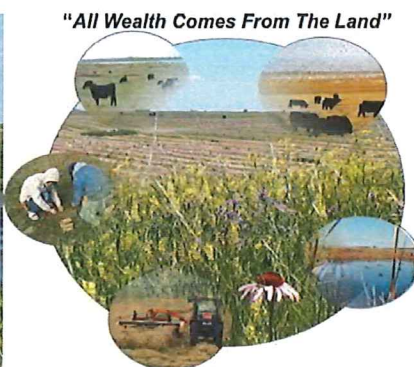
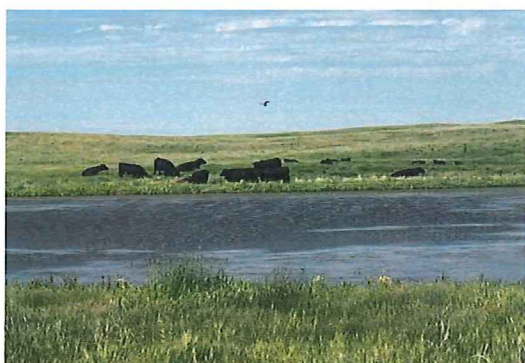


People, Land and Facilities

- ✓ 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).



Capital Project Update (2021-2023 Session)

Pasture Facility Improvements

- ✓ Two new livestock pasture working facilities were completed in 2022 and 2023.
 - \$200,000 budget completed under-budget.
 - 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.

Director's Residence

- ✓ \$325,000 was funded in 2021 – 2023 legislative session.
- ✓ \$500,000 was authorized in 2023 – 2025 legislative session (\$325,000 appropriated, \$175,000 internal).
- ✓ Plan to re-bid the project in January 2024 for the 3rd time.
- ✓ The permanent director's residence on the center will enhance retention and recruitment.

NDSU | Central Grasslands Research Extension Center

Capital Project Update (2021-2023 Session) Continue

Livestock Facilities Enhancement Project

- ✓ Funded during the 2021 – 2023 legislative session for \$1,963,000 using ARPA funds.
 - Bid was above the appropriated funds.
- ✓ Another \$400,000 was funded during the 2023-2025 legislative session.
 - Successfully bid for project.
- ✓ Ground breaking spring 2024.
- ✓ Increase research directed at livestock production and reproductive efficiency, 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, harvest efficiency and ecosystem services.
 - 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.

Conservation Initiative (new for the 2025-2027 legislative session)

Increase Extension Programming and Research Related to Reclamation of Lands Impacted by Energy Development and Conservation of Natural Areas, Wildlife and Endangered Species

- ✓ NDSU Extension programming and research can enhance or provide educational opportunities for:
 - Improving wildlife habitat.
 - Protecting threatened and endangered species while maintaining production agriculture.
 - Managing natural areas that promote conservation.
 - Managing saline affected and marginal cropland acres to promote conservation.
 - Improving recreation opportunities (bird watching, hunting, hiking, etc.).
 - Reclaiming lands impacted by energy development.
 - Partnering with private and public agencies.
- ✓ This statewide initiative on reclamation and conservation would ensure long-term, continued investment from North Dakota State University on managing our state's natural resources.

Future Requests

Support for an increased budget for Operating and Technology Transfer:

- ✓ Inflation and general operating costs have increased more than 30 percent over the last six years.
- ✓ Technology fees to conduct smart research and precision agriculture are a new cost to future ranching and farming studies.

Storage Building:

- ✓ Continued support for a new storage shed.

Support new state-wide Conservation Initiative:

- ✓ Two new main campus faculty related to conservation of wildlife and habitat, and reclamation of lands impacted by energy development.
- ✓ Two new Extension specialists at the RECs (Central Grasslands and Williston REC) related to conservation of nature areas, wildlife and endangered species; and reclamation of lands developed by energy.

Extension Conservation Initiative: Reclamation and Wildlife

Prepared by

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North Dakota is known for its natural resources. These natural resources drive the state's economy while also providing vast areas for wildlife habitat.

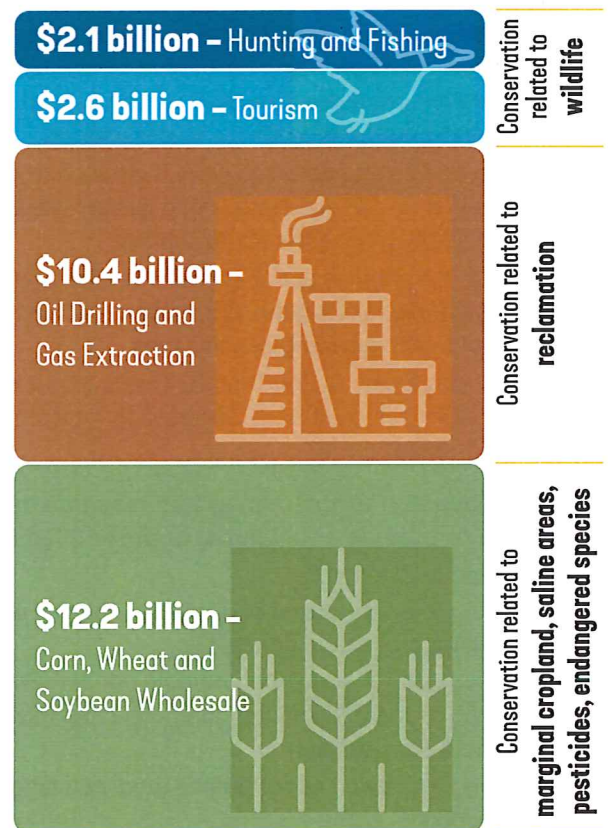
Agriculture and energy extraction occur on the state's natural resources to create salable products, and wildlife use our natural resources exclusively to survive and flourish.

