Get the most from your pastures

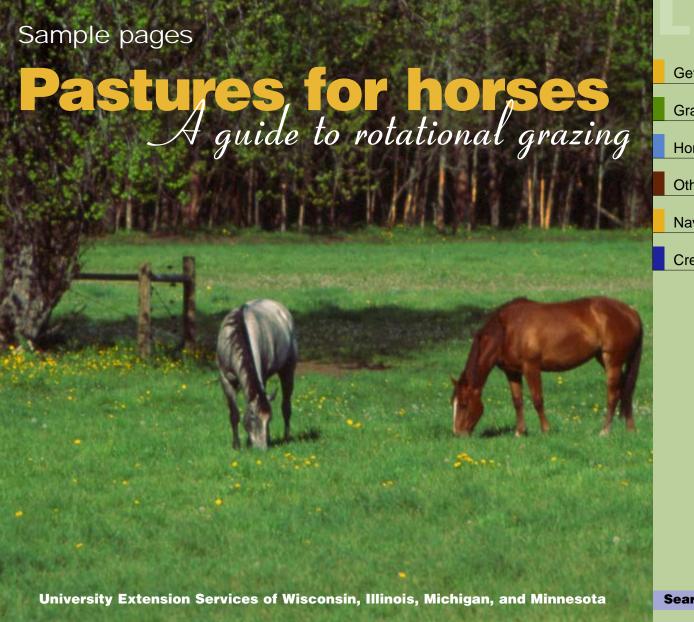
Why rotational grazing? If your horses are grazing a single large pasture continuously, you may be able to nearly double the amount of forage produced by switching to rotational grazing. This technique allows portions of a pasture to "rest" between grazings. Rotationally grazed pastures can supply enough forage for your horses without the need for additional hay for much of the year.

Why this CD? Developed specifically for horse owners in the Midwest, this CD is packed with information to help you get the most from your pastures. Pastures for Horses describes the basic principles as well as special considerations for your pasture and horses. Links to related material let you explore topics in greater

detail. Learn how to evaluate the condition of your pasture and your horses, how to identify forage plants and weeds, how to decide when to move your horses, and more. Continue to page through this file to view a sample of the contents.

To order your copy, call Cooperative Extension Publications at 877-WIS-PUBS (947-7827). The cost per CD is \$58 plus shipping and handling. Request stock number A3764.

Runs on PC and Macintosh computers; includes Acrobat Reader 5.0.



Getting started

Grazing pastures

Horse needs

Other resources

Navigation tips

Credits, copyright

Search

Getting started

- Navigation tips
- Pastures: An untapped resource
- What is rotational grazing?
- Benefits of rotational grazing
- Determining pasture size and condition, horse health





Getting started

Navigation tips

First-time users

The first time you use Acrobat, you'll need to change a preference setting to make navigation easier. Open General Preferences: **Options** and uncheck the box marked Open Cross-Document Links in Same Window. This will let you close the windows of linked documents and return to the main file.

Bookmarks

Click to jump to section.



To hide bookmarks, click the Show/Hide

Bookmarks button in the toolbar.

Enlarging text

Click on the Zoom In tool on the toolbar. To zoom out again, hold down the control key (PC) or the option key (Macintosh) while using the zoom tool.



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Links

Click on the bulleted items to explore the subject in greater detail.

To return to the main file, close window (PC: top right, Macintosh: top left). If this leaves you with an empty screen, you'll need to change your preferences file. See above directions for first-time users.

Search CD

Click to open the search function. Note: If this feature isn't working, reinstall Acrobat from this CD (directions in readme.txt).





Getting started

Pastures: An untapped resource

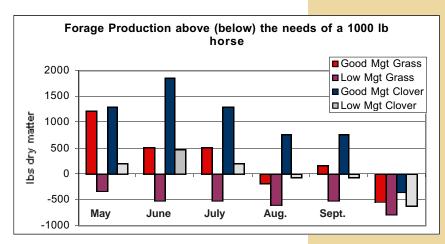
Few horse pastures produce even close to their potential. Nearly 80% suffer poor fertility and serious weed and erosion problems. And most are grazed continuously throughout the growing season. However, continuous grazing results in the lowest possible yields since the plants are never allowed to recuperate. These pastures are a poor source of forage. Understandably, most horse owners are reluctant to rely on pastures to feed their animals. With rotational grazing, these same pastures can produce nearly double the amount of forage, providing adequate forage for horses without the need for additional hay for much of the year.

This CD will guide you through each of the steps needed to implement rotational grazing—from pasture management to horse management. It will also help you recognize and correct common problems.

Getting started

Grazing pastures

- Feed or exercise paddock?
- Calculate forage needs and pasture availability (Excel file)



Grazing pastures

Understanding plant growth

- Plant response to grazing
- Carbohydrate storage patterns
- Plant yield and quality
- General grass growth patterns
- General legume growth patterns
- Seasonal pasture growth patterns
- Managing for more uniform pasture growth
- Combining forages for maximum productivity
- Extending the grazing season by stockpiling forage



Pasture management

- Weed management
- Soil fertility
- Pasture establishment or improvement
- Selecting appropriate forages
- Estimating forage yield

Setting up a rotational grazing system

- Setting goals and assessing resources
- Paddock design and layout
- Paddocks: How many? How big?
- Paddock layout
- Fencing
- Lanes
- Designing a pasture system

Understanding
the basics of
plant growth
is key to
establishing
and maintaining
profitable
pastures.



