



# Adaptive Grazing

Also known as managed grazing, regenerative ranching, or holistic management, this approach involves carefully controlling livestock density and how long a particular pasture or paddock is grazed at one time. Rather than following a set protocol, the rancher learns to make changes according to current conditions, feedback from the environment, and specific goals and objectives. Generally speaking, however, the over-arching goal is to avoid over-grazing by using methods that attempt to mimic the patterns of wild migrating herds. The animals stay packed closely together for protection, eat the vegetation to partial level (rather than all the way to the ground), disturb the soil lightly with their hooves (which mixes their manure and urine into the top soil), and then move on to another paddock or pasture. In this way, grazing animals actually improve the condition of the soil rather than damaging it, and a significant amount of carbon can be sequestered because the land is always kept covered and the roots and soil microbiome are nourished and left mostly undisturbed.



## Benefits

- Adds organic matter to the soil and keeps it covered
- Prevents overgrazing
- Improves degraded soil
- Improves soil microbiology
- Improves forage yield
- Can lengthen the grazing season and improve production
- Increases carbon sequestration
- Increases biodiversity

## Potential Considerations

- Requires training and time to learn what will work best for your land and current conditions
- Time and labor to move the animals from place to place
- Might need an initial investment to create paddocks if that approach is chosen
- Need access to enough space to allow land recently grazed to recover



The Center for  
**REGENERATIVE AGRICULTURE**  
**AND RESILIENT SYSTEMS**  
CALIFORNIA STATE UNIVERSITY, CHICO

## Resources



### Profiles in Land and Management: Benefits of Adaptive Grazing

Success stories of ranchers and land managers using regenerative practices. <https://bit.ly/3zkZvXp>

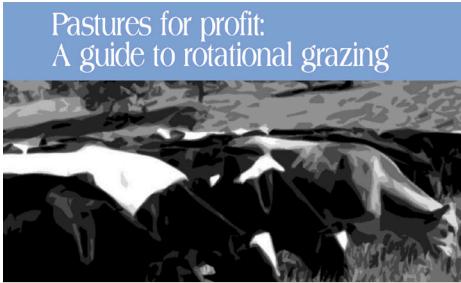
**Holistic Management International**  
Nonprofit providing training in a decision-making process for adaptive regenerative ranching.  
<https://holisticmanagement.org/>



### Tutorials on Managed Grazing

Offered on NCAT ATTRA's Tutorial's Page.

<https://attra.ncat.org/tutorials/>



### Pastures for Profit: A Guide to Rotational Grazing

The basics of setting up a rotational grazing system on your ranch or farm.  
<https://bit.ly/2TI1Ta4>



### Seminar with Dr. Richard Teague

A systems approach to land and livestock management that sustains natural rangeland resources and the people depending on it.  
<https://bit.ly/350c3oV>



### The Ins and Outs of Grassfed Beef with Jason Rountree

The latest research around healthy, regenerative and low-cost, low-input beef production.  
<https://bit.ly/352knV7>

## Research

Mosier S, Apfelbaum S, Byck P, Calderon F, Teague R, Thompson R, Francesca Cotrufo M, *Adaptive multi-paddock grazing enhances soil carbon and nitrogen stocks and stabilization through mineral association in southeastern U.S. grazing lands*, Journal of Environmental Management, Volume 288, 2021, 112409, ISSN 0301-4797, <https://bit.ly/3g5F5dj>

Rowntree JE, Stanley PL, Maciel ICF, Thorbecke M, Rosenzweig ST, Hancock DW, Guzman A and Raven MR (2020) *Ecosystem Impacts and Productive Capacity of a Multi-Species Pastured Livestock System*. Front. Sustain. Food Syst. 4:544984. <https://bit.ly/3ggSDBz>

Gosnell H, Charnley S, Stanley P. 2020 *Climate change mitigation as a co-benefit of regenerative ranching: insights from Australia and the United States*. Interface Focus 10: 20200027. <https://bit.ly/3g1GD7R>

Teague Richard, Kreuter Urs, *Managing Grazing to Restore Soil Health, Ecosystem Function, and Ecosystem Services*, Frontiers in Sustainable Food Systems, Vol. 4, 2020. <https://bit.ly/3wGIfty>

**Learn More About Adaptive Grazing at The Center for Regenerative Agriculture and Resilient Systems**  
<https://bit.ly/3v67uVu>