Providing research-based information, resources, and education in the areas of Family and Consumer Science, Youth Development, Agriculture, Natural Resources and Community Development have been the foundation of Valley County MSU Extension since 1917. Valley County is rich in agriculture, including 42,460 beef cattle, 68,000 acres in hay and haylage, and over 1.63 million acres of agricultural land. The population of 7,600 is supported by agriculture, tourism, health care professions and the railroad. Residents enjoy outdoor recreational activities such as fishing and hunting, as well as cultural experiences like the Fort Peck Summer Theater, art galleries, and Native American traditions such as the Red Bottom Celebration.

Positive Youth Development

Valley County MSU Extension engages and supports youth and families through opportunities to achieve optimal physical, social and emotional well-being. Valley County youth create positive change in issues that affect most young people today: nutrition, childhood obesity, drug awareness, bullying, decision making and stress management.

Life skills are the focus of the 4-H mission, including health, which is one component of the 4-H pledge. Through 4-H educational experiences, youth learn to make smart, healthy decisions for themselves, increase leadership skills and contribute to their community through the development of life skills. Valley County 4-H impacts over 100 youth through positive youth development activities.

STEM concepts are incorporated into the majority of youth programs. In addition to Science, Technology, Engineering and Math, Art and Recreation are also included to make STREAM. Adult afterschool professionals also benefit from MSU Extension-offered STEM training. Through this hands-on training, Helena School District teachers experienced replicable STREAM activities.

The 4-H Afterschool program provides a receptive audience for learning life skills. 4-H Afterschool fun includes lessons in citizenship, character, history, art, and public speaking, and STREAM learning experiences. Virtual meetings have become normal and involve remote learners in 4-H Afterschool.

Youth team building activities successfully teach life skills. Through 4-H and Jobs for Montana Graduates (JMG) classes, youth learn to build consensus and create a comfort level within a group. Young people establish strong foundations for future relationships and environments of open communication. Learning experiences increase the members’ commitment to the group and contribute to their growth as leaders in their community.
Parliamentary Procedure is a skill that youth exercise in 4-H and it is appreciated as they participate in local organizations and move into adult roles in their communities. 4-H and JMG students learn to lead meetings and successfully participate in organizations.

Classroom food safety is an innovative curriculum taught by MSU Extension in high school Family and Consumer Science classes. The curriculum is designed to teach students the basic elements of food safety during 12 hours of education. This training culminated with 67 students passing tests to achieve the National Restaurant Association Food Handlers certification.

Babysitting training provides a background for youth ages 9 and up to take on the serious responsibility of caring for children. This course reached 36 young caregivers, and included basic first aid, ethical behaviors, child development, kitchen safety and business management.

**Keeping the Service in MSU Extension Service**

MSU Extension outreach and education continues to enhance the lives of constituents in Valley County. Mills identified 75 samples of weeds, insects, trees and diseases submitted to the office, providing recommendations for management when necessary. Mills conducted 19 nitrate tests, representing 1,650 acres of small grain forages such as oats, wheat, barley, and millet. Valley County MSU Extension has been utilizing a new method for nitrate testing that involves an hour-long process of drying, grinding, and testing each forage sample. The strip test indicates a range of nitrate levels rather than just a yes/no presence. This new procedure helps the agent and producer make feeding management decisions to avoid nitrate toxicity to their livestock.

Valley County MSU Extension collaborated with Daniels County and Jane Mangold, PhD, to receive a $4,100 grant from the Noxious Weed Trust Fund for researching best management strategies for baby’s breath (Gypsophila paniculata). Baby’s breath is a county noxious weed and has expanded its range in recent years. The team set up, mowed, and treated two plots in Daniels County in 2020.

Due to COVID-19 restrictions, MSU Extension’s annual fall beekeeping workshop was not held, leaving some people wondering how to extract honey and winterize hives. Mills provided her own equipment and garage to assist beekeepers in extracting honey. She aided a beekeeper who was too ill to winterize his bees by treating his hives for mites, providing winter protection, and placing winter food supplies in the hive. Mills assisted fellow beekeeper Patricia Gilbert to rescue a feral hive of bees found in a tree that had blown down at Kiwanis Park, and she teamed up with Fort Peck Reservation Extension
MSU Extension received several inquiries into vegetable growth & development, fertility, and pest and disease management from Valley County gardeners by Shelley Mills. This Page: Beekeeper Patricia Gilbert rescues feral honey bees from a tree stump in Kiwanis Park after the tree fell in a windstorm, by Shelley Mills.
Agent Wendy Becker to teach Lambert School children in fifth and sixth grade about honey bees and extracting honey.

**Pandemic Rekindles Interest in Gardening**

In 2020, Valley County residents experienced food and durable goods shortages in their communities which created a renewed interest in home gardening. Clients new to gardening or new to the area sought the science-based information offered by MSU Extension. Requests for horticultural and agricultural information doubled in 2020 from the previous year (from 179 to 329). Agricultural agent Shelley Mills helped clients with planting, soil management, plant selection, pest and disease identification, harvesting, season extension, and fall lawn and garden care. Through the Montana Certified Seed Potato program, MSU Extension provided over 1,300 pounds of Montana grown seed potatoes to gardeners. Mills also researched and presented “Best Urban Trees” to the Glasgow Beautification Committee to make an informed decision about the best species of tree to plant along Main Street. The committee chose Dropmore Linden trees, which will be purchased locally from Neubauer Tree Service.

In April, MSU Extension was asked to partner on a Facebook project with a recent graduate of the level one Master Gardener Program. The Facebook group page of over 400 members from the region is for gardeners in northeastern Montana climate zone 3, and it accounted for 115 direct requests for help with gardens, lawns and urban tree care over a six-month period.

**Family and Consumer Science**

MSU Extension Valley County programs in Family and Consumer Science span a wide variety of efforts to improve the lives of Montanans. Education in healthy living, financial management, food safety, food preservation, nutrition and mental health, and more is available.

**Food Safety** - Adult food managers work through eight hours of intensive training to become ServSafe certified by participating in training from Valley County MSU Extension. The State of Montana requires that a public food service establishment has at least one certified food manager. ServSafe training certifies a valuable skill for participants and helps protect the health of the community through increased food safety practices.

**Active Living** - Relief from pain and building strength is the focus of this ongoing, community-based, recreational group exercise and education program. Strong People and arthritis exercises are designed for people of all ages. Multiple activity components help reduce participant pain and stiffness and help maintain or improve mobility, muscle strength and functional ability. Participant feedback indicates that 95% of participants felt stronger, 89% improved balance and 85% moved more freely.

**Teacher Workshops** - Providing continuing education for educators in northeastern Montana continues to be a priority in Valley County. Teachers earn 16 renewal units or one graduate/undergraduate credit by participating in this two-day event. Topics included the science of beekeeping and pollinators, and utilizing bee products. The importance of instilling kindness in students through a Kindness Rocks activity was demonstrated. And methods of reducing student and educator stress using Zentangles and mindfulness experiences were explored as tools to enhance learning experiences. NASA Rocketry resources were were provided with an activity for replication in the K-12 classroom. Rural teachers find time and financial savings through this local training opportunity, expanded vision through topics offered, and strategies to present the new curriculum concepts in the classroom.