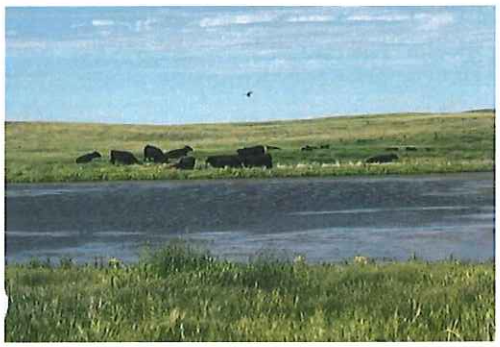
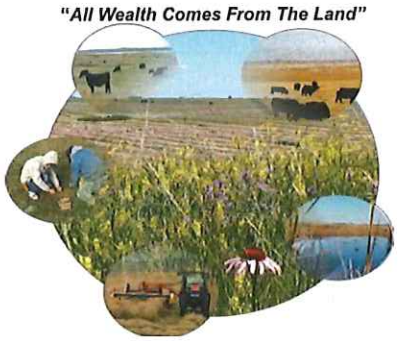
NDSU | Central Grasslands Research Extension Center

2021 SBARE Listening Session

People, Land and Facilities

- ✓ The Central Grasslands Research Extension Center comprises 5,335 acres that support range, pasture, livestock, forage research, and extension. The center facilities include the headquarters building, range and forage laboratory, livestock working unit, 28 pastures for grazing research, forage research sites, and housing units. The center has 3300 acres of native range, 1,895 acres of tillable land, and 120 acres of wetlands. We manage approximately 425 head of cows and 200 heifers that are used for growing season, late-season, reproduction, and animal nutrition and behavior research studies.
- ✓ Staff at the center includes one scientist (livestock), two research specialist (range and forage), one Extension state specialist (livestock), the interim director (range scientist and Extension specialist), and five support staff (two livestock, one agronomy, one range, and one administrative/ accounting/payroll/time-slips/cook assist).





Thanks SBARE for supporting the 2021-2023 Initiatives

Pasture Facility Improvements

- ✓ $200,000 to build two new livestock pasture working facilities. Create safe environment for both livestock and staff.
- ✓ Help stimulate novel research that is pasture based. Focus on collecting treatment effects throughout the grazing season on livestock performance and reproductive efficiency.
- ✓ Assess water and feed intake efficiency to help determine best management practices that enhances grazing efficiency and individual animal performance.

Director's Residence

- ✓ $325,000 toward building a permanent director's residence on the center to enhance retention and recruitment.

Deferred maintenance

- ✓ Built a new roof on the office

NDSU Central Grasslands Research Extension Center, 4824 48th Ave. SE, Streeter, ND 58483
701-424-3606; www.ag.ndsu.edu/CentralGrasslandsREC
Dr. Kevin Sedivec, Interim Director

NDSU | Central Grasslands Research Extension Center

Livestock Facilities Enhancement

Increase Livestock Production, Grazing Efficiency and Biodiversity of Rangelands: Improved livestock facilities will enhance grazing management strategies to create resiliency and minimize the impacts of drought. Grazing management strategies can impact livestock performance, reproductive success, grazing harvest efficiency and ecosystem services.

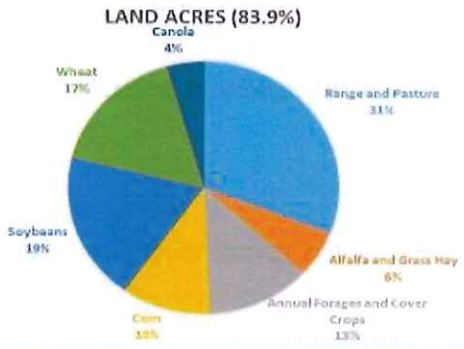
- ✓ Other than maintenance to keep the livestock facilities on the headquarters functioning, much of the current facility (including cattle working and research buildings, pens) have had very little updates since early 1980's. A new research working facility and updated pens would provide a safer environment and more efficient livestock data collection
- ✓ Innovative research trials and alternative production systems aim to address the pasture-to-plate model are needed to address future research questions
- ✓ A new facility will allow the center to provide complementary facilities to conduct data collection from animals coming off pasture and still have the main station scientists collect data from those animals before they go to plate

Forage Crop Agriculture and Conservation

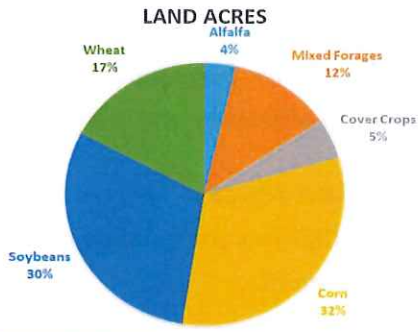
Increase Research and Outreach related to Forage Crops: Forage crops have become a major use of cropland in North Dakota and United States. Forage crops are feed for livestock and have become the dominate plants used in cover crops and conservation plantings.

- ✓ Seeded forages and cover crops combined rank 3rd in cropland use acres in North Dakota in 2021 (behind soybeans and wheat), and when all forage acres are combined ranked 2nd only to soybeans
- ✓ All perennial forage types rank 6th in terms of economic value based on production (behind soybeans, wheat, corn, livestock and canola) in North Dakota in 2020
- ✓ All forage types ranked 3rd in land use acres planted in 2021 in the United States
- ✓ Enhancing the center's forage research specialist position to a split appointment scientist/Extension position with added operating funds will allow for new forage and cover crop type of applied research addressing traditional agronomic studies, large scale grazing experiments, nutrition/feeding studies that test different forages, and conservation planning

Land Use in North Dakota – Top 7



Land Use in United States – Top 6



Future Requests and Capital Projects

Livestock Facilities Enhancement:

- ✓ Livestock research laboratory and handling facility
- ✓ Feed handling facility

Forage Crop Agriculture and Conservation:

- ✓ Enhance Central Grasslands Research Extension Center's current forage program from a forage research specialist to a forage scientists/Extension specialist position with operating