

Welcome to Sanders County

MSU Extension in Sanders County is a three-way partnership between Sanders County, Montana State University and the United States Department of Agriculture. This partnership provides educational programs in the areas of Agriculture/ Natural Resources, 4-H Youth Development, Community Development, and Family and Consumer Sciences. Sanders County currently has a population of about 11,363 (2013 estimate). There is a diverse mix of agricultural land, small acreage subdivisions, rural communities and range or forested land. MSU Extension provides a unique set of services and educational resources to meet the diverse and changing needs of local clientele.

4-H = Positive Youth Development

Demonstrations Prepare Members for Future Public Speaking

More than 130 4-H members participated in the county demonstration program building the life skills of communications, planning and organizing, self-motivation, responsibility, self-discipline and learning to learn. These life skills reward demonstrators in their adult lives. 4-H alumni testimonials credit experience gained via the Sanders County 4-H Public Speaking Program as very valuable.

Youth Learn Leadership at State 4-H Congress



Sanders County 4-H Congress Delegation on the MSU Campus.

Sanders County 4-H members earn the opportunity to compete at the Montana 4-H Congress Contests. This year a small but talented delegation represented Sanders County in the Demonstration and Fashion Revue contests as well as attended to represent the Sanders County Ambassador Program. Rachel Wroblewski took first place with her demonstration and qualified for a trip to National 4-H Congress. Madeline Snell and Tressa Lyscio gained valuable leadership skills to advance their Ambassador efforts.

4-H Projects Teach Life Skills to Members at County Fair

Over Labor Day weekend each year, approximately 140 Sanders County 4-H members, their families, and leaders come together for the County Fair. The purpose of the fair is to enrich the learning experience of the 4-H member through exhibiting project work they have completed the past year. It serves as a learning laboratory for youth going far beyond winning ribbons.



Sanders County 4-H rabbit project team leader works with a younger member preparing for his interview during the Sanders County Fair. The project interviews are an integral part of members' learning during the fair.

The County Fair provides a backdrop for youth to reflect on the important life skills they have learned and about their own personal accomplishments. Leaders and members work together as a team preparing to put on livestock shows, display exhibits, serve delicious food raising funds for the program, and even completing a service learning project to bring the community together.



Supported by Sanders County Commissioners
Carol Brooker
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Aquatic Invasive Plants Threaten Lower Clark Fork River System

In its eighth year, the Sanders County Aquatic Invasive Plant Task Force (AIP Task Force) continues its work targeting invasive aquatic vegetation, primarily Eurasian Watermilfoil, in the lower Clark Fork River system. The Task Force is comprised of representatives from multiple public and private entities which share an interest in the welfare of Noxon Rapids and Cabinet Gorge reservoirs. A set of bylaws binds the Task Force to the Sanders County Board of Commissioners, who act as program sponsors. MSU Extension agent Jason Badger serves as chairman of the AIP Task Force.

Past efforts focused on defining the extent of the infestation of AIP (aquatic invasive plants) in the lower Clark River drainage. Dr. John Madsen, UC Davis, and Dr. Kurt Getsinger, US Corp of Engineers, conducted herbicide trials to better plan the effective use of aquatic herbicides in a flow through system. All treatments prior to 2014 occurred in Noxon Rapids Reservoir. During 2014 and 2015, treatments were also conducted in Cabinet Gorge Reservoir, with varying degrees of control.

During the 2016 season, treatments occurred during August. A total of 198 acres were treated in Noxon Rapids Reservoir. Herbicide rates and timing were based upon data



Badger getting ready to toss a rake to sample Eurasia's watermilfoil growth stage and percent cover in Vermillion Bay.

collected during plot trials. Post-treatment vegetation analysis occurred in mid-October and will take place again one year after treatment to estimate the effectiveness. In the past, control of Eurasian watermilfoil has been estimated at 90 percent or greater, depending on the site and reservoir conditions, which is considered excellent. Treatment