

NDSU Extension mission:

Empower North Dakotans to improve their lives and communities through science-based education

SUCSESSES:

Extension agriculture and natural resources (ANR) programming has been very successful in meeting the needs at the local and state level. Agents and state specialists continually strive to engage with the citizens and provide innovative solutions to complex problems. For example:

- Soybean cyst nematode (SCN) national coalition being led by NDSU Extension
- NDSU Extension soil health program seen as a national leader
- Palmar amaranth response crucial to exclusion and management of this pest
- Disaster response and documentation of losses critical to federal disaster declaration
- Providing farm stress materials and education within North Dakota and across the U.S.

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AREAS OF NEED:

Although Extension ANR is strong, North Dakota has areas of need that should be addressed to ensure adequate support for our citizens and communities through agriculture.

Extension livestock support



The majority of beef cattle are in the central prairie pothole region and southwestern quarter of the state. Potential areas of focus are: grazing and soil health management, livestock management on irrigated lands, managing livestock on disturbed soil and livestock interactions with pollinators.

Extension agribusiness support



The current level of agribusiness support is not adequate to begin to meet the need for agribusiness expertise across the state. Potential areas of focus are: agricultural entrepreneurship, budgets, marketing, finance, risk management and life after agriculture.

Extension honey bee support



North Dakota leads the nation in honey production. South Dakota is third in the nation. South Dakota State University has expressed interest in co-funding an Extension specialist much like NDSU and the University of Minnesota co-fund specialist positions. This is an ideal opportunity to collaborate with the North Dakota Agricultural Experiment Station (Main Station and/or Research Extension Centers) to provide unified Extension and research programming to citizens of North Dakota and South Dakota.

Extension veterinary epidemiology support



The NDSU Veterinary Diagnostic Laboratory (VDL) is state of the art. The faculty and staff of the VDL do outstanding work. The VDL generates field-derived, science-based data every day. The addition of an Extension veterinary epidemiologist to analyze data, interpret findings and create evidence-based Extension programs and recommendations for producers and veterinarians will benefit all citizens of North Dakota and the region.

Extension rural psychology/sociology support



Historic and recent events have shown significant gaps exist in North Dakota's understanding and ability to respond to the ever increasing stress and mental health issues associated with agriculture at the individual and community level. Recent events have shown Extension personnel are a trusted confidant and partner in our rural communities. Advanced training and expertise are needed to support and advance sustainable mental health for all segments of our rural citizens.

Operational support



NDSU Extension is not immune from the continuing costs of operation. Areas where operational support is needed: costs associated with in-state travel and lodging, costs associated with professional development and relevance, costs associated with evolving technologies and training, costs associated with responding to disasters and emergencies, and the ability of NDSU Extension to be nimble.

Ongoing web support



NDSU Extension and the North Dakota Agricultural Experiment Station are intertwined. A unified web presence is essential to meeting the needs of the citizens of North Dakota. Much work needs to be done to enhance uniformity and access. Looking forward, effective websites will be transformed from static "filing cabinets" to dynamic up-to-the-second "dashboards." North Dakota will benefit from an NDSU-based geo-positional (site-specific) dashboard. Location and weather determine current and future agricultural management decisions. A geo-positional dashboard (GP-bd) would integrate real-time, location-based open-source data, including weather and research/field trial data, with producer-derived proprietary information to enhance current and future decisions.

- Location (GPS)
 - Soil type
 - Growth zone
 - Degree days
 - Soil moisture content
 - Proximity to markets
 - Proximity to resources
- Weather conditions at that location (current and historical)
 - Temperature (inversions)
 - Wind speed
 - Precipitation
 - Relative humidity
- Research/field trial site
 - Variety trials
 - Region-verified seed releases
 - Soil type, growth zone, germination rate
- NDSU predictive models
- Producers' on-farm production records

For more information:

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