

PASTURE RENOVATION

What is pasture renovation?

Pasture renovation consists of various practices such as inter-seeding legumes (e.g. clover) and grasses, fertilizing, liming, controlling weeds, and the improvement of grazing management. These efforts seek to improve the sustainability of pastures in terms of overall health, productivity, and vegetative composition. A combination of such practices implemented routinely as part of a long-term management plan can essentially “renew” a pasture and increase forage yield and animal performance over time. Extending the productive life of a pasture through renovation eliminates the need to convert adjacent lands into pasture.

Why conduct pasture renovation?

There are many advantages to pasture renovation. Soil erosion is reduced and a healthier stand of grass is cultivated. Pasture renovation can reduce the need for (commercial) nitrogen fertilizer since planted legumes replenish the soil with nitrogen after decaying. The leaching of excess nitrogen is reduced when practicing minimal tillage in conjunction with the seeding of legumes because remaining plant communities use the majority of the nitrogen provided by decaying legumes. Nitrogen not used by existing plant communities is likely to remain onsite due to ample ground cover and a stable soil matrix provided by intact root systems.



Pasture that could benefit from renovation.

What are the disadvantages of pasture renovation?

The long term and routine maintenance required by pasture renovation can be a disadvantage. Legumes can be difficult to establish because they are environmentally sensitive to numerous stressors, including a variety of nutrient deficiencies, disease, and competition with other vegetation communities. Legumes may also cause bloating in livestock.

How would one implement pasture renovation?



A no-till grain drill is available for low cost rental. It works well for overseeding pastures.

Implementation of pasture renovation typically involves the following steps:

- Overgrazing to suppress weeds and conducting a soil test
- Disturbing or suppressing the existing sod
- Seeding the legumes
- Grazing newly legume-seeded pasture
- Grazing established grass-legume pastures
- Fertilizing
- Re-renovating

Contact the following agencies for technical and/or cost share assistance with pasture renovation:

North Carolina

USDA Natural Resources Conservation Service
225 Valley River Rd., Ste. J
Murphy, NC 28906
(828)837-6417 x3
glenn.carson@nc.usda.gov

Cherokee Co. Soil & Water Conservation District
225 Valley River Rd., Ste. J
Murphy, NC 28906
(828)837-6417 x3
michael.stiles@cherokeecounty-nc.gov

Clay Co. Soil & Water Conservation District
PO Box 57
Hayesville, NC 28904
(828) 389-9764
glen.cheeks@nc.nacdnet.net

Georgia

USDA Natural Resources Conservation Service
185 Welborn Street, Box 3
Blairsville, GA 30512
(706) 745-2794 x3
doug.towery@ga.usda.gov

The following web sites provide additional information about pasture renovation:

Purdue University
Improving Pastures by Renovation
<http://www.agry.purdue.edu/Ext/forages/publications/ay251.htm>

North Carolina Natural Resources Conservation Service
Job Sheets for Individual Agricultural Practices
ftp://ftp-fc.sc.egov.usda.gov/NC/ECS/Job_Sheets/NC_Job_Sheets.htm

Virginia Cooperative Extension
Putting the Punch Back in Your Pastures: Pasture Renovation
<http://www.ext.vt.edu/pubs/cses/418-134/418-134.html>

Iowa State University of Science and Technology, Cooperative Extension
Interseeding and No-till Pasture Renovation
<http://www.extension.iastate.edu/Publications/PM1097.pdf>

University of Delaware, College of Agriculture and Natural Resources
Pasture Renovation - Agronomy Facts Series AF-08
<http://ag.udel.edu/pasturesandhay/factsheets/af-08.pdf>

Vermont Natural Resources Conservation Service
Fact Sheets for Individual Conservation Practices
http://www.vt.nrcs.usda.gov/technical/Conservation_Practices/Index.html