



# GO A LITTLE OLD SCHOOL

## Regenerative approach works with nature to optimize your system.

by Barb Baylor Anderson, field editor

**A**nimals grazing on grasslands efficiently used and recycled nutrients to create the productive soils of the Corn Belt. Cattle and cropping systems then mimicked those patterns. Cattle would graze and fertilize land that would grow feed they would later consume. This closed nutrient loop kept the need for fertilizer and equipment intrusion to a minimum and enhanced soil health.

Fast-forward a few generations, and many farmers began to exclusively focus on either cattle or crops. The natural nutrient loop was broken, needing more purchased input use and intervention.

Now the tides are turning again. Economic and environmental pressures are encouraging more farmers and ranchers to go old school and put natural nutrient cycling back into practice.

“Regenerative grazing is the latest step in a long evolution of grazing systems,” says Laura Paine, grass farmer and outreach coordinator with Grassland 2.0, a collaborative project involving the University of Wisconsin, the Grassworks non-profit group and other partners.

“We have a much better understanding of the complex and critically important roles microbes

and soil biology play in healthy soils and agro-ecosystems,” she says. “Regenerative graziers focus on not only managing their cattle, but also their ‘soil livestock’ and ‘rumen livestock.’ Managing to optimize the health of the microbial community makes the whole system function more effectively with minimal inputs other than time and management skills.”

### A mindset

“Regenerative grazing is as much a mindset as a shift in practice,” she says. “It is a trendy buzzword for something many producers already do — management-intensive grazing (MiG), with emphasis on management. If you manage your system well, you build soil health

while feeding cattle on perennial and annual forages. It is the MiG system with a soil-health-principles focus.”

Practicing the five soil health principles is key to regenerative grazing, says Paine:

1. Armor the soil with continuous living cover.
2. Minimize soil disturbance by reducing or eliminating tillage and increasing perennial pasture use.
3. Increase plant diversity with complex pasture mixtures.
4. Keep living roots in the soil year-round.
5. Integrate livestock into cropping systems.

It is a contrast to a continuous-grazing system, where cattle are known to eat their favorite forages first and often run out of quality forage because pastures are not allowed to rest and recover. If

overgrazed, plant root structures become insufficient to regrow those forages. Bald spots develop in the pasture, and weeds have room to take over.

“If we graze too hard or have inadequate forage recovery periods, we leave little or nothing for the soil microbial community, and we are not likely to gain soil organic matter or even produce sufficient amounts of high-quality forage,” she says.

Principles of regenerative grazing include rotating animals from paddock to paddock, leaving enough forage residual to spur regrowth, and allowing for sufficient rest and recovery.

“Adaptive high-stock-density grazing” modifies the grazing rotation in response to conditions. Short-duration, high-density grazing in smaller paddocks leads to longer rest and recovery and boosts production, quality and dry-matter intake of the pasture to feed soil bugs as well as cattle.

“Producers should select a high-quality forage mix for their region,” says Paine. “There are several on the market that will increase yields and disease resistance.”

Paine also believes successful regenerative grazing requires producers to become ecologists and detectives to optimize pasture and cattle performance. Where

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# WITH GRAZING

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simple rotational grazing may follow a formula for pasture management, regenerative grazing is more observation and reaction.

“If you manage pastures using a cookbook or a calendar, you are not a regenerative grazer,” she says. “Regenerative graziers walk their pastures frequently; observe the weather, the cattle and the forage; and adapt their management system to what the observations are telling them.”

## Benefits twofold

A well-managed pasture will yield economic and environmental benefits.

“A frequent rotation will increase the forage yield and quality on the same amount of land. You can increase your forage production and your animal stocking rate,” she says. “Stored feed is generally the biggest cost. Well-managed grazing can extend the season and reduce stored feed needs. There also is cost savings from manure handling and improved animal health.”

Paine adds that substituting well-managed pasture for other feed sources reduces fertilizer and pesticide use, cutting costs and helping reduce soil erosion and nutrient runoff.

“Managed grazing with adequate residual provides high-quality habitat for grassland birds and

pollinators. You will see ground-nesting birds that used to be on the prairie return,” she says.

Carbon sequestration is another area of growing interest for regenerative graziers.

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“Growing plants take carbon from the atmosphere and turn it into grain and feed. They also store some of the carbon in roots that eventually turn into soil organic matter,” she says. “The jury is still out on how much carbon can be sequestered by well-managed pasture, but we know regenerative grazing improves soil health, and there is payback for livestock producers in that.”

## Transition is easy to make

How do you become a regenerative grazer? Paine says many cattle producers are already making the right management decisions and can easily transition into the system.

“It is not hard to get started, and certainly any producer can do this,” she says. “Begin by walking through your pasture, check your grass health and legume stand, and identify weeds the cattle won’t eat. Let your forages and cattle give

you the clues as to the state of your pasture and what your next management steps should be.”

While it may take a few years to establish and for the benefits to accrue, Paine notes that adoption of all these practices will set up a positive feedback loop in which increasing soil organic matter can lead to improved water-holding capacity, nutrient cycling and productivity.

“Pasture is a perennial system, so you can expect significant changes in the three to five years after establishment. Although accumulation of soil

organic matter slows as the pasture matures and plant and microbial communities recalibrate to a new steady state, soil organic matter and plant community vigor can continue to improve under well-managed grazing,” she says.

Paine concludes, “It will take some work honing your management skills, but it’s not rocket science. The most important tool you have is the gray matter between your ears.”

Editor’s note: A former National Junior Angus Board member, author Barb Baylor Anderson is a freelance communications specialist from Maryville, Ill.

## Regenerative grazing go-to resources

Laura Paine recommends producers interested in learning more about regenerative grazing review the information found on the following websites:

- ▶ Grassland 2.0 — <https://grasslandag.org/learn/getting-started-in-grazing/>
- ▶ GrassWorks — <https://grassworks.org/>
- ▶ Green Lands Blue Waters — <https://greenlandsbluewaters.org/midwest-perennial-forage-working-group/>
- ▶ Pasture Project — <https://pastureproject.org/>



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