









STATEWIDE IMPACTS







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From the Director

Montanans can rely on MSU Extension as a trusted partner. Our dedicated agents, specialists, and staff are embedded within local communities, collaborating with counties and tribal reservations to find solutions that improve lives and communities. We address locally identified needs through teaching, learning, research, discovery, and engagement. Each year, MSU Extension offers thousands of educational programs to diverse audiences, assisting farmers, families, elected officials, business owners, and others seeking assistance.

Our 2022 statewide needs assessment helped us identify and better understand issues and opportunities across Montana. We are addressing these needs by providing educational programs and partnerships that help Montanans tackle critical local issues. Key needs identified in our assessment include housing, youth career readiness, rural community vitality, agricultural profitability, and mental health.

For over 100 years, MSU Extension has been an unbiased and trusted educational partner for all Montanans. This document highlights our efforts and successes. I invite you to connect with your local Extension Agent to learn more about how we contribute in your community.

Sincerely,

Cody Stone Executive Director, MSU Extension



Improving Lives and Communities



Montana State University Extension's network of faculty and staff on the MSU-Bozeman campus and in county and reservation offices serve Montanans to fulfill the land-grant mission and in response to our assessment of local needs. MSU Extension partners with others to serve locally identified needs, improving lives with trusted education and information to strengthen the social, economic and environmental well-being of individuals, families and communities. MSU Extension offers education in leadership, agriculture, horticulture, healthy living, estate planning, youth development, and more.

IDENTIFYING AND MANAGING PESTS FOR SAFETY AND SAVINGS

The Schutter Diagnostic Lab (SDL) is a nexus for statewide integrated pest management (IPM) efforts. Expert diagnosticians help safeguard agriculture, landscapes, and public spaces from pests by providing free identification services, IPM advice, and education.









INCREASING TEEN LEADERSHIP SKILLS THROUGH 4-H EVENTS

Statewide 4-H events host teens aged 13-19 with opportunities for personal growth, increased engagement, and development as capable leaders and responsible citizens. Youth gather at annual events like 4-H Congress with 150-400 participants, where they are supported by certified 4-H adult volunteers and MSU Extension faculty to practice life skills in networking, leadership roles and learning. Evaluations indicate participating youth at 4-H events are enhancing and developing essential skills like social intelligence, communication, teamwork and problem-solving.



DEVELOPING RURAL LEADERS

Montana faces the second-highest demand for leaders per capita in the US. In response, Big Sky Big Leadership (BSBL) develops leaders through local facilitation. BSBL has served 400 participants in their programs with more than 13,000 hours of leadership training that positively impacts communities.

The Resource Education and Agricultural Leadership (REAL) Montana program has trained more than 100 leaders from 33 counties to impact agriculture and natural resource industries.

"REAL Montana provides the opportunity to build leadership skills that I can use to serve my local community and Montana agriculture through my work."

Riley Slivka, Class VI, Lewistown
 Digital Media Producer at AgriStudios

IMPROVING WATER QUALITY THROUGH WELL EDUCATION AND TESTING

The Well Educated program distributes test kits with more than 40 partners to help private well owners test water and understand results. **One-third of Montanans rely on private household wells,** and over 20 percent contain health risk contaminants, yet many well owners are unaware of risks.

The program's data helps well owners understand local contamination risks like arsenic. By providing accessible, localized guidance on testing and treatment, **the program supports rural and underserved communities in mitigating health risks of contaminated well water.**

Since 2023 more than 565 participants received personalized water quality reports (for drinking, livestock and irrigation), with 44% of participants with healthrelated issues making changes to address water quality



SUPPORTING MENTAL HEALTH NEEDS

In response to Montana's consistent top ranking in suicide mortality rates and to our needs assessment, MSU Extension trained agents as instructors of the Question, Persuade, Refer (QPR) suicide prevention program. Since 2023, MSU Extension has provided QPR training to 205 participants across seven counties (Gallatin, Liberty, Pondera, Ravalli, Silver Bow, Toole, and Yellowstone).