Grazing pastures: Pasture management

Weed management

Not all plants that are considered weeds in row crops are a problem in pastures. Many "weeds" such as quackgrass and lambsquarters are very nutritious at certain growth stages and need not be removed. Be concerned mainly about those plants your horses avoid eating, those that have low nutritive value such as goldenrod, and

those that are poisonous like hoary alyssum.

Good rotational grazing systems will tend to keep most weeds out of pastures. Grazing management alone, however, will not normally correct serious preexisting



weed problems without causing great losses in animal performance.

Plants such as thistles, brush, and poisonous plants may continue to be a problem even after you have intensified your system since they are seldom eaten even at high stocking rates.

Before taking action,

identify the weeds that are a problem in your pasture. Your county Extension agent can give you specific control recommendations. Thistles are by far the most troublesome weeds in pastures. Be aware that different kinds of thistles require different control measures.

Getting started

Grazing pastures

Horse needs

Identification

- Weed ID key
- Poisonous plants
- Common thistles
- Plant ID reference list

Management

- Weed inventory checklist
- Weed management practices
- Chemical-free management
- Implementing weed management





Horse needs

Understanding horse needs

- Horse digestive system
- Horse nutrient needs
- Water systems
- Grazing patterns
- Selective grazing
- Amount of available forage
- Grazing habits of different animals
- Impact of horses on pasture

Management of horses on pasture

- Exercise paddocks
- Restricted grazing
- Length of rest periods
- Length of grazing periods

- Deciding when to move horses to new pasture
- Spring start-up
- Managing seasonal fluctuations in pasture growth
- Grazing stream banks
- Excess pasture growth
- Evaluating and improving your grazing system

Animal health on pasture

- Colic
- Founder
- Insect pests of horses
- Nitrate poisoning
- Parasites
- Poisonous plants
- Additional care considerations



Other resources

Web sites

University of Wisconsin-Extension Team Forage:

www.uwex.edu/ces/crops/uwforage/uwforage.htm

University of Illinois-Extension and College of Veterinary Medicine—Pet Columns:

http://www.cvm.uiuc.edu/petcolumns/

Great Lakes Grazing Network:

www.glgn.org

Publications

Some of the publications on this CD are available for purchase. If you'd like to add them to your library, contact UW Cooperative Extension Publishing at 877-WIS-PUBS (947-7847) or visit our web site at www1.uwex.edu/ces/pubs/.

Pastures for Profit: A Guide to
Rotational Grazing (A3529)—The
"backbone" of Pastures for Horses was
adapted from this publication. A handy
reference.

Buying Horse Hay (A3772)—This 16-page publication is packed with information on hay quality, potential toxicity problems, bale types and storage, and determining a fair price.

Identifying Pasture Grasses

(A3637)—This spiral-bound, pocket field guide will help you identify seedlings and mature plants. Includes information about the ease or difficulty of establishing each species and management tips.



Getting started

Grazing pastures





Other resources, continued

Forage Variety Update for

Wisconsin (A1525)—Compares the performance of hundreds of grass and legume varieties to help you pick the ones that will be best suited for your pastures. Includes dealer names and addresses. Updated annually.

Grazing Streamside Pastures

(A3699)—If you're fortunate enough to have a stream running through your pastures, this booklet will help you take steps to protect water quality and pasture productivity.

Grassland Birds: Fostering
Habitats Using Rotational
Grazing (A3715)—This colorful
booklet outlines easy ways you can
help save these endangered songbirds
through minor modifications to your
rotational grazing program.

Books from other sources

Greener Pastures on Your Side of the Fence: Better Farming with Voisin Grazing Management by Bill Murphy. 1999. Colchester, Vermont: Arriba Publishing. 379 pages.

Holistic Resource Management by Allan Savory. 1988. Washington, D.C.:Island Press. 558 pages.

How to Plan, Implement, and Practice Controlled Grazing on Your Place by Bob Kingsbury. 1989. Woodinville, Washington: Kingsbury Communications. 57 pages.

Intensive Grazing Management.
Forage, Animals, Men, Profits by
Burt Smith, Pingsun Leung and George
Love. 1986. Kamuela, Hawaii: The
Graziers Hui. 350 pages.



Getting started

Grazing pastures





Credits

Wisconsin

Dan Undersander, forage agronomist
Dennis Cosgrove, forage agronomist
Jerry Doll, weed agronomist
Keith Vander Velde, horse management
educator

Minnesota

Paul Peterson, forage agronomist

Michigan

Rich Leep, forage agronomist

Illinois

Ed Ballard, animal systems educator
Robert Bellm, crop systems educator
Bill Brink, crop systems educator
Dennis Epplin, crop systems educator
Sean Evans, crop systems educator
Mark Hoard, IPM educator
Kevin Kline, extension equine specialist
Jim Morrison, crop systems educator
Ellen Phillips, crop systems educator
Jay Solomon, engineering technology
educator

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Getting started

Grazing pastures



