Regenerative Grazing to Mitigate Climate Change: It’s Not the COW, It’s the HOW

Francesca Chiappetta¹, Laura Mindlin¹, Lydie Costes¹, Megan Mason Dister², Alix Foster¹, Abby Martell¹, Eric Mullen⁴, Addie Navarro¹, Marco Paternoster⁵, Margaret Reed³

¹Nicholas School of the Environment, ²Duke Law School, ³Trinity College of Arts & Sciences, ⁴NC State University

Regenerative Grazing Mitigates Climate Change

Regenerative grazing is an agro-ecological approach for livestock management based on understanding and observation of natural systems. Regenerative grazing:

- emphasizes management of land as a system of relationships, efficient nutrient cycling, and diversity of organism and functions
- applies management techniques to restore the system to improved productivity
- focuses on regrowing, repairing, and restoring the ecosystem of the farm

How:

- Grazing occurs more intensively over a smaller area for a shorter period of time, allowing the land to regenerate for a minimum period of 45 days.
- Baseline testing establishes a benchmark from which farms monitor for continuous improvement as they implement regenerative practices.

Livestock in North Carolina

- 52,000 farms
- 1 million acres of pasturized
- 75%, 65,000 cattle
- 17%, 50,000 goats
- 8 million hogs

Regenerative Grazing Provides Many Benefits

**ECONOMIC BENEFITS**

- Benefits to Farmers
  - Reduce cattle feed costs
  - Decrease fertilizer expenses
  - Decrease veterinary expenses

**ENVIRONMENTAL BENEFITS**

- Benefits to the Environmental Landscape
  - Enhance the rate of carbon sequestration
  - Increase biodiversity on farms
  - Increase water retention rates
  - Improve soil health functions
  - Increase carbon, water, and microorganism processes

**SOCIAL BENEFITS**

- Benefits to Society at Large
  - Increase local resilience to weather events
  - Enhance your community network
  - Develop support for local food movements

Farmers Need Support to Expand Regenerative Grazing

Through CARBON OFFSETS...

- As a farmer interested in Carbon Offsets
  - Carbon Markets provide financial incentives for implementation of regenerative practices
  - How to tap into these markets?
    - Find a project developer
    - Implement carbon sequestration protocols with help of project developer
    - Project developer markets the offsets to a carbon registry
  - Other environmental markets
    - Wetland mitigation banks

Through POLICY INTERVENTION...

- At the state level
  - NC Healthy Soils Legislation
  - Disaster Resilience Funds
- At the federal level
  - Fund baseline testing to better understand the benefits of regenerative grazing through: USDA Funding Programs:
    - Partnerships for Climate-Smart Commodities Grant
    - Small Business Innovation Research Program
    - Regional Conservation Partnership Program
    - Modified Prescribed Grazing Practice Standard

Thank you to our external partners, including: