

NDSU Extension Program Initiatives

Final Ranking by SBARE – March 2, 2022

NDSU

EXTENSION



CRITICAL PRIORITY – Hiring and retaining diverse candidates strengthens our ability to expand on critical needs in research, teaching, and extension. **Building attractive compensation packages for employees will be crucial in the recruitment and retainment of top talent.**

1 Cropping Systems Initiative

North Dakota is a dominant force in agriculture, generating more than \$7.6 billion annually and leading the United States in the production of multiple commodities. However, there is room to grow. To help maximize the financial impact that NDSU Extension has on the state, additional expertise and educational programs are needed in response to the rapid expansion of soybean and corn acreage, new and emerging plant diseases and fungicide-resistant pathogens that limit crop yields, controlling the spread of noxious and invasive weeds, and advancing cropping systems that sequester soil carbon, increase plant growth, retain water and build soil health.

The cropping rotation mix across the state is changing as new and emerging crops move into western growing regions. While the crop rotation is changing, herbicide-resistant weed populations are also expanding in North Dakota. The combination of these changes creates a challenging environment for managing weeds. Best management practices for noxious weeds are also necessary to maximize crop yields in this region of the state.

Soybean acreage continues to increase in North Dakota; however, between 2015 and 2019, an estimated 1.1M bushels, worth well over \$10 million, was lost to soybean diseases, and additional diseases and pathogen variants. As examples, the diseases Sudden Death Syndrome and Frogeye Leaf Spot were first reported in North Dakota in 2018 and 2020, respectively, and new variants of the soybean cyst nematode were reported. An NDSU Extension soybean pathologist is needed to develop and deliver disease management information to growers and their industry partners to help prevent or mitigate economic loss to the North Dakota soybean crop.

Increasing interest in carbon contracts from a variety of entities means farmers and ranchers are being asked to sign long-term contracts and utilize practices that will help sequester carbon in soils. It is critical that we provide education and assistance around these carbon-capture practices so producers are fully informed as they consider using them on their farms.

Innovative farmers contribute to the development of best management practices for the commodities they grow. On-farm research programs serve as a bridge between the field-scale problems and novel plot-sized concepts and/or research-based solutions. On-farm research is an effective way to validate research advances while helping farmers envision the value those advances bring to their farm.

Request: Five FTEs total. Western crop production specialist, soybean pathologist, weed specialist, carbon credit specialist, on-farm research coordinator. \$400,000 operating support that includes \$200,000 operating for on-farm research.

Total: \$1,400,000

NDSU Extension Program Initiatives

Final Ranking by SBARE – March 2, 2022



2. Livestock Development Initiative

Livestock production in North Dakota accounts for approximately \$1.5 billion in gross revenue annually, and there is ample opportunity for growth. North Dakota lags its neighboring states in livestock production, and livestock integration has been identified as a top priority to utilize and add value to North Dakota agricultural products.

The health of livestock is also imperative to the state's economy. NDSU Extension continues to serve as a key technical resource that helps protect the health of North Dakotans and their livestock by enhancing the monitoring and surveillance of zoonotic diseases common to animals and people. Educational programming related to livestock production and management, business and economics, and animal health and biosecurity is needed to enhance existing opportunities and develop new opportunities to grow this industry in the state.

Request: Three FTEs total. Veterinary epidemiologist, swine specialist, off-campus livestock development specialist.
\$120,000 operating support.

Total: \$770,000



3. Farm and Ranch Safety and Health Initiative

The health and safety of those involved in agriculture is of utmost importance. A leading cause of agriculture accidents is stress and fatigue. When stress, adversity or trauma occur, having the ability to adapt to difficult situations allows farmers, ranchers and their families to continue to function.

Farmers and ranchers regularly experience uncertainties throughout the year, such as extreme weather, fluctuating commodity prices or trade disruptions. Extension personnel across the state offer prevention resources, and Extension is uniquely positioned to coordinate additional efforts and critical resources related to farm and ranch health and safety. Prevention efforts help build skills that can reduce the need for expensive, crisis-level services.

Request: \$250,000 operating support for farm and ranch safety and health resources.

Total: \$250,000



4. Program Support for 4-H Initiative

North Dakota is facing a workforce crisis, with a particularly high demand for individuals with strong science, technology, engineering, math and entrepreneurial skills. These technical skills, combined with teamwork, decision-making, critical thinking and communication can help build a strong and effective workforce for the state. To build this workforce, expanding and developing quality youth development programs and experiences, such as 4-H, is essential.

Support for 4-H youth development programs will advance North Dakota's future, growing leaders through positive youth development experiences, club involvement, year-round camping opportunities, school enrichment, and after-school programs to promote youth who thrive with workforce readiness skills.

Request: 320,000 One FTE total. 4-H entrepreneurship specialist. \$120,000 operating funds to include support for camping, clubs and after-school programs.

Total: \$320,000



5. Extension and State Soil Conservation Committee Operating Support Initiative

Operating support allows Extension specialists to develop innovative programming in a timely fashion, reach audiences as the need arises, or develop new methods to connect with local communities, and leverage resources needed to address larger issues facing our citizens. Operating support for the State Soil Conservation Committee provides an increase in direct assistance funding to be distributed to local Soil Conservation Districts for technical assistance and conservation planning support.

Request: \$300,000 in operating support for Extension and \$300,000 in operating support for the SSCC.

Total: \$600,000



6. Increased Food Security Initiative

Agriculture continues to be a cornerstone of North Dakota's economy in both rural and urban communities. With the increased emphasis on agricultural processing capacity within North Dakota, there is a need for continued education on the food supply chain. Support for food processing efforts and activities, particularly for value-added food products, can enhance nutrient dense foods.

The pandemic facilitated an increased interest in locally-produced and sustainable food, gardening and horticulture. This initiative would provide funding for enhanced support of Extension agents with expertise in horticulture to support this growing interest across the state.

Request: One FTE total. Urban ag/value-added food technologies specialist.
\$200,000 in operating support to include two county-based horticulture agents in partnership with counties.

Total: \$400,000

NDSU | EXTENSION