Daniels County MSU Extension is a non-formal educational program designed to help people use research-based knowledge to improve their lives. Since 1922 MSU Extension has successfully provided a service to the citizens of Daniels County through the availability of resources and by facilitating education programs in the areas of agriculture, natural resources, family consumer science, community health and development, and youth development through 4-H.

The current population in Daniels County is estimated to be 1,737; there is one K-12 school serving the county. With agriculture being the main industry, Daniels County was considered the most rural county in the continental United States as measured by the Index of Relative Rurality in 2000. It is south of the Canada-US border with Saskatchewan.

Established in 1920, Daniels County boasts a variety of small-town community events including Lutefisk dinners, snowmobile races, ranch rodeos, and a county fair. Daniels County is also home to its annual Pioneer Days, a weekend-long celebration in June; at the center of the celebration is the historic “Dirty Shame Show,” a variety show composed of local talent. Pioneer Days takes place at Pioneer Town, a 20-acre plot just west of Scobey, which houses 35 buildings that have been restored to depict turn of the century homes and businesses.

StrongPeople Strength Training Program Impacts Local Residents

StrongPeople is a national, evidence-based community exercise program that has been increasingly popular in Daniels County, having been led by the previous and now current Extension Agent. While the program is open to individuals of all ages, the curriculum targets the aging population, helping participants retain strength, stay independent longer, and avoid chronic illness. The program grew out of research published by Dr. Miriam E. Nelson of Tuft University on bone density in older adults, which became popular through her first book, Strong Women Stay Young.

For the current 2021-2022 winter session, there are 14 female participants registered for the program. Returning community members attest to the benefits of the exercise curriculum. Previous class participants provided the following statements: “My attitude about different things has changed a lot. I feel happier and not alone” and “This program motivated me to keep exercising at home on my own. There is no charge for this program and is a blessing to many seniors. Thank you!” Results from a participant survey found that 100% of the participants report feeling stronger, having better balance,
increased mobility, and stamina, and 80% report sleeping better and feeling less stressed. Sixty percent of participants report less chronic pain, with all participants reporting intent to maintain a similar physical activity routine on their own. Participants value the camaraderie the program fosters and depend on it to stay active during northeast Montana's long winter months.

**County Residents Contact MSU Extension with Horticultural and Agricultural Needs**

Spring and summer brought numerous questions concerning tree, shrub and lawn health, weed identification and management to the MSU Extension office, a trend that would continue through the fall. With the state experiencing drought conditions, MSU Extension Agent Inga Hawbaker completed many site visits in-county to look at drought afflicted trees, shrubs, gardens, and lawns. The drought also brought about higher pest populations, namely grasshopper and blister beetles. The high grasshopper pressure was particularly detrimental to agricultural crops, gardens, and trees in the area. Several samples of blister beetles were brought into the office; blister beetles produce a blistering agent called cantharidin that can be harmful to livestock if ingested, thus they are a concern when found in hay fields or baled hay. Hawbaker worked with the MSU Schutter Diagnostic Lab and MSU Extension Specialists to identify the species found and provide management recommendations to producers and property owners.

In addition to site visits and walk-in clients, Daniels County MSU Extension also offers services such as nitrate testing, water test kits, and forage testing. The severe drought conditions caused nitrate levels in small grain forages to be higher than usual; forage crops that are a concern include annual cereal grains, such as wheat, barley, and oats as well as sorghum, corn, brassicas, millet, sweet clover, and alfalfa. There were 42 Nitrate QuikTests (qualitative) and 45 nitrate strip tests (quantitative) conducted for producers over the summer and fall of 2021; a total of 90 samples were received in the office. The tests helped determine a safe cutting window for standing forages and determined if forages that were already harvested were safe to be consumed by cattle or if they required additional testing by a forage lab. Nitrate-accumulating weeds such as kochia, lambsquarter, pigweed and quackgrass were also a concern and were tested when brought in with forage samples. Forages and weeds with high nitrates can be toxic and even fatal to livestock if consumed. Hawbaker also worked with livestock producers to assess water quality for livestock, as the drought impacted water quality in the region. Hawbaker tested approximately 15 water samples throughout
Moderate infestation of pine needle scale on stressed Colorado Blue Spruce, by Inga Hawbaker
the summer utilizing a TDS meter (total dissolved solids) and sulfate test strips to evaluate toxicity. Providing adequate water to livestock is critical for maintaining health and production.

**Wheat Milling and Bread-making with 4-H Members**

MSU Extension Agent Inga Hawbaker led a youth workshop in the spring focused on wheat production and bread making. Daniels County Cloverbud and Exploring 4-H members learned about the different classes of wheat, how those classes are used to produce different products, how to “mill” or grind wheat to make flour, and lastly, how to make bread utilizing a whole wheat bread-in-a-bag recipe. All participants left the workshop with a loaf of bread that they made, along with a jar of flour that they ground using an old-fashioned grain mill – a vintage device that the kids surprisingly enjoyed using! The bread-kits were part of a shared partnership with North Dakota State University Extension in Williams County.

Daniels County is primarily a grower of Spring wheat and durum, producing roughly 6% and 18% of the statewide spring wheat and durum (2020 USDA, NASS). This workshop focused on teaching participants about the importance of the commodity and industry and the role local farmers play in regional and state production.