North Dakota's fertile soils support one of the world's most vibrant and sustainable agricultural industries, together with one of the most expansive hydrocarbon energy-producing potentials in the world. The extraction of energy resources results in soil and habitat disturbances. In the absence of effective reclamation, these disturbances can pose environmental risks, ultimately limiting their current and future productivity potentials. Upstream development includes exploration and production whereas midstream development includes gathering, processing, treatment, storage, transport and export of energy resources. These energy developments, each prominent today in North Dakota, are inextricably intertwined with our state's economies.

Even in North Dakota, our landscape is always changing as we ask more of the land with additional production of energy, new crops for food and fuel, and new developments for housing and living. This reminds us of the need to also pay increasing heed to conservation and the importance of our grasslands, forests and wetlands, and the benefits they provide for all North Dakotans.

Although NDSU's researchers continue to conduct cutting-edge research on land reclamation due to energy development and habitat management on lands managed for livestock production and energy extraction, we lack Extension support to relay the outcomes to North Dakota citizens. NDSU Extension currently lacks natural resource management programming focusing on conservation related to reclamation of energy-disturbed lands, wildlife habitat management, threatened and endangered species, and natural areas.

North Dakota Annual Revenue



Sources: IBISWorld 2023, ND Dept. of Commerce 2022, ND Game and Fish Dept. 2019

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EXTENSION

Demonstrated need for conservation of our state's natural resources include:

- **A significant amount of soil disturbance occurs each year as a result of energy development in North Dakota.**
 - 500 miles of pipelines are constructed each year to support midstream capacity of energy development, resulting in more than 6,000 acres of disturbed soils.
 - Currently, three accidental spills of oil products or produced waters are reported each day to the North Dakota Department of Environmental Quality. These releases result in loss of soil function and require remediation.
- **Economic importance of conservation:**
 - The ND Legislature has been dedicated to funding the ND Outdoor Heritage Fund since its legislative creation in 2013. With a funding ceiling of \$40 million per biennium, the fund has been appropriated as much as \$15 million per biennium for important collaborative projects with landowners, providing cost share for agricultural conservation practices, improved wildlife habitat, soil health and grassland health on working lands.
 - Hunting and fishing activities were estimated to generate \$48.2 million in general state tax collections and supported 3,263 full-time jobs in the North Dakota
 - Nearly \$17.3 billion is spent annually in wildlife-watching trip-related expenses in the U.S., with more than 20 million Americans taking birding-specific trips
 - A study conducted by the Trust for Public Lands showed conservation returned \$4 to \$10 back to the community for every \$1 spent.
- **NDSU Extension programming and research can enhance or provide educational opportunities for:**
 - improving wildlife habitat
 - protecting threatened and endangered species while maintaining production agriculture
 - managing natural areas that promote conservation
 - managing saline affected and marginal cropland acres to promote conservation
 - improving recreation opportunities (bird watching, hunting, hiking, etc.)
 - reclaiming lands impacted by energy development
 - partnering with private and public agencies (Ducks Unlimited, Pheasants Forever, Natural Resources Conservation Service, ND Grazing Lands Coalition, Nature Conservancy, etc.)

The opportunity to create educational programs and conduct research in reclamation and conservation has never been greater. Our citizens should have the opportunity to learn more about conservation from our land-grant university. Agriculture and energy development drive our state's conservation planning and creation of wildlife habitat. NDSU Extension and research should play a large role in the direction our state is going related to these issues.

We propose a statewide initiative:

- **Two new main campus faculty related to conservation of wildlife and habitat, and reclamation of lands impacted by energy development.**
- **Two new Extension specialists at the RECs (Central Grasslands and Williston REC) related to conservation of wildlife, including the use of pesticides with a potential impact on threatened and endangered species and reclamation of lands impacted by energy.**
- **This statewide initiative on reclamation and conservation would ensure long-term, continued investment from North Dakota State University on managing our state's natural resources.**

For more information:

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Ultimately, successful reclamation of disturbed soils and conservation of existing lands are critical for all economic sectors of North Dakota by returning agricultural and native lands to their pre-disturbance productivity potentials.