Blaine County is located in North Central Montana. The Missouri River is the southern boundary and the Canadian border provides the northern boundary. Agriculture is the backbone of Blaine County, with cattle and wheat as the primary enterprises. Blaine County produces over 5.7 million bushels of wheat each year from 190,000 planted acres. There are 45,000 mother cows in the county supported by an irrigated hay base of over 60,000 acres located along the Milk River, enhanced by irrigation supplied by the Corps of Engineers St. Mary’s diversion project. Population in Blaine County stands at just over 6,800 people with approximately half residing on the Fort Belknap Indian Reservation. Blaine County MSU Extension serves the community through a variety of programming carried out by two full-time Extension Agents, a part-time SNAP-Ed paraprofessional, and a full-time administrative / 4-H program assistant. Programming is concentrated in the areas of 4-H Youth Development, Agriculture and Natural Resources, and Family Consumer Sciences. The MSU Extension program is supported through an annual county budget which includes a portion of the agent’s salary along with MSU’s direct support of the agent’s salary. MSU also supports the program indirectly and the county benefits with returned services for every dollar invested. This is truly a partnership between MSU and Blaine County that provides citizens access to high quality education and knowledge from the state’s land-grant university system.

**Blaine County 4-Her’s Learn More Than Showing Animals at 4-H Showmanship Clinics**

Despite restrictions on activities this year, Blaine County 4-H members participated in many hands-on workshops this summer. Every week, 4-H volunteer leaders organized horse, dog, beef and sheep showmanship workshops. Over 50 4-H members with skill levels from beginner to advanced participated. They received individual instruction and could immediately practice what they learned about feeding, show prep, clipping, obedience and pattern skills (dog project), and showmanship skills.

4-H members learn responsibility, the importance of practice, and setting high goals in their 4-H projects. After attending school at home since March, many 4-H members were happy to be outside, working with their animals, and being able to see friends. The 4-H members who participated in the workshops reported feeling more prepared for fair, and mentioned not feeling as nervous as they had in previous years. New project
members appreciated learning what would be required at the fair. The additional preparation helped youth improve in their showmanship classes at the fair. All the workshop participants, as well as 4-H members who were unable to participate this year, requested the showmanship workshops be scheduled again for summer 2021.

2020 Challenges for Blaine County Agriculture Producers

Blaine County agriculture producers faced many challenges in 2020. In a year that included the COVID-19 pandemic, uncertain commodity prices, catastrophic failure of Drop 5 in the St. Mary’s irrigation canal system on the Milk River, grasshopper infestation, wind and drought, producers were still able to reach out to Blaine County MSU Extension for assistance.

At the beginning of the pandemic, MSU Extension was very quick to gather available resources into one website. MSU Extension shared the website to constituents on their Facebook page as well as through local news media outlets. Throughout the year, MSU Extension staff assisted over 150 producers through forage testing, insect and weed identification, plant disease diagnostics, plant variety information, ration balancing, feed analysis, range monitoring, private applicator testing, and nitrate testing. Blaine County MSU Extension was able to work with producers to provide these services through contact-less means.

More than 50 forage samples were submitted for feed nutrient analysis. These samples represented over 7,000 acres (over 20,000 tons) of forage produced in the county. Producers appreciate the low cost of analysis and speed of results. With producers unable to irrigate normally this year, coupled with drought conditions, having the nutrition analysis results is a vital tool for producers when pricing and purchasing forage. In addition, more than 40 samples had nitrate levels tested (high nitrate levels in feed can be toxic to livestock). Less than 20% of the samples came back with elevated nitrate levels; of those, all were still in the ‘safe to feed under all conditions’ classification. This year, the nitrate test samples represented over 2,000 acres (4,000 tons) of forage that could still be used for livestock consumption. Through testing, producers know forage can safely be used, thus saving an average $25 a ton versus having to purchase additional feed.