Some QPR participants are members of groups at higher risk of suicide (young adults and people in agricultural occupations), and many are teachers, school staff, and EMTs with increased opportunities to respond to people experiencing suicidal ideation.



HELPING MONTANANS ACCESS AFFORDABLE AND HEALTHY FOODS

Nutrition educators on the Flathead Reservation partnered with the Montana Partnership to End Childhood Hunger to transform school meals. More than 30 school food service providers learned about connecting with local producers, scratch cooking, budgeting, and incorporating local and indigenous foods, impacting more than 4,000 students over the next two years. **Statewide, nutrition education programs provided 1,715 nutrition and physical activity classes reaching 3,966 Montanans in the past year.**

RESPONDING TO HOUSING ISSUES

Housing is an issue closely tied to rural community vitality, and according to an MSU Extension needs assessment, one that needs to be addressed. **MSU Extension agents offer programs and host rural housing webinars** to guide discussions and build networks addressing the complexity of housing challenges. MSU Extension addresses housing needs in collaboration with NeighborWorks

Montana and other partners to offer a neutral collaboration for stakeholder conversations.



4-H and Youth Development



Building a ready generation through hands-on learning and discovery

In 4-H, we believe in the power of young people. We see that every child has valuable strengths and real influence to improve the world around us. 4-H projects support the personal growth and development of members through handson learning. Members practice skills of communicating effectively, responsibility, decision making, record keeping, and financial management.

PARTICIPATION BUILDS LEADERSHIP SKILLS FOR WORK AND LIFE

According to the US Department of Labor, employers report gaps in soft skills among job candidates and new hires, including communication, teamwork, problem solving and emotional intelligence. These are the very skills that Montana teens are gaining because of participation in 4-H events like Fall Leadership Training. Recent participant feedback indicates:



Leadership Preparedness 84% reported feeling more prepared to take on leadership roles

Networking

83% expanded social networks and formed new connections with peers they wish to stay in touch with



Knowledge Sharing 83% learned new ideas they intend to share within their communities



Problem-Solving 81% indicated an increased readiness to tackle problems because of learning experiences at this event



Statewide events like Fall Leadership Training are **highly** regarded by 4-H participants, with 91 percent finding it worth their time and 92 percent planning to attend future events for continued personal growth and skill development. Participating youth develop the capabilities necessary to thrive in the workforce and contribute positively to their communities.

By focusing on hands-on learning experiences, statewide events, and skill-building programs, Montana 4-H aims to empower young people to become confident leaders who are ready to contribute to the world around them.

Through ongoing support and collaboration with certified adult volunteers, community organizations, and educational partners, Montana 4-H is committed to creating impactful programs that inspire lifelong learning and civic responsibility.



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4-H CENTER FOR YOUTH DEVELOPMENT COLLEGE AND CAREER READINESS

Montana 4-H has hired a faculty member to work on collaborations to serve college and career readiness needs of Montana 4-H youth. **The program will equip students with the skills and knowledge necessary to build their educational and professional futures.** Partnerships are underway with Gallatin College, the Montana Office of Public Instruction, local and statewide nonprofit organizations, and national entities focused on college and career readiness.

SHOOTING SPORTS HITS THE MARK IN POSITIVE YOUTH DEVELOPMENT



700 youth connect with others to develop skills in the safe and responsible use of firearms and archery equipment, with the guidance of more than
4,400 hours from certified instructor volunteers



MEMBERSHIP ACROSS MONTANA

Montana 4-H represents youth, families and volunteers from nearly every neighborhood in Montana. Members reside in rural, urban, and suburban communities across the Treasure State.



