2022 MSU EXTENSION HIGHLIGHTS

Powder River County



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Weaned calves benefit from record hay production throughout the county.

owder River County is a rural, agricultural county of 3,297 square miles in southeastern Montana. The county was named for the gunpowder-colored sand on the banks of the Powder River, which runs through it. The total acres in Powder River County equals 2,109,728 million, most of which are used for rangeland purposes. The population of Powder River County is 1,694, according to the 2020 census.

Powder River County is primarily rural and agricultural. There is limited oil and timber production. Most of Powder River County is grazing land. Since 1954, farm acreage has fluctuated between 1.54 and 1.72 million acres. The number of ranches has decreased, and the average ranch size continues to increase.

What a difference rain makes in May and June

After a winter of feeding high-priced purchased hay, ranchers in Powder River County were elated to have substantial moisture in May and June. The difference in forage production on native range and introduced pastures was profoundly better compared to the poor production during the drought of 2021. Record hay production was reported

throughout the county. Producers reported record weights for calves and lambs. Happiness (and financial security) is a full-of-hay stack yard.

New Worries

Producers are very concerned with invasive grasses and broadleaf weeds which reduce the productivity of both tame and native pastures. Ventenata, an aggressive invasive grass has been detected in Powder River County. Informational news articles about bulbous bluegrass detection and control were written; several samples were brought in for identification.

Fifty-two people attended the annual summer MSU Extension Weed Workshop, which focused on improving range conditions and reducing annual and perennial invasive grasses through grazing management and controlled fire. Private applicators earned re-certification credits. Weed control questions throughout the summer included controlling Canada Thistle, Bulbous Bluegrass, Ventenata, and Catchweed Bedstraw.

Annual crops yielded additional forage. High nitrate levels are always possible, especially if either high temperatures or hail stresses the crop, both of which occurred during the growing season. In addition, the re-growth of annual crops can sometimes contain toxic nitrate levels. One hundred four

samples of forage were nitrate tested for 40 producers. Blister beetles were also a concern during the summer; management guidelines were shared with producers.

Fully engaged youth

Powder River County 4-H membership has increased to 86 members and 20 volunteer leaders. Youth of all ages participated at differing levels throughout the year.

4-H Mini-Congress was planned and facilitated by nine teen 4-H members. Twenty-five third through sixth-grade youth attended the "How to Train Your Dragon" event held at the High School on New Year's Day. Workshops led by teens included making dragon snacks, creating masks, and playing games. A cornhole tournament, movie, and pizza rounded out the adventure. Positive interaction between teens and younger members created a safe and fun event.

Camp Needmore was attended by 21 Powder River County 4-H members and one teen counselor. MSU Extension agents facilitated an "Outdoor Activities" workshop which covered "Leave No Trace," watercolor ceramic tiles, and the life cycle of the Pacific Salmon. The activities were active and engaging and the weather was delightful!

Seven members and two chaperones attended the 4-H OREO trip for seventh and eighth-grade youth. The youth joined 23 other 4-H members from southeastern Montana on a trip to Glendive. Highlights of the trip included hiking Makoshika Park, touring Dawson Community College, kayaking, swimming and learning the value of recycling by working at the GROW Recycling Center.

Youth Development

Discovering local treasures included a "Morning at the Museum" for youth ages 4-12. Forty participants learned about mammoths, making butter, sun photography, braiding hemp bracelets and playing field hockey on the courthouse lawn. The museum is full of the community's treasures for children of all ages. MSU Extension worked closely with volunteers to provide a positive, fun, educational experience.

Powder River County Fair – MSU Extension worked with the Fair Board, 4-H Council and other volunteers to create a quality event reflecting the involvement of the entire community. Despite the intense heat, all persevered and some even thrived.

Interview judging conversations are a key to learning at the county fair:

- 94 interviews were conducted to evaluate what youth learned in their projects;
- 319 non-livestock exhibits; 200 livestock exhibits;
- 95 donors contributed for a total of \$7,520 paid to participants in prizes and cash awards;
- \$3,957 was paid in premiums;
- \$1,854 was generated by the silent auction with 37 exhibitors;

- \$140,514.75 was generated by the livestock auction featuring 17 market steers, 13 lambs, 24 hogs and one pen of three fryers;
- \$7,919 from resales during the market livestock sale went to charitable organizations;
- And, \$2,301.50 was generated for the Entertainment Fund.

