

Carbon County



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Carbon county views, by Nikki Bailey.

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 extends over many different areas of emphasis and groups of people.

Creativity in 4-H Programming During COVID-19 Pandemic

During the early months of the COVID-19 pandemic, Carbon County MSU Extension addressed the needs of 4-H youth sheltering in place by developing a series of interactive videos. During the series, youth learned many new life skills, utilized science outside of the classroom and continued to learn through 4-H at a distance. Each class was virtual yet hands-on, and addressed a wide variety of 4-H life skills. For example, in an animal science class, students built model digestive

systems for both monogastric and ruminant animals. Students compared the two systems for effectiveness and how it affects feeding animals. Guest speakers were brought in remotely for specific topics. Lori Beth Evertz, PhD, from the MSU College of Engineering, taught a webinar on biomechanics and the science of muscles. Students built jumping machines after a look at the fundamentals of biomechanics and mechanical engineering principles.

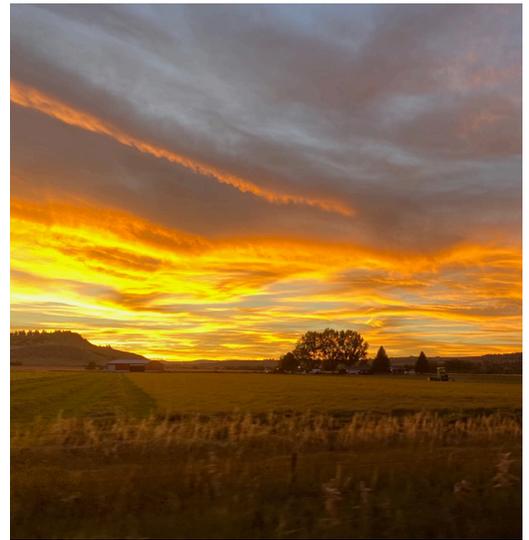
Other biweekly classes included topics from photography to record books. Each virtual workshop was presented in a webinar and posted to social media. Each workshop averaged 115 direct virtual views and remotely reached an average of 220 people. 4-H youth were able to continue to advance their STEM knowledge and project skills during the shelter in place order.

A community service project was created to keep 4-H members connected during this challenging time. Adult and teen leaders collaborated with Carbon County MSU Extension to create new Carbon County 4-H Facebook and Instagram pages aimed specifically to create interconnectedness in a virtual world. These pages have served as a vehicle for educational material and promotion of 4-H education in the county and continue to be active. While the pandemic has provided many

challenges, opportunities also have risen for creative thinking and virtual instruction. Carbon County MSU Extension has been able to reach many community members through a new and creative virtual presence.

South Central Ag Forum Continues to Bring Agriculture Specialists to the 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. This past year, many producers had been considering different ways to utilize fall and spring forage options. To address these concerns, Jeff Mosley, PhD, MSU Extension Range Management Specialist, was brought to the tour to discuss grazing management options in the spring and early fall. Following this presentation, producers demonstrated an increased knowledge of forage management in spring and fall pastures. Mosley and Carla Sanford, PhD, MSU Extension Beef Specialist, then presented the implications of fetal programming when developing replacement heifers. Reproduction is the single most important factor in ranch productivity and management of replacement beef heifers is one of the costliest to an operation. Producers learned about heifer development and postpartum management. In the final presentation of the night, attendees increased awareness of how water quality impacts livestock through Molly Master's presentation on water quality. Agriculture producers left the program with a greater understanding of cattle genetics, grazing systems, and water quality. Collaborative programs such as this series provide an opportunity for local agriculture producers to hear from state specialists and further develop strategies to make their agricultural operations more productive and profitable.



Top: 4-H quilt judging at the Carbon County Fair. Through collaboration and creative thinking, the 2020 Carbon County 4-H & FFA Fair was successfully carried out during the COVID-19 pandemic; **Bottom:** Hay production is an agriculture commodity in Carbon County. MSU Extension performs nitrate tests and provides feeding recommendations throughout the year. All photos by Nikki Bailey.

Carbon County Staff



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

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