

ROTATIONAL GRAZING OF LIVESTOCK

What is rotational grazing?

Rotational grazing is a process whereby livestock are strategically moved to fresh paddocks, or partitioned pasture areas, to allow vegetation in previously grazed pastures to regenerate.



Why implement rotational grazing?

Rotational grazing encourages an even distribution of grazing throughout a paddock, allowing resting periods in between rotations that help maintain the health of forage. This discourages competition from weeds and undesirable plant species that often invade when forage is overgrazed and weakened. The alternative – continuous grazing – is a more widespread management practice in which livestock are permitted to graze anywhere. Continuous grazing often leads to overgrazed and undergrazed areas throughout a pasture. Rotational grazing is more efficient and productive because it reduces this waste since livestock are only permitted to feed in paddocks for a limited period of time. This gives the farmer more control by coordinating the rotation of livestock to

paddocks where forage growth is at peak production (high in nutrition and easy to digest). Less wasted forage results in lower costs from not having to supplement livestock diets with purchased harvested forage. Proper management of paddocks and coordinating the growth of seasonal plant communities throughout the year can enable livestock to graze throughout the winter. Other advantages of rotational grazing and include:

- Limited soil compaction which encourages root growth and reduces leaching of fertilizers
- Reduced soil erosion due to the presence of continuous ground cover throughout the year
- Reduced weeds from ample resting periods
- Longer grazing season because of shorter forage recovery periods when rotating paddocks
- Improved animal productivity
- More efficient use of forage compared to continuous grazing
- Improved nutrient distribution (manure) since livestock have fixed schedules, each rotation covering a limited area in each paddock

What are the disadvantages of rotational grazing?

Rotational grazing requires more active management of livestock (i.e. labor involved with rotating livestock). There are initial startup costs for fencing, water, and feed bunks; however, cost share programs are available.

How would one implement rotational grazing?

Implementation of rotational grazing typically involves the following steps:

- [Renovate pasture](#)
- Determine the number and size of paddocks needed
- Subdivide pasture into paddocks using fencing, making sure an adequate water supply is available in each
- Graze paddocks containing forage in peak production first
- Rotate livestock when forage has been grazed down to about two inches
- Break up and evenly distribute manure in previously grazed paddocks

Technical assistance is available from multiple agencies to help determine the appropriate number and size of paddocks and to potentially provide cost share program assistance. Contact information is provided below.

*Developed by the Hiwassee River Watershed Coalition, Inc.
with funding from the NC Ecosystem Enhancement Program – December 2008*



Livestock watering systems can be installed such that they are accessible from multiple paddocks.

Contact the following agencies for technical and/or cost share assistance with rotational grazing:

North Carolina

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

Cherokee Co. Soil & Water Conservation District
225 Valley River Ave., 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 rotational grazing:

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

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

National Sustainable Agriculture Information Service
<http://attra.ncat.org/attra-pub/rotategr.html>

The University of Georgia, Crop and Soil Sciences Department
What can rotational grazing do for my farm?
www.caes.uga.edu/commodities/fieldcrops/forages/GA_Cat_Arc/2003/Oct03b.pdf

University of Illinois Cooperative Extension, College of Agricultural, Consumer, and Environmental Services
60 Ways Farmers Can Protect Surface Water
http://www.thisland.uiuc.edu/60ways/60ways_10.html

The Samuel Roberts Noble Foundation
Rotational Grazing – Get in the Ballgame
<http://www.noble.org/Ag/Forage/RotationalGraze/index.html>

Horse Outreach Workgroup (HOW)
www.mda.state.md.us/pdf/rotgraze07.pdf

West Virginia University Extension Service
Manage Winter Feeding System to Meet Livestock's Needs
<http://webdev.wvu.edu/~agexten/forglvst/mangwin.htm>

North Dakota State University, Dickinson Research Extension Center
Winter Grazing vs. Feeding Harvested Forage
<http://www.ag.ndsu.nodak.edu/dickinso/research/1997/winter2.htm>