

Carbon County

202 State St., P.O. Box 230, Joliet, MT 59041 | (406) 962-3522 | carbon@montana.edu | carbon.msuextension.org



The Carbon County MSU Extension office is located in Joliet, MT, and is staffed by Extension Agent Nikki Bailey and Administrative Assistant Sheri Hatten. Assisted by support from the Carbon County Commissioners, MSU Extension has met the needs of clientele across the county including a robust 4-H program with more than 300 members, traditional agricultural producers, and new small acreage landowners. One of the exciting aspects of working in Carbon County is the opportunity to create programming that supports many different areas of emphasis and groups of people.

New Collaborative Agriculture Series Brings Agriculture Specialists to Region

The South Central Cattle & Forage Series was organized to address the educational needs of farmers and ranchers while reaching people across Carbon, Stillwater, Yellowstone, and Big Horn Counties. In 2018, multiple producers approached MSU Extension in Carbon County with concerns about nitrates in cover crops and recommendations on grazing these alternative crops. For every producer who came into the office, it became clear there were many more facing this same dilemma. Was there a way to gain additional income from safely grazing cover

crops? Based on this recognized need, Darrin Boss from the Northern Ag Research Center was invited to share his experience and research with grazing cover crops. Information on genetic selection and mineral nutrition were also identified across the region as educational needs of local producers. During this series, Megan Van Emon, MSU Beef Cattle Specialist, discussed with producers how to improve their bottom line by implementing a mineral nutrition program and feeding discarded sugar beets to cattle. Callie Cooley and Nikki Bailey, MSU Extension Agents in Yellowstone and Carbon Counties, discussed the past and future of genetic selection in beef cattle. Agriculture producers left the program with a greater understanding of cattle genetics, mineral programs, and how to get additional value out of cover crops. Collaborative programs such as this series provide an opportunity for local agriculture producers to hear locally from state specialists, thereby fulfilling a vital role of MSU Extension of bringing university knowledge to local communities.

Horticulture and Rural Living

With its varied landscape and elevation changes, Carbon County presents many challenges to local gardeners and landscapers. Throughout the year, multiple walk-in visits and

house calls dealt with a variety of horticulture issues. White pine weevil, *Rhizosphaera* needle cast, tip blight, aphids, pine needle scale and many other insects and diseases were identified at the Extension office. Recommendations were given for an integrated pest control approach to remedy these issues during consultations.

Education efforts were driven by this high frequency of horticulture calls and questions, resulting in several classes taught by MSU Extension around the county. Integrated Pest Management (IPM) was discussed with a garden group to proactively solve some of the common issues. Approximately 30 people learned the importance of monitoring, correct pest identification, and then the options for control of insects, weeds, and disease in their landscapes. A Master Gardener Level 1 class was taught during the winter months to prepare gardeners for the growing season. This eight-workshop series focused an in-depth look into gardening in Montana, with topics ranging from vegetable gardening to lawn maintenance. Gardening and small acreage development education play a very important role for MSU Extension in Carbon County, and local needs were met through a combination of one-on-one consultations and group educational workshops.

New Outreach in Agriculture Education

Carbon County MSU Extension participated in an agriculture education event at the Northern International Livestock Expo (NILE) in Billings. For the first time ever, MSU Extension in Carbon County joined the educational efforts of MSU Extension in Yellowstone County and Musselshell/Golden Valley Counties to collaboratively teach agriculture education to over 1,600 fourth graders from the region. Students learned about the area crops including sugar beets, corn, alfalfa, barley and wheat, and information about Montana's number one industry. Learning about the sugar from sugar beets or the flour from wheat expanded their understanding of food systems and the importance of agriculture to their lives. Educational efforts such as this are critical to future support and understanding of the industry.

Building Opportunities in 4-H Project Areas

In 2019, great strides were made to provide more hands-on education to 4-H members enrolled in the 4-H Dog program and the 4-H Horse program. Starting in the fall, a new kick-off event called the 4-H Horse Spooktacular was organized for horse members. This event was a great way for horse members to meet and learn new things about their horses in a safe, controlled environment. At the annual 4-H Horse Camp, members learned about different equine disciplines and were able to try working cattle, jumping-in-hand and equitation. Students also learned about the equine digestive tract by





Top row: (left) During the summer, cattle dominate the rangeland of Carbon County; **(center)** 4-H Camp Counselors learn responsibility and communication skills while having a bit of fun; **(right)** Views of Carbon County; **Middle row: (left)** Cooley Spruce Gall Adelgid on Blue Spruce tree; **(center)** Nikki Bailey teaching about wheat and sugar beets at the NILE; **(right)** Workshops such as dock diving expanded the horizons of 4-H members in the dog project; **Bottom row: (left)** 4-H Exchange Group at Churchill Downs; **(center)** 4-H equine workshops focused on new ways to work with horses; **(right)** Ambassador Prom Dress Drive

creating replicas. Through these efforts, 4-H members built on their current equestrian skills, tried new disciplines and experienced the science of horses.

The 4-H Dog Program also expanded knowledge this year in Carbon County. Through collaborating with local experts, dog obedience, showmanship, agility, and rally workshops were scheduled twice a month during the 4-H year. At these practices, 4-H members learned how to work with their dogs and adopted new training techniques. Members tried their hand at agility, dock diving and barn hunt, which were new, fun experiences for many dogs and youth handlers. After attending these educational events, both dog and horse 4-H members reported they built connections with other youth who share similar interests, expressed interest in applying the knowledge they gained to school projects, and began to think about the future and possible animal science careers.

Creating Teen Leaders

4-H Teen Leaders in Carbon County increased their impact this year with several innovative projects. With the assistance of MSU Extension, the teen 4-H Ambassadors planned and organized a prom dress drive at local schools. The Ambassadors

collected more than 100 prom dresses and traveled to three schools setting up prom stores. The dresses were loaned out to teens from around the county to save on the cost of attending prom. As in most service endeavors in rural communities, it took a village to accomplish moving these dresses over 100 miles around the county in the middle of winter. This project required the assistance of 4-H teens, 4-H leaders, Extension staff, school administrators and even the county road crew. In the end, the 4-H Ambassadors helped Carbon County teens save \$1,500 in prom expenses.

Carbon County teens also built upon their leadership skills by attending 4-H Camp Counselor trainings, including an overnight training in Joliet, planning a Project Day for younger members and teaching Cloverbud activities. Teens learned how to teach in a one-on-one environment and speak in front of large groups; they traveled with 4-H Exchange and made connections with teens from Kentucky; and became leaders within their own communities. One teen reported, “Doing things like this, leadership things, that’s where I learn the most in 4-H. The animals are fun and I learn there too, but through all the leadership training I have gained skills I use outside of 4-H all the time.”

Carbon County Staff



Montana State University Extension is an ADA/EO/AA Veteran's Preference Employer and provider of educational outreach.



Nikki Bailey
Extension Agent



Sheri Hatten
Administrative Support