2024 Northeast Pasture Research Priorities

The Northeast region pasture research priorities are maintained and updated annually by the Northeast Pasture Consortium, an organization dedicated to fostering connection between pasture-based livestock farmers, federal and land-grant university researchers, policymakers, and industry partners. This list is reviewed by farmers and other partners to inform research partners about relevant questions and topics, help guide policymakers to address issues of concern, and highlight areas where research and programming partnerships might develop.

The sample questions in this document have been collected directly from farmers and service providers across the Northeast region (Maine to West Virgina).

A more detailed list is available on request by emailing <u>nepasture@qmail.com</u>.

Animal Health, Nutrition and Management

Livestock animals are a key piece of grass-based farms, and priority topics range from monogastric and ruminant nutrition to managing internal parasites, understanding genetics, animal behavior, and meat quality.

Some sample questions:

- Why do animals eat certain plants at different times of the day?
- Do my genetics match our grazing goals?
- Are my animals as healthy as they could be on my grassland?
- Is there a perfect age for best-tasting beef?

Climate Impacts & Adaptation

Environmental conditions under which grass-based farmers operate has been changing, bringing new weather pattern impacts and pressuring adaptation. Topics such as establishing/managing silvopasture or agroforestry-based practices, increasing water infiltration and/or water holding capacity, managing stored feed harvest, and extending the grazing season have been identified as priority topics in this area.

- What are the best ways of introducing pasture species into agroforestry systems?
- Will climate change increase worm pressure?
- With new global rise in climate and rain events how can I better use and store water resources for plant or animal?
- Concern of hay production with increase of precipitation(?)

Consumer Education & Public Interface

Many grass-based livestock farmers in the Northeast region either directly communicate with their customers in the course of marketing their products or experience community/neighbor interactions around water quality, eating meat, human health, and land use. Priority topics in this area include what information exists to share with consumers and the general public, data to describe or distinguish grass-based products, how to talk about wide ranging issues such as flavor and ecosystem services, and whether the responsibility to provide this education should fall on the farmers themselves.

Some sample questions:

- How much does human health improve when our soils, waters, animals, plants, microbial communities are restored to health?
- How do you compete for consumer dollars against cheap food?
- Does our consumer really care about the soil?
- How can I communicate this world to people outside ag so they can better understand its challenges and nuances?

Data & Decision-making Tools

Across the region, farmers perpetually seek better information to guide their decisions, particularly information most relevant to their set of circumstances. Grass-based livestock farmers ask about topics like tradeoffs between different management options, indicators to measure progress or impacts, and increased understanding of the natural systems with which they interface.

Some sample questions:

- Can the observation/frequency of dung beetles be connected to increased fatty acids?
- Economics of custom grazing dairy heifers vs. raising on the farm?
- Are minerals worth the investment (lime, silicates, rock phosphate, whatever) based on soil tests or observations?
- What is the nutrient output (food/calories) vs. energy input compared to grain fed? What alternative food systems are we sacrificing in each system?
- What is the impact of grass-based farming on the community/local economy?

Farm Management & Infrastructure

Grass-based livestock farmers balance management of grazing systems (under a different category) with built/physical infrastructure and systems such as processing, transportation (marketing), labor, equipment, and social systems (such as health care).

- How will I expand my livestock operation without leasing or buying more land?
- How do farmers access affordable health insurance?
- How do I minimize sacrifice zones around my water stations?
- How do I manage CSA distro while farming & making meaningful connections with my customers?

Forage & Grazing

Understanding forage and grazing is the keystone of grass-based livestock farming, with a wide range of priorities identified. Topic areas include managing open and forested grazing areas, understanding grass/legume/forb interactions, cycling multiple species of grazing livestock, stockpiling techniques and plant species, bale grazing, revitalizing pastures, grazing/mowing heights, plant species diversity, increasing forage production and quality, forage varieties, and how management impacts end results.

Some sample questions:

- How do I choose VARIETIES of forages for pasture renovation?
- How to best manage the grass after bale grazing...how to continue the bump in yield?
- How do I graze on a pasture that is too wet? How do I know when it is too wet to graze?
- How do silvopastures differ from treeless pastures in terms of management needs?
- How to better use low-pasture areas?
- What are the effects of ruminant saliva on pastures?

Future of Grazing

Across the region and the country, agriculture is changing. Grass-based livestock farmers have concerns similar to other types of farmers around transitioning to new generations and ensuring that systems are in place for future success, within parameters specific to grass-based farms.

- At what scale does it make sense for new/beginning farmers to get into grazing agriculture?
- How do I teach students the IDEALS & potential in grass-based farming AND prepare them for the realities of working on other peoples' farms?
- How can we help people from non-ag backgrounds enter into and stay in ag?
- What are barriers we can lift now for farmland access?

Grazing/Pasture Programs & Policy

Northeast grass-based livestock farmer priorities include interface with land use and water quality policy, potential to address climate change/soil/biodiversity as large-scale public policy issues, intersection of technological and management education, research and public outreach, financial assistance, and public/private partnerships to help achieve goals.

Some sample questions:

- How to grow TSPs? (Technical service providers)
- Outside of Wall Street commodification, how can we value regenerative farm results to bolster viability?
- Are watersheds (and what HUC) the most appropriate (and good) unit in which to focus research?
- Can small grass farmers restore the Great American Prairie, and what policy changes do we need to facilitate that transformation?

Marketing, Profitability & Value

Northeast grass-based livestock farmers have shared deep questions about markets they serve, whether their farms are (or could be) profitable, and the value they provide for society. Priority topics include economic ramifications of different management choices (such as haying vs. grazing), profitability measures, connecting with customers/markets, winter vs. summer livestock management, what role diversification plays, and social/cultural expectations around farmers.

Some sample questions:

- Is a CSA more profitable than retail after factoring in time?
- How to effectively market grass-fed or grass-finished products?
- What is the maximum economic potential of a grazing business?
- Why is it not socially acceptable to be financially successful as a farmer?

Soil Health & Biodiversity

Grass-based farming in the Northeast is based upon a foundation of soil health and is highly interconnected with ecological biodiversity in soil, plants, and insect/animal life. Priority topics in this area include better understanding the interactions between farm/grazing management and soil/biodiversity impacts, biochemical and biological interplay, improving soil health and productivity, better understanding ecological niches, and soil changes between management system transitions (such as from crop to managed grazing).

- What aspects of soil health are most impacted by forage management and how do those translate to productivity, quality and economic viability?
- What impact does spreading organic material (manure) have on my pasture? Does the length of the composting make a difference?
- How do I promote silvopasture/native species for wildlife habitat without attracting too many predator species?
- What ways do fly control chemicals impact the soil health and ecosystem?