Montana 4-H reaches more than 14,000 youth from every county and reservation

2,200 trained and certified volunteers support and mentor youth

While American Indians in Montana make up 6.4% of the general population, **approximately 7.5% of Montana's 4-H enrollment is American Indian youth**





This award-winning program celebrates the accomplishments of members making significant impacts. The program consists of a live radio broadcast where **members utilize interview skills and promote the positive impacts of 4-H to a statewide audience.**

Agriculture and Natural Resources



Addressing critical agriculture and natural resource issues

MSU Extension partners with the College of Agriculture and the Montana Agricultural Experiment Station to serve Montanans. We provide support for farmers, ranchers, homeowners and small acreage landowners on topics including: ranching systems, livestock and the environment, forages, urban and agricultural Integrated Pest Management (IPM), ag-economics, potatoes, sheep, pesticides, forestry, cropping systems, water quality and soil fertility.

DATA TOOLS HELP MANAGE EFFECTS OF DROUGHT AND EXTREME WEATHER

To ease concerns about weather uncertainty in agriculture, MSU and the National Institutes of Food and Agriculture (NIFA) supported a specialist to deliver tools and ideas to manage the effects of extreme weather.

MSU Extension provided climate data from Montana Mesonet weather stations and more information to manage growing risks for **800 farmers and ranchers in 20 counties with more than 35,000 cattle.** Increased education and use of the data supported site selection for additional weather stations.



300 out of 650 producers recently surveyed said uncertain weather is a primary concern

PESTICIDE EDUCATION PROGRAMS SUPPORT AGRICULTURAL PRODUCERS

Proper pesticide use protects from overuse and waste, revenue loss, poor sprayer calibration, or damage to the environment or human health. The MSU Pesticide Education Program provides support to more than 5,000 pesticide applicators in partnership with the Montana Department of Agriculture. **Ninety-two percent of attendees said training was of economic value to their operation, reflecting significant cost savings.**

"The training helped me focus on correct pesticides to utilize and safety measures to consider before treating any pest."

- Ravalli County landowner and participant

MULTI-AGENCY EDUCATION ON INVASIVE HOGS

Participants have begun monitoring for feral hog activity and know how to report sightings, which are important to limit the

establishment of this destructive pest that could have negative agriculture and financial impacts.

Seven northern locations hosted more than 350 people to learn about emerging concerns of feral hogs



SCHUTTER DIAGNOSTIC LAB IDENTIFIES NEW SPECIES TO SUPPORT MANAGEMENT

The Schutter Diagnostic Lab (SDL) serves integrated pest management efforts in plant, insect, and disease identification to help safeguard Montana agriculture and landscapes. This important resource documents new pests and species:



Confirmed the first two known detections of Palmer amaranth (*Amaranthus palmeri*) in Montana with Extension field faculty in 2023, allowing personnel to contain the new populations of the invasive weed.



Confirmed the first case in Montana of the tick responsible for Lyme disease (*Ixodes scapularis*) with the SDL in 2023. The SDL and the National Institutes of Health confirmed diagnosis.



Extension field faculty consulted the SDL to confirm Physiological Leaf Spot, which saved five producers from spraying fungicide on Bobcat winter wheat. At 1,000 acres and \$6 per acre savings, producers saved a total of \$30,000.



Confirmed identification and first report in 2023 of the common reed (*Phragmites australis* spp. *australis*) in Gallatin County. This priority 1A noxious weed has very limited state presence and management goals are eradication and prevention of spread.

PRECISION AGRICULTURE PARTNERSHIP INCREASES BENEFICIAL RESEARCH

MSU Extension partners with the MSU College of Agriculture to **provide education and research in precision agriculture technology.** Projects include the use of activity sensors and thermal monitoring to evaluate cattle response to winter weather conditions, 3D cameras to evaluate cattle soundness, and the combined use of drones and ground sensors to measure grazing impacts.

MASTER GARDENERS SHARE HORTICULTURE KNOWLEDGE IN COMMUNITIES

As Montana's population grows, Master Gardeners are sharing vital gardening information with newcomers and introducing them to MSU Extension. With **more than 4,300 hours of volunteer service and 900 pounds of fresh food donated to local food banks** this year, Master Gardeners are meeting local needs through community volunteerism and continuing education.



