A Closer Look At

Prescribed Grazing

Prescribed grazing, sometimes referred to as managed or rotational grazing, is becoming a popular tool for livestock producers seeking to improve their pastures or rangeland. In addition to its impact on soil health and ecological diversity, prescribed grazing can help producers achieve their economic and animal husbandry goals.



What is prescribed grazing?

Prescribed grazing is the careful movement of grazing livestock to improve ecological, economic, and management goals. Areas are grazed to the extent of reducing undesirable plant varieties and supporting wanted species. This creates healthy forage land that improves soil and water quality.

Improving soil health through thoughtful grazing

By cultivating a balanced ecosystem through prescribed grazing, native, perennial, and other desired plants are able to thrive. These plants' robust root systems improve soil stability, reduce erosion, and increase soil organic matter. Grazing various areas also allows livestock to naturally fertilize different areas without burdening any one location with excess manure. This increases soil fertility and further improves forage health.²

Creating healthy livestock through healthy forage

Grazing livestock to reduce unwanted plants and avoiding grazing during times of growth for desired plants creates a balanced forage area. Diverse and robust forage provides healthy feed for livestock and may extend the grazing season.³

Prescribed grazing methods

Grazing systems are not one-size-fits-all and can be designed to meet the goals of any single operation. Herd size, pasture location, forage type, and water availability are just a few factors that must be considered when selecting a prescribed grazing method.⁴

While grazing systems may vary between operations, they all require attention to key management parameters to be successful and ensure the nutritional needs of livestock are met. These include stocking rates and distribution, grazing frequency, and the timing and duration of pasture rest and grazing periods.⁵ Below are some examples of commonly used prescribed grazing systems.

Sources

- "Conservation Practice Standard, Prescribed Grazing, Code 528 (Ac)."
 U.S. Department of Agriculture, Natural Resources Conservation Service,
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 Grazing_528_CPS.pdf. Accessed January 2024.
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- 2 Duiker, Sjoerd Willem. "Maximize Grazing and Improving Soil Health." PennState Extension, Sept. 19, 2023, extension.psu.edu/maximize-grazing-and-improving-soil-health. Accessed January 2024.
- 3 "Prescribed Grazing, South Dakota Fact Sheet." South Dakota Natural Resources Conservation Service, U.S. Department of Agriculture, June 2022, nrcs.usda.gov/sites/default/files/2022-10/Prescribed_Grazing_SD-FS-57.pdf. Accessed January 2024.
- 4 "Agricultural Management Practices for Water Quality Protection." U.S. Environmental Protection Agency, cfpub.epa.gov/watertrain/moduleFrame.cfm?parent_object_id=1478&object_id=1481. Accessed January 2024.
- 5 Ibid.





Rotation: Rotational grazing requires two or more pastures or paddocks. Intensive grazing is done in one pasture until the desired forage height is reached, at which point livestock are moved to another pasture, allowing the previously grazed area to rest. Through this method, pastures are alternately grazed and rested multiple times throughout the season.⁶

Rest rotation: During a rest rotation, one pasture or paddock is rested for an entire year or more, while other pastures remain in rotation.⁷

High-intensity, low-frequency: A high-intensity, low-frequency system moves a single herd through multiple pastures in a grazing season. Each area is heavily grazed for a short period of time until the desired forage height is reached, often between 10 and 25 days. The herd is then moved to the next area and the grazed pasture is left to rest. With this system, rest periods are longer than grazing periods.⁸

Short duration: Similar to high-intensity, low-frequency systems, multiple pastures are grazed for short periods of time, but with large herds at a faster rate, especially during peak growing season. Full cycles may be completed in 25 to 35 days.⁹

Benefits of prescribed grazing

Every operation is different. While one producer may implement a prescribed grazing plan to extend the grazing season, another may be invested to eradicate an invasive plant species. Regardless of motivation, prescribed grazing has the potential to benefit pasture and rangeland in multiple ways.

- Improves forage quality
- Improves livestock health
- Improves soil health
- Improves water quality

- Increases desired plant species
- Increases wildlife habitat
- Reduces erosion
- Reduces wildfire risk





Watch a video about prescribed grazing at rb.gy/ztf7lb.

How to get started

The U.S. Department of Agriculture's Natural Resources Conservation Service supports prescribed grazing through programs such as the Conservation Stewardship Program and the Environmental Quality Incentives Program, which provide producers with technical and financial assistance. To find your local office, visit offices.sc.egov.usda.gov/locator/app.

Sources, continued

- 6 Ibid.
- 7 Ibid.

8 "Illinois Grazing Manual Fact Sheet, Grazing Management, Prescribed Grazing." U.S. Department of Agriculture, Natural Resources Conservation Service, nrcs.usda.gov/sites/default/files/2022-12/Prescribed-Grazing.pdf. Accessed January 2024.
9 Ibid.



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