Big Sky, Big Leadership (BSBL) offered to and embraced by community

The need to build and enhance leadership skills in our community was identified by participants in ReImagining Rural, a webinar series that redefines the concept of rurality. Working closely with a devoted steering committee, a holiday mixer that taught Gracious Space communication principles was attended by 34 participants. The attendees learned the four elements of better collaborating with others by showing positive intent (spirit); providing a welcoming setting, inviting the stranger, and learning in public. Following the mixer, BSBL was launched. Twenty-three community members participated in the intensive, in-depth leadership series from January through May. Each session consisted of a skill-building experience and a community-based experience. The skill-building included generations, community asset mapping, Real Colors personality evaluation, Leading Local and Leadership Challenge. Participants gained a better understanding of their community; improved the effectiveness of meetings and actions of a board or group in which they were a member; became a better leader at home, work or in their community; and gained a greater appreciation of others. BSBL received a \$3,000 School Community Development (SCDC) grant to create a more welcoming space downtown; and cleared an abandoned property of trash and debris, and received another \$3,000 SCDC grant to fund the BSBL in 2023.

- Generations: MSU Extension Community Development Specialist Tara Mastel led the generations workshop. Participants generated valuable information on the experiences that formed and shaped five generations. A local multi-generational, family-owned business panel shared what is rewarding and challenging about working together.
- Community Asset Mapping: MSU Extension Rosebud/ Treasure Agent Jennifer Anderson helped participants map the community's assets by first defining the community and then brainstorming the assets. Areas included people, jobs, infrastructure, location, available resources, organizations, events and culture.
- **Real Colors' helps people understand human behavior. People recognize, accept and learn to value the differences in others and increase understanding, empathy and communication with others. By understanding co-worker preferences, the correct job or tasks can be assigned. Health professionals shared self-care and mental health issues, and shared their missions and methods for connecting with the community.













Top: (left) The invasive grass, Ventenata, has been detected in Powder River County; **(right)** Teen leader Becca Aye works with 4-H member Anna Hagedorn to create trail mix during a Mini-Congress workshop; **Center: (left)** 4-H volunteer Kate Ruland teaches sunlight photography during the "Morning at the Museum"; **(right)** Team building skills through non-verbal communication was practiced at BSBL; **Bottom: (left)** Building strength during SAIL classes; **(right)** Harvesting carrots at the Community Garden

- **Leading Local:** Participants learned how to hold effective meetings, engage board members, have crucial conversations and inspire vision. The community tour explored the roles and responsibilities of town and county government offices.
- Leadership Challenge, presented by Dan Clark, MSU Local Government Center, inspired people to share a vision and model the way. Clark also taught Board Leadership Training to 16 community volunteers active on boards the day before Big Sky Big Leadership.

Healthy Living

Stay Active and Independent for Life (SAIL), an exercise and educational program designed to prevent falls in adults 65 years and older, began in January. Participants:

- Learned activities to promote balance;
- Increased social interaction with others;
- Learned the importance of exercise for improving balance;
- Improved confidence in being more physically active.

Respite Retreat - MSU Extension Gerontology Specialist Daniel Koltz and Rebecca Koltz, MSU Professor and Counselor, facilitated a Caregiver's Respite Retreat for 15 caregivers. Caregivers who attended expressed decreased stress, an appreciation for being cared for, developed relaxation skills and connected with others. Participants noted:

- I didn't realize how many of us there are;
- I no longer feel alone in this caregiving;
- My cup was empty when I came, but now it is full;
- I feel cared for.

Reactive Balance Training – MSU Researcher Justin Whitten worked with local physical and occupational therapists and qualified 18 people aged 65 to 85 for a Reactive Balance Training research study sponsored by Montana State University. The study is designed to research the feasibility of offering training in rural communities. Results are still being tabulated for the five-week program that concluded in the fall.

Powder River Trails – MSU Extension applied to the Bureau of Land Management to create new bicycle and pedestrian trails on BLM land just 5 miles north of Broadus; Received a \$3,000 SCDC grant to purchase and install outdoor musical instruments along the trail. Installed two historical interpretive signs along the trails that celebrate the agricultural, western tradition and the building of the community and courthouse.

Broadus Community Garden – Thirteen garden plots were completed with corresponding drip systems which were rented to 12 local gardeners who grew fresh produce in low-cost, accessible, deer-proof garden spaces.

Mental Health – The Wellness Weekly provides weekly education and treatment resources for mental health and substance use disorders. "The weekly information addresses the stigma in our community around mental health. Every little step we can take to reduce the stigma helps." MSU Extension applied for a \$5,000 grant to continue producing the Wellness Weekly in 2023.

Food Insecurity – MSU Extension received a \$3,000 SCDC grant to provide nutrition education to low-income residents in 2023.

Extension solves mysteries...the Yucca Weevil

Over the last five years, there have been reports of yucca plants dying. MSU Extension helped to finally discover the cause through the help of a landowner who had more than a hundred yucca plants in their native landscaping, all of which were dying. During the removal of the dead plants, yucca weevil larvae and adults were detected and positively identified through a diagnostic lab. The larva feeds on the inside of the root, causing decay and allowing for disease.



Healthy yucca plants are becoming scarce due to the devastating yucca weevil (Scyphophorus yuccae).

Powder River Staff



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

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