Glacier County is home to Glacier National Park, the Blackfeet Indian Reservation, 75 miles of international border, and thousands of acres of small grains, pulse crops, rangeland, and hay fields that support agriculture. The nearly 13,500 residents are immersed in agriculture, oil and gas, and tourism industries.

MSU Extension in Glacier County strives to meet the needs of community, 4-H, and agriculture producers. Programming highlights this past year included the annual Cropping Seminar, Montana’s Next Generation conference, an Herbicide Resistance workshop, workshops for 4-H, yard and gardening, and much more. In the past five years, 4-H enrollment has steadily grown.

Glacier County Ground Squirrel Research and Programming Aims to Reduce Produce Losses

Richardson ground squirrels have plagued Glacier County producers in recent years, reducing crop yield, decreasing field operation efficiency, and damaging farm equipment during cropping operations. In 2018, a research study was done in Glacier County with Dr. Stephen Vantassel, Montana Department of Agriculture Vertebrate Pest specialist, to determine the efficacy of broadcast baiting zinc phosphide for ground squirrel control. As a result of the project and submitting producer letters, a special label registration was granted allowing for the broadcast baiting of zinc phosphide.

The study was followed up in March 2019 with a program on ground squirrel biology and control options to encourage early and effective ground squirrel treatment by producers. Producers attending the event estimated their last three years’ yield loss to ground squirrels has averaged 25% in hay, 19% in canola, 18% in chickpeas, 14% in spring wheat, 13% in barley, and 11% in winter wheat. Using average NASS, 2018 wheat prices, this represents approximately $33,000 in lost revenue per farm, annually. In addition to the lost revenue, producers still have input costs of seed, fertilizer, chemical, diesel, labor, etc. on those acres with no revenue to offset those costs.

As a result of the program, half the producers planned to begin control earlier. Nearly 20% of producers planned to begin or improve scouting and monitoring. Other producers planned to change their rodenticide, build bait stations, or increase observations through technology use. Overall, producers rated the program 4.8 out of 5, illustrating high satisfaction with the event.
Calvin’ Fever Program Trains for Calving Preparedness

Reducing death loss during calving is a high priority for beef producers. Approximately 33% of all calf losses and 15% of breeding cattle losses are due to dystocia (abnormal or slow-progressing labor). Calvin’ Fever, a new program for calving preparedness, aims to educate ranch women on proper calving protocol, dystocia prevention, and newborn calf care. Thirty participants learned about calving difficulties, bull selection, newborn calf care, and preparing freezer meals in advance for busy times on the ranch. The workshop featured a local veterinarian and MSU Extension agents teaching and providing hands-on learning experiences.

Calvin’ Fever provided education and increased knowledge of identifying calving difficulties and assisting with delivery and care of calves. Workshop participants were multi-generational and actively participated in this event. Assuming a 1% reduction in calf death loss as a result of Calvin’ Fever, an additional 55 calves would be weaned, creating approximately $55,000 additional revenue and resulting in an economic impact of approximately $1,800 per participant yearly.

Overall, participants rated Calvin’ Fever as 4.8 out of 5, indicating high satisfaction. Participants learned several new techniques they planned to implement to improve calf and cow health. Attendees of Calvin’ Fever also gained confidence with their abilities to assist with calving. One producer commented, “You taught me much today. I am confident that I can save a calf. Your knowledge is incredible. I am proud that we have people like you with the time and care to teach me.”

MSU Extension agents Kari Lewis, Adriane Good, and Kimberly Woodring won two awards for the program from the National Association of County Agricultural Agents.

4-H members ‘Follow the Beef North’

Beef feeding and processing industries are very limited in Montana, and producers and 4-H youth have limited exposure to learn more. However, with a $700 Montana 4-H Foundation grant, 13 4-H members and 6 parents attended a June seminar and tour in Brooks, Alberta, Canada, to experience the beef feeding industry firsthand. They visited MCF Feedyards (63,000 head of cattle on feed that day), met with a feedlot nutritionist, and learned about beef processing from JBS Packing representatives.

Prior to the tour, most members perceived technology in the feedlot industry as tractors, hay busters, and computers. In a post-evaluation, 4-Her’s identified technology as feed ration formulations, electronic identification (EID) tags, laptops and scanners for EID tags, implants, and water sprinklers to control dust.

Prior to the program, 80% of 4-Her’s thought that anywhere from 11% to 99% of the beef animal was thrown out during
Glacier County 4-H continues to grow and members are actively involved in service projects in the community; **(center)** Local 4-H beef members and parents toured the MCF Feedyard in June near Brooks, Alberta; **(right)** Participants learned about beef processing through a presentation from JBS. **Middle row:** **(left)** Dr. Stephen Vantassel provided basic biology and control measures for producers at a March workshop on ground squirrels; **(center)** Richardson ground squirrels begin poking out from their hibernation in late February and early March, and early control is critical; **(right)** Participants gained practice force-feeding calves using a specially modified, stuffed calf. **Bottom row:** **(left)** The Glacier County 4-H shotgun program continues to grow with NRA grant funding; **(center)** The Calvin’ Fever workshop included hands-on activities, including group work with actual bull sale catalogs to identify calving-ease sires.
processing. After the program, all of the 4-H members had a better understanding of animal byproducts, and answered that less than 5% or less than 10% of the animal is thrown out.

One member commented, “I learned that the highest priority in the packing plant is the animal’s welfare so none of the things they do are painful or hurt the animal in any way.”

4-H’ers and parents who attended planned to change their pen layout to increase animal exercise, change feed rations, keep better records, and implant their 4-H steers, etc. Overall, the program was rated 4.6 (youth) and 4.8 (adults) out of 5.

**Glacier County 4-H Shooting Sports Program Grows with Friends of the NRA grants**

The Glacier County 4-H shooting sports program continues to grow, with nearly half of the enrolled members participating in Archery, Air Rifle, or Shotgun projects. That growing interest was supported with two grants totaling $4,600 from the NRA Foundation this past year.

Because members must travel 30 miles one way for shotgun practice in a neighboring community, the financial commitment to participate is increased compared to many other youth activities. An NRA grant for nearly $800 worth of shotgun shells and supplies has helped make participation more affordable for families, which is anticipated to help the beginning 4-H Shotgun program to continue to grow. Grant funds allowed for decreased fees in the coming year, which resulted in a 38% increase in program enrollment. It’s anticipated that more members will join until the program starts in May 2020.

Due to a cumbersome size and outdated design, the air rifles that had been used for many years were a challenge for younger members to handle. Recognizing that, an NRA grant was sought requesting lighter rifles that would be more user friendly. The grant was awarded to purchase five new air rifles and cases, along with ammunition and targets, at a value of more than $3,800. It’s expected that with new equipment, members will be more enthusiastic about the sport and committed to long-term participation.

Stewart 4-H family hosted 13-year-old girl, Yua, and the Bunker 4-H family hosted 13-year-old boy, Yuki, here in the Flathead. Linda Stewart, 4-H leader for the Swan River Buttons & Bows 4-H Club, traveled to Japan as the chaperone for 4-H members participating in the exchange from the U.S. Stewart has served as the Western Region Coordinator for Montana 4-H Exchange programs for a number of years, serving hundreds of Japanese exchange members while they are in Montana.