MSU EXTENSION CATTLE EDUCATION PARTNERSHIP WITH STONE CHILD EXTENSION

For the past three years, MSU Extension partnered with Stone Child College to offer **workshops on cattle production** with Extension specialists at Stone Child College, the Northern Agricultural Research Center, and a Cattlemen's College Series in Hill County and on the Rocky Boy Reservation.



Community Vitality



Strengthening the civic, economic, and leadership capacity of communities

The MSU Extension Community Vitality Program engages Montanans to strengthen the social, civic, economic and leadership abilities of their communities. We approach community vitality work with the values of collaboration, curiosity, excellence, and responsiveness, ensuring our efforts are community-centered and community-driven.



BUILDING LOCAL LEADERSHIP

Big Sky, Big Leadership aims to expand the pool of local leaders and equip them with skills needed for proactive solutions to rapid community change and volunteer burnout.

Through local facilitation, **the program helps communities develop leadership capacity.** There are currently eight programs in various counties, with two more in development. Participants build networks and contribute to positive changes, including fostering collaboration across political divides and driving local economic growth.

Big Sky, Big Leadership has served 400 participants with more than 13,000 hours of leadership training

TETON COUNTY BANDSHELL INCREASES COMMUNITY ENGAGEMENT

The Choteau Lions, Chamber of Commerce, and Teton County MSU Extension partnered to raise grant funds to sponsor a new:







MAGINING RURAL

ROADSHOW AIMS TO INSPIRE SMALL TOWNS TO DREAM BIG

The Reimagining Rural Roadshow highlights the importance of Montana's small towns, recognizing the charm and value of people who live in them. To support rural communities to overcome challenges of limited capacity and resources, **the Roadshow connects rural Montanans with statewide agencies, expanding partnerships, increasing awareness of available resources, and inspiring communities** to dream big.

Seventy people from 21 communities attended, with participants gaining valuable knowledge and motivation to take action through increased connections. Since the start of the Reimagining Rural program, it has enriched 53 communities across Montana.

> 27 counties participating in the Reimagining Rural Roadshow





"The Roadshow was a wonderful way to connect with leaders and community volunteers from some of the most rural communities. I met new people, got new ideas, and provided technical assistance that will continue to propel communities forward."

- Reimagining Rural Roadshow resource-provider

MUNICIPAL EDUCATION PROVIDES SKILL DEVELOPMENT

The Local Government Center partners with the Montana Association of Clerks, Treasurers and Finance Officers to host the Montana Municipal Institute. This annual 4.5-day training provides International Institute of Municipal Clerks certification. The institute serves both new and experienced clerks representing rural towns to the most urban centers. From clerk-treasurers to rural water specialists, **74 of 81 participants were extremely satisfied with presenters.**

Annually, Montana municipalities manage \$3.6 billion dollars of appropriated funds

LOCAL GOVERNMENT CENTER (LGC) ONLINE COURSE ENHANCES EFFICIENCY

Local government clerks, treasurers, council members, mayors, elected officials, and employees care deeply about their communities and doing their jobs well. Resources and training are provided by the LGC, which offers a twice-per-year 'Fundamentals of Montana Municipal Government' online course. **The participants, 110 from more than 50 municipalities, value the efficient**

online format to save travel costs and time, as well as connecting with other municipal officers and having reliable

course reference materials.



Family and Consumer Science



Collaborating to create health and nutrition solutions

MSU Extension Family and Consumer Science faculty and staff approach issues in healthy lifestyles, food and nutrition, and financial planning with multiple impacts for individuals and families of all kinds. To address complex community concerns, we work together in partnership with communities to combine expertise and resources to deliver impactful local solutions.

STRENGTH TRAINING IMPROVES HEALTH FOR OLDER ADULTS

The Strong People Strength Training Program offers Montanans (ages 55+) a free or low-cost physical activity program in a structured, supportive environment, with **329 participants in 10 counties from 2022-2024.**

The MSU Extension statewide needs assessment revealed that fewer than a quarter of adults in Montana meet the Physical Activity Guidelines for Americans, with significant health risks tied to this lack of activity, including diabetes, hypertension, and mobility issues, especially in older adults.

