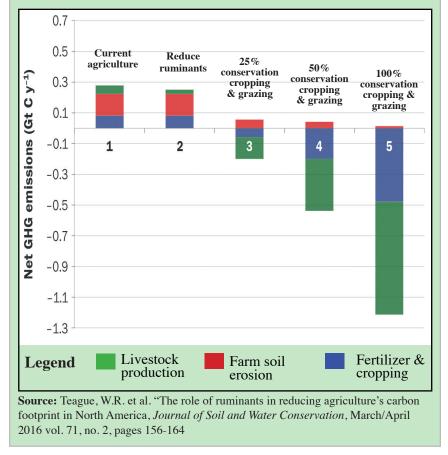
Soil Health, Water & Climate Change: A Pocket Guide to What You Need to Know

Figure 13: Modeling shows how integrating such soil-friendly practices as cover cropping and managed rotational grazing could help make agriculture a net sink for greenhouse gas emissions in North America.



tems scenarios outlined in the *Journal of Soil and Water Conservation* aren't just the stuff of fancy computer models—real farmers are taking advantage of such synergies in the Midwest and elsewhere every day.²

Sources

¹ Teague, W.R. et al. "The role of ruminants in reducing agriculture's carbon footprint in North America, *Journal of Soil and Water Conservation*, March/April 2016 vol. 71, no. 2, pages 156-164

² DeVore, B. "Grazing as a Public Good." *Land Stewardship Letter*, Vol. 32, No. 1, 2014, pages 24-25

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Soil Health by the Numbers

30%-75%	The amount of carbon soils have lost since tillage began.
25,000 Gallons	The amount of water per acre 1 percent of organic matter can hold in the top six inches of soil.
90%	The percentage of soil functions organic matter controls, even though it makes up less than 5% of the soil profile.
3-10 Years	How long it can take a farmer to raise organic matter levels using methods such as cover cropping.
200 Times	The amount herbicide-related water toxicity was reduced when diversified crop rotations were utilized in one trial.
8%-10%	The annual percentage of greenhouse gas emissions reductions needed if we are to avoid climate catastrophe.
5%-15%	An estimate of the annual percentage of greenhouse gases farming has the potential to sequester by building soil organic matter.