These services provided by MSU Extension in Blaine County allowed producers to make informed decisions about their operations, thus improving their bottom line. Overall, requests to Extension by constituents for services and additional information has increased by 20% over the past year.

Blaine County 4-Her’s Answer the Call to Service and Make Masks During the COVID 19 Crisis

When the COVID-19 pandemic was declared, many were faced with shortages of essential items. One of these items was face masks. 4-H members were called to service and asked to help sew face masks for local elderly. In an effort organized by Blaine County MSU Extension, 10 4-H youth, with the help of adult volunteer leaders, were able to sew over 300 face masks. MSU Extension asked for local county residents to donate any spare material and elastic for the face masks. Through contact-less delivery, Blaine County residents donated over 50 yards of fabric and 50 yards of elastic. The face masks were donated to a local nursing home, as well as two retirement homes in the county. Blaine County 4-H members donated over 25 hours of service to the project. They were able to work on sewing skills, as well as participate in a supportive community service project. In addition, Extension office staff sewed over 50 youth-sized masks to donate to any area youth that needed a mask. Extension staff also assisted a Fort Belknap area resident in constructing an additional 50 masks. Eventually, the supply of commercially-produced face masks was able to catch up with demand. However, in Blaine County, several of the masks are still in use as they are comfortable, washable, and made by caring 4-H members.

Blaine County Extension and 4-H Use Technology During COVID-19 Pandemic

2020 has been a challenging year for everyone. Blaine County MSU Extension has adapted and embraced new technology to keep programming running smoothly. This year everyone has increased the use of technology to be successful. Virtual meetings, workshops and conferences have replaced travel and in-person activities. Blaine County MSU Extension worked closely with the Blaine County Commissioners and Information Technology Department to update the capabilities of the office and adjacent meeting room. This new technology has allowed Blaine County MSU Extension to organize events, meetings and activities virtually throughout the year. In addition, the Blaine County 4-H program has benefited from the new technology. Council meetings, 4-H project workshops, and 4-H club meetings were still able to happen online. In the past year, meeting attendance actually increased with the availability of virtual attendance. 4-H members could participate more without having to travel. In addition, for the first time, 4-H and FFA shows during the Blaine County Fair were broadcast live online. Families of youth participating were excited to be able to see the shows while they were unable to attend. The Blaine
Top: Beef cattle in Blaine County, by Julianne Snedigar; Bottom Row: (left) Blaine County 4-H members practice their showmanship skills, by Julianne Snedigar; (center) Face masks made by local 4-H members, by Julianne Snedigar; (right) Fall in Blaine County, by Julianne Snedigar
County Fair Youth Livestock Sale was also broadcast online for the first time ever. Sales to online bidders increased the sale average 15% over previous years averages. Many requests were made to continue an online sale option in the future. At some point things may return to “normal,” however, the technology use will remain and continue to benefit Blaine County constituents.

**SNAP Education Benefits Hi-Line Area**

SNAP-Ed (Supplemental Nutrition Assistance Program Education), taught through MSU Extension, continues to provide nutrition education to eligible individuals within Blaine and Phillips Counties, and the Fort Belknap Reservation. Some individuals who are eligible are families with children, youth, seniors, single individuals, and individuals with developmental disabilities. For over 15 years, SNAP-Ed Educator Joann Beard has served the area delivering programming. In May, Beard retired to spend more time with her family. Prior to her retirement, she was able to teach 69 classes reaching 229 children in 17 different workshops. As a result of these programs, 83% of children and youth improved their diet quality via their abilities to choose foods according to Federal Dietary Recommendations or gained knowledge, 39% of children and youth improved their physical activity practices or gained knowledge, and 52% of children and youth use safe food handling practices more often or gained knowledge. Upon Beard’s retirement, the position has been moved to Fort Belknap MSU Extension, where the people of Blaine and Phillips Counties and the Fort Belknap Reservation continue to benefit from the direct and indirect contact they have with the Blaine County SNAP-Ed program.