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 6,700 people with approximately half of these 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 assistant. Programming is concentrated in the areas of 4-H Youth Development, Agriculture 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.

**Agriculture-related services in Blaine County**

MSU Extension in Blaine County offers many services to assist producers including: forage testing, insect and weed identification, plant disease diagnostics, plant variety information, ration balancing, feed analysis, range monitoring, and nitrate testing. This year, over 100 producers utilized these services. More than 50 forage samples were submitted for feed nutrient analysis. These samples represented over 7,500 acres (or over 22,000 tons) of forage produced in the county. Producers appreciated the low cost of analysis and speed of results. These results allowed producers to develop feed rations and to price hay for sale based on tested quality. In addition, more than 40 samples came to the office to have nitrate levels tested. Less than 10% of those samples came back with elevated levels of nitrates. Of those 10%, all were still in the ‘safe to feed under all conditions’ classification. Sampling for nitrates within the office has allowed producers to make informed decisions on their feed rations. This year, the samples done for nitrates represent...
over 3,500 acres (5,200 tons) of forage that will be available for livestock consumption. Producers know their forage is safe and it can be used, thus saving these producers on average $25 a ton versus having to purchase additional feed. Throughout the year, 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 producers for additional information has increased by 25% over the past year.

Blaine County MSU Extension focuses on delivering research-based knowledge

This year, Blaine County MSU Extension focused on delivering research-based information to our many agriculture producers. An agriculture newsletter covering topics about our area was sent to over 300 producers, once in spring and once in fall.

Blaine County MSU Extension organized two days of producer workshops in conjunction with the 70th Annual Montana Seed Show. Speakers included one NRCS specialist, three MSU Extension specialists, one MSU Ag Research Center Assistant Professor and one representative from the Montana Department of Agriculture. The first day focused on beef cattle topics, while the second day focused on crop-related topics. The ‘Hemp production in Montana’ session was well attended. Attendees learned more about state licensing regulations and growing hemp in our area. Blaine County saw an increase from two licensed producers in 2018 to more than 20 in 2019, and an increase in planted acres from 200 in 2018 to more than 3,200 in 2019.

Blaine County MSU Extension Agent Juli Snedigar also invited three MSU Extension faculty to present topics at a fall crop workshop and held a winter beef workshop. Ten percent of the producers who attended the crop workshop reported they investigated their current cropping systems and plan to implement changes based on what they learned. In addition, several producers reported investigating different ranching systems. Producers report they appreciate being able to learn from university experts and like that topics they requested have been covered during the year.

Blaine County 4-H youth gain life skills through hands-on activities

4-H youth development programs create an environment for youth to reach their greatest potential by acquiring knowledge, developing life skills and strengthening their values. Blaine County youth are provided opportunities to develop their talents and capabilities. Throughout the process, youth develop life skills that are relevant both now and in the future. Youth who develop these skills become self-directed, productive and contributing citizens. Some of the life skills they develop are: understanding of self, relating with others, communication, problem solving, acquiring, analyzing, and using information, managing resources and working with others.

This year, Blaine County 4-H saw the highest member participation in county activities in the past five years. Over 100 members and 30 leaders participated in organized events and workshops. Average attendance was up 20% at all activities throughout the year. MSU Extension office staff, 4-H volunteer leaders and 4-H teen leaders taught many hands-on workshops and trainings, including livestock judging, monthly shooting sports, summer weekly horse project, summer weekly dog project, 4-H project day, livestock quality assurance, 4-H officers, and record books.

Blaine County 4-H members learned many new skills and had a lot of fun during the 2018-2019 4-H year!

4-H Cloverbuds gain momentum in 2018-2019

It’s exciting to report that Blaine County 4-H saw a large increase in 4-H Cloverbud participation. Cloverbuds are 4-H members aged 5-7. Youth in this program only enroll in this project and all activities are non-competitive. The Cloverbud program is designed to introduce youth to many different 4-H areas to help them decide what they would like to participate in when they are old enough to be full 4-H members.

Monthly workshops were taught in two locations. Blaine County Ag & 4-H MSU Extension Agent Juli Snedigar taught Cloverbud workshops in Chinook and Blaine County 4-H Leader and 4-H Alumni Shannon Van Voast taught workshops in Turner. Cloverbuds participated in many science, technology, engineering and math (STEM), hands-on activities, learning about insects, objects that sink or float, leaves, birds; creating a habitat; growing a garden; going on a nature walk; building paper airplanes; playing tic-tac-toe; weaving; and making balloon rockets. Participation by Cloverbud-aged members increased by 35%. In addition, youth who are now too old for Cloverbuds are moving on to regular membership with 100% of those eligible youth now enrolling for the next 4-H year.

Supplemental Nutrition Assistance Program

SNAP-Ed 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. The program strives to help Montanans “Buy, Eat, Live Better” by saving money on food, making healthy eating choices, and incorporating more physical activity into their daily lives.

Over the past year, Blaine County SNAP educator Joann Beard focused largely on education with youth in area schools.
Top row: (left) Sooty mold on an Elm tree; (center) Blaine County producers attend a beef workshop; (right) Blaine County 4-H Cloverbud members decide if objects will sink or float; Middle row: (left) A Blaine County 4-H member learning new skills at 4-H Project Day; (center) Part of Three Buttes in fall in eastern Blaine County; (right) Fusarium root rot and common root rot in wheat; Bottom row: (left) 4-H Cloverbuds learn about insects and construct ants from marshmallows; (center) Hemp growing in Blaine County; (right) Blaine County 4-H members participating in a record book workshop.
She visited five area schools and taught a series of lessons to more than 250 youth in first, third and fifth grades.

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. Visit the SNAP-Ed program website for more information at https://buyeatlivebetter.org/.

**Blaine County MSU Extension partners with Triangle Communications**

This year, Blaine County MSU Extension Agent Juli Snedigar partnered with Anne Boothe, Economic Development Specialist from Triangle Communications, to offer a Basic Grant Writing Workshop. The workshop was offered free to participants and was limited to 20 attendees. Participants represented local city government, fire department, ambulance department, city police, non-profit community organizations, tribal government agencies, county departments, and private individuals.

The workshop, which was designed for beginners, included ideas, resources and processes for developing grant proposals. Attendees were able to work on their own ideas during the workshop. As a result, each attendee identified at least one grant proposal idea and developed it. Participants were provided with a take-home packet of additional information on grant funding available in the area and in Montana, as well of a list of resources for more information. Following the workshop, two attendees returned to MSU Extension for more assistance in writing grant proposals. Over half of the participants reported they submitted at least one grant following the workshop and felt more confident in their grant writing abilities. Continued requests have prompted consideration to hold this workshop annually.