

**Mille Lacs Lake  
Watershed Management Group**

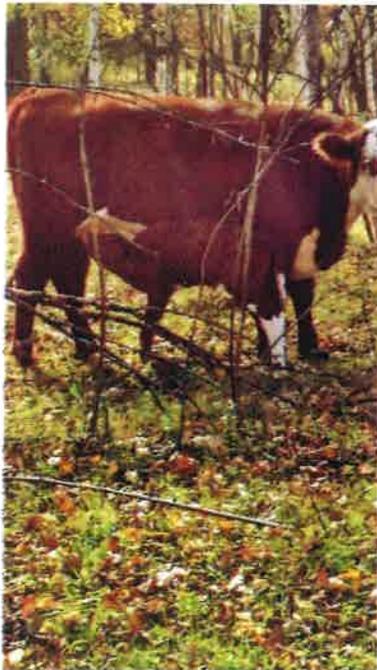
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## Topic of the Month – November 2017

### Silvopasture for Water Quality in the North

Our lakes are blessed with surrounding trees and forest, native shrubs and plants that provide water filtering, absorption, and transpiration, erosion and flood control. This protects not only the lakes, streams, and wetlands, but also mitigates downstream flooding especially during extreme weather events.

Silvopasture is the intentional integrated management of trees and forage for production benefits that include the foregoing water and land protection benefits as well as pasture and protection for livestock, high quality saw logs and a diversity of other forest products such as fruits, nuts, and mushrooms.



Alley cropping is one method of silvopasture that provides strips of forage for livestock of all kinds alternating with strips of trees for future harvest and edge loving shrubs such as hazelnut, choke cherry, pin cherry, raspberries, blackberries, plums. Temporary fencing such as electric single/double wires would be needed to protect the trees and shrubs from livestock who also enjoy these tasty morsels.

Another method is rapid rotational grazing through the forest which has been thinned so that the canopy allows forage growth and high quality saw logs are preserved. If you enjoy and respect wild flowers such as hepatica or mayflowers, wild violas, wild geranium, trillium, blood root, native sedges, then grazing must be delayed until the dry part of August or September and persist for only a short time dependent upon the forage available. This allows the flowers to bloom undisturbed and store sufficient nutrients for the next season of bloom. Avoiding grazing during extremely wet conditions and limiting the time frame to good forage availability helps to prevent compaction which harms the feeder roots of trees, especially oak.



Fortunately, the University of Minnesota Extension now provides methods of silvopasture appropriate for our north woods.

Information shared by Barb Eller, Mille Lacs SWCD

Get More Information:

<https://www.extension.umn.edu/environment/agroforestry/silvopasture/silvopasture.html>

My Minnesota Woods <http://www.myminnesotawoods.umn.edu/> also provides additional information as well as current threats to our Minnesota forests.