NDSU | DICKINSON RESEARCH EXTENSION CENTER

Increasing Cropping Systems Research and Outreach

A recent strategic planning survey indicated that a research agronomist is the greatest need of the people served by the DREC. This position was vacated more than five years ago. A research agronomist and technician would help address many of the biggest issues facing southwest North Dakota (Figure 1). This applied researcher would investigate and find solutions for issues facing the diverse production agriculture systems of southwest North Dakota farmers and ranchers.

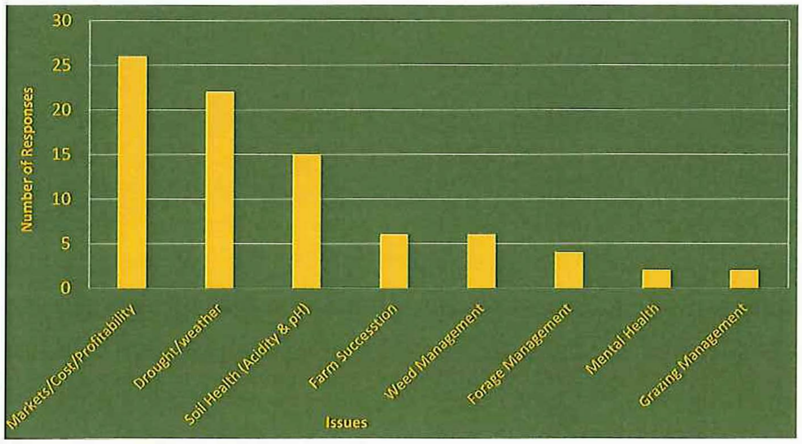

Figure 1. Results from an August 2021 strategic planning survey showing the top issues facing southwest North Dakota agriculture.

Our Request: Support for one research agronomist and technician.

Improving Agricultural Laboratory and Shop Facilities

The current agronomy and forage labs are outdated and repurposed buildings. The agronomy lab was built for grain storage and the range lab was a chicken coop. Working conditions are borderline hazardous from excessive dust due to poor ventilation (figure 2) and drying ovens sharing space with the work area. This makes working conditions excessively hot during the summer. The agronomy lab is not heated which renders winter work difficult. Lab space is very limited in both buildings.

The current shop is too small to meet the needs of modern farm research equipment. Most machinery does not fit in the current shop (figure 3). Repairing equipment under the current conditions is difficult and cumbersome.

Figure 2. Processing agronomy samples in the limited space and poor conditions of the current agronomy lab.

Our Request: Support for a combination agriculture lab and shop.

Figure 3. Dickinson Research Extension Center shop space is limited. This mower and tractor (left) are the smallest plot equipment regularly used. The plot sprayer (right), plot combine, plot planter and others do not fit in the shop. Fixing these needed pieces of equipment can be quite trying under current conditions.

Enhancing Animal Husbandry

A manure management system and feedlot expansion project occurred in 2008. Over 700 feet of concrete pad has sat idle since then as the feedlot project was not completed (figure 4). Bunks, windbreaks, and fencing are needed to decrease stocking density and improve animal welfare. Additionally, many miles of pasture perimeter fence need replacing.

Many full scale farm machines are required to care for Dickinson Research Extension Center livestock. Many implements are stored outside. A machinery shed with heated wash bay would increase equipment longevity.

Our Request: Support to complete the unfinished feedlot, repair existing livestock infrastructure, and a machinery shed.

Figure 4. Aerial photo of the Dickinson Research Extension Center ranch headquarters. The unfinished pen area is signified by the "Unfinished Pens Area".

For More Information:

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