Program participants improve health benefits; 26 percent report meeting activity guidelines after completing classes and 100 percent express intent to continue physical activity and maintain friendships made through the program.



NUTRITION PROGRAMS IMPROVE DIETARY PRACTICES

Adult obesity has been rising, with families facing barriers to nutrition education and access to healthy food. As part of the Nutrition Education Program, MSU Extension offers courses for adults with limited resources on nutrition, physical activity, food safety, budgeting, and provides coupons for access to fresh produce. As a result, **98 percent of participants improved diet quality,** with one participant noting how learning to meal plan and make healthy snacks for her daughter helped her make healthier choices and save money.

Nutrition Education programs provided **1,715 nutrition and physical activity classes,** reaching 3,966 Montanans



BOLSTERING MENTAL HEALTH AWARENESS. KNOWLEDGE AND RESPONSE SKILLS

Mental illness and substance use disorders are prevalent among Montanans, with rates higher than the national average. Early intervention is critical, but barriers such as stigma, limited awareness of resources, and cultural emphasis on self-reliance often prevent a person from seeking help.

Since 2017, MSU Extension has offered Mental Health First Aid (MHFA) and Youth MHFA training to reduce stigma and equip adults and youth with skills to support those experiencing mental health challenges. MSU Extension has trained 791 people in MHFA and 235 in Youth MHFA, with training efforts reaching school nurses, national park staff, and early childhood services staff, thereby enhancing community-wide mental health literacy and support.

MSU Extension has trained 791 people in Mental Health First Aid and 235 in Youth MHFA



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ADDRESSING NEEDS OF AGING MONTANANS

More than 21,000 people live with Alzheimer's disease in Montana. In response to family caregivers and in partnership with AARP-Montana and agencies on aging, MSU Extension produced two magazines on Alzheimer's disease and dementia. The publications aim to reduce the stigmas attached to Alzheimer's and offer information for agricultural producers facing early to middle stages of Alzheimer's disease.

MSU Extension coordinates a Respite Retreat program and a Caregiver Respite Food Box program for caregivers, who often provide unpaid family care for the elderly. This year, the Food



Box program has benefited 30 counties, providing an estimated 3,600 hours of caregiver respite. The program served 1,350 adults and 680 children, with more than 40 percent of families served being American Indian.

More than 100 programs and webinars in 2023-2024 provided estate and legacy planning tools for 7,500 participants



SAFE FOOD PRESERVATION OUTREACH **REDUCES HEALTH RISKS**

A 2024 survey of 302 Montanans revealed that while 98.7 percent engage in home food preservation, many use unsafe or untested methods, posing risks of foodborne illness. Respondents preserve food to save money and reduce waste, with many relying on MSU Extension for trusted guidance.

In response, MSU Extension offers social media, webinars, community events, and hands-on classes to teach safe food preservation practices. Through these, Extension reaches thousands of individuals, including 200+ adults and youth in hands-on classes, to build confidence in preserving food safely. This work reduces the risk of foodborne illness and increases access to nutritious, often locally-grown foods, benefiting both consumers and producers.

SEED LIBRARIES BENEFIT GARDENERS AND **COMMUNITY ENGAGEMENT**

Public libraries in Billings and Conrad are offering seeds in addition to books. MSU Extension partnered with these libraries to help coordinate seed donations and volunteer hours to establish seed libraries that bring gardening education programs and improve food security and community engagement. The seed libraries promote affordable home gardening and community collaboration by distributing donated and shared seeds.



tomato

cabbage

heet



EXTENSION

Improving Lives and Communities



97 MSU Extension agents26 subject matter experts

serving local needs in

56 counties and 7 reservations

offering education in agriculture, horticulture, healthy living, leadership, estate planning, youth development, and more





MSU Extension improves lives and communities across Montana by providing unbiased, research-based education that integrates learning, discovery and engagement to strengthen social, economic and environmental well-being.





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