Regenerative Grazing to Mitigate Climate Change Sustainable Beef Production in NC



BASS CONNECTIONS

Energy & Environment

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Beef Production Can Rebuild Soil Carbon Stocks

Regenerative grazing refers to a set of grazing practices that deliver continuous benefits to the ecosystem, the economy, and society. These practices renew the productivity of the pasture by stimulating plant growth while increasing soil carbon sequestration, biodiversity, soil fertility and a long list of co-benefits.

Common regenerative grazing practices include intensive rotational grazing or adaptive multi-paddock grazing. Regenerative "graziers"—the term for a farmer raising ruminants—graze more animals on smaller plots of land, and consistently move the grazing location to mimic natural grazing patterns of other ruminants, such as bison.

North Carolina Needs Legislation to Promote Regenerative Grazing

Healthy soil legislation is legislation with the expressed purpose of improving or maintaining the capacity of soils to support plants, animals, and people. Currently, North Carolina does not have any healthy soil legislation. We analyzed healthy soil legislation in nine states to come to the following recommendations:

- 1. North Carolina should establish a healthy soils task force to connect stakeholders, to build a statewide plan, and to consolidate stakeholders.
- 2. North Carolina should recruit farmers for demonstration projects to build a network of producers focused on peer to peer learning.
- 3. North Carolina should invest in the creation of measurement, prediction, and documentation tools that capture North Carolina's unique environment.



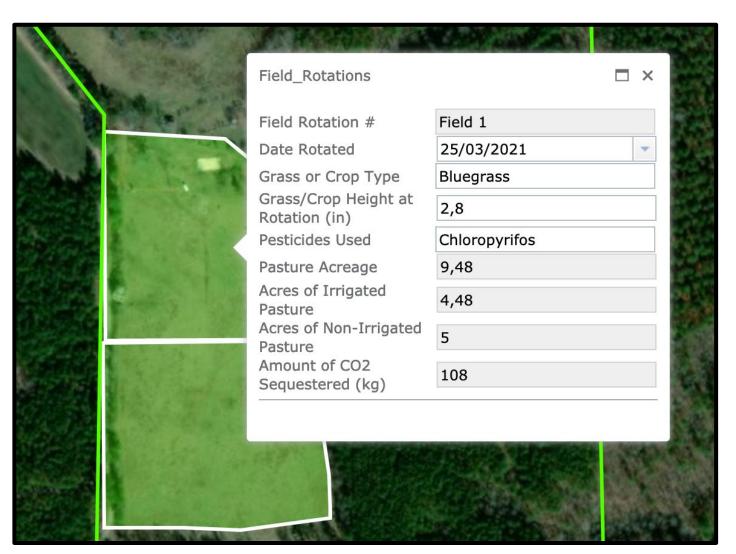


Our project team brings together students from the following four universities:

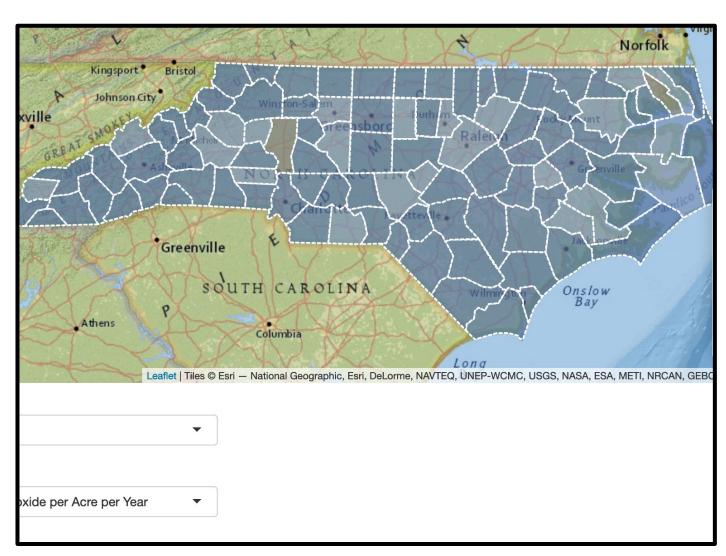


Producers Need Better Tools to Predict, Measure, and Record

We developed several web tools to help producers predict, measure, and record the impacts of their grazing practices. For these tools, we expanded on existing datasets with the aim to make them more accessible to producers. All tools are available on our website.







Map of Carbon storage potential in NC grasslands

We Learned from Producers and Help Connected them with Support

We created case studies of farms that have implemented regenerative grazing to inspire other farmers to consider implementing these practices and learn from their stories—one farmer to another.

We also performed an impact analysis of the benefits of regenerative grazing. Key findings affirmed that regenerative grazing can reduce costs of production, improve soil health, and support rural communities.



