodlands, it is worth taking a new look at silvopasturing as a valuable option for the management of some forested landscapes. Silvopasturing differs from woodlot grazing of the past in that the frequency and intensity of the grazing is controlled to achieve the desired objectives. New fencing systems, a better understanding of animal behavior and the evolution of “management intensive grazing” practices have enabled us to gain the necessary level of control over livestock to achieve positive impacts from silvopasturing.

Silvopasturing – the sustainable and symbiotic production of trees, forages and livestock on the same land, is not appropriate for every farm and forest since it requires a commitment to caring for animals, managing the woods, and investing in grazing infrastructure. Silvopastures are best suited for good growing sites with adequate water and gentle, accessible terrain. Care should be taken to identify and protect special ecosystems and wildlife habitats like vernal pools and wooded wetlands when developing silvopasture areas.

In addition to starting with the right location, the most important key for success is skilled management of the system. This requires considerable knowledge of both silviculture and grazing. But limited experience shouldn't discourage new practitioners from exploring the potential of silvopasturing on their property. There are a number of ways that one can jump ahead on the learning curve:

- Look for on-line resources. There are a number of temperate agroforestry sites with good articles and information on silvopasturing, though much of the information will need to be extrapolated to your own situation. The “Guide to Silvopasturing in the Northeast” and other silvopasture resources are currently available under the “publications” section of www.forestconnect.info
- Develop woodlot management and animal husbandry skills independently, and then gradually look for ways to symbiotically combine the two systems in a context appropriate for your own property
- Seek out local silvopasture practitioners to see what has worked for them. To ask question and share experiences with silvopasturing, visit: www.silvopasture.ning.com
- Work with a forester who is willing to help you learn and experiment. Expect some resistance at first when you mention the word “silvopasturing”, but foresters are trained to achieve landowner goals. They may lack knowledge on the livestock side of the equation, but their expertise in vegetation and forest management will be invaluable.



Cornell University
Cooperative Extension

SCNYAG
South Central New York Agriculture Team



In addition to its productive benefits, silvopasturing can also be used as a tool to organically manage undesirable vegetation that interferes with ownership goals. However, carefully controlled grazing with the right kinds of livestock at the right time of the year is just part of a larger strategy to deal with nuisance plants. In severely over-grown areas, other methods such as heavy-duty mowing and/or chemical treatments may also be necessary to reduce the height of the target vegetation so that livestock can effectively browse it. Controlled grazing will then help transition the site to a more desirable and stable plant ecosystem. There are numerous other creative strategies for reducing overgrown areas to a more manageable browsing height if a local mowing contractor cannot be found. Likewise, there are a number of practical ways to grow-back desirable plants when the time is right, so creating a silvopasture does not exclude the option of natural regeneration in the future.

One economic benefits of silvopasturing is the generation of frequent, short-term revenues from the wooded portions of properties through the production of valuable goods ranging from breeding stock to quality foods and fibers. These same items can be used for personal benefit and self-sufficiency, which increase the overall enjoyment and utility of woodland. The sale of silvopasture products and the conversion of wooded areas into silvopastures may also help farmers and woodland owners qualify for important property tax abatement programs, depending on particular state laws.

Some other important points to consider before taking the plunge into silvopasturing are the time, investment and dedication required to succeed. Develop a written start-up plan for your project that outlines *where, when, what, why, how and how much* you can spend in terms of both time and money. If you have never raised livestock before, take time to speak with livestock specialists from Cooperative Extension and ask them to refer you to other producers who may share helpful advice. Start small because it will be better to make the inevitable mistakes on a smaller scale, but don't let the fear of initial failure prevent you from exploring the exciting opportunities of silvopasturing!



There are many examples of silvopasturing that range from enriching a pasture with a few trees for shade, mast and aesthetics - to grazing in relatively dense wooded area. But from a livestock perspective, the silvopasture is only as good as the quality and quantity of food available to them. Here, sheep and goats enjoy lush cool season grasses and black locust sprouts in a walnut/locust plantation that was recently thinned for thousands of dollars worth of posts.