To: Chairman Monson and House Appropriations

Government Operations Division

From: Chris Augustin

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Subject: Support Senate Bill 2020

Good morning, Chairman Monson and House Appropriations Committee Members. For the record I am Chris Augustin and serve as director of the Dickinson Research Extension Center. I am a farm kid from Pembina County, the product of 4-H, and have worked hard to make the best better. The "best" being North Dakota! Thank you for this opportunity to communicate to you the value of the Dickinson Research Extension Center.

The Dickinson Research Extension Center (DREC) conducts agricultural research and outreach that empowers people. Soil acidity and aluminum toxicity are new soil health issues that robs farmers of crop yield. Soil acidity is found across the state. By working with farmers and NDSU colleagues across the state, we have developed lime recommendations that fix this issue and have started the Extension outreach portion of this project. Additionally, Dr. Victor Gomes has worked with students, farmers, and the integrated pest management program to scout over 12,000 acres of southwestern North Dakota farmland. Crop focus has been on wheat, barley, sunflower, canola, and soybean. Dr. Gomes' and the team's efforts provided timely pest management recommendations to farmers and contributed to increased crop health that supports the region's agricultural exports.

We perpetuate agriculture through research and education. Range Scientist Dr. Manske's grazing research has shown that the twice-over grazing system soil contains 58 tons of carbon. Whereas, 2023 Food and Agriculture Organization report states that prime North American grassland soils contain 27 tons of carbon per acre. DREC pastures have twice the carbon! Dr. Manske conducts various grazing tours and works one-on-one with many ranchers and students throughout the year.

The DREC improves food systems and natural resources for today and tomorrow. Integrating livestock and diversifying cropping systems research conducted by Douglas Landblom has shown a net return increase of \$15 per acre. The integrated rotation has shown similar yields, while reducing nitrogen fertilizer by 50%.

I am pleased to report that the lab/shop funded by the special legislative session in 2021 is nearly complete. We are preparing this year's crop in the lab. The shop area is making a positive impact serving as home for our local 4H air rifle team.

Senator Rich Wardner has been a champion for North Dakota agriculture. I am thrilled to inform you that the State Board of Higher Education approved to honor Senator Wardner and name the new building the Wardner Agricultural Laboratory! I hope you join us at our

annual agronomy field day on July 17 where we will have a ribbon cutting ceremony and barbeque.

I support the SBARE priority list. Enhancing our operating budget is crucial to accomplish our charge. During my five years of serving at the DREC, our operating costs have increased immensely. Fuel, motor pool, and seed/feed/herbicides costs alone have risen 41, 9, and 18% respectively (Figure 1).

The SBARE capital improvement request to construct Equipment Storage Sheds is needed. Storing the equipment in sheds is vital to maximize the investment for the equipment by prolonging their life. Our combines may only have a five-foot header, while a farmer's combine has a 30 foot or larger header. However, despite this size difference, the two pieces of equipment share a similar price.

Thank you for your time and support. I am proud of the Dickinson Research Extension Center team. They are all dedicated, hardworking, and live the land-grant mission. I am happy to answer any questions.

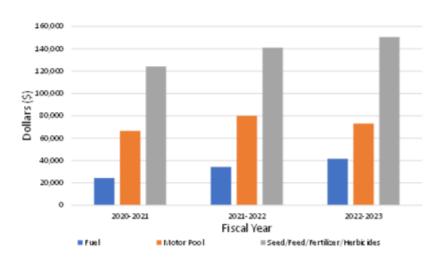


Figure 1. Comparison of costs for various categories at the Dickinson Research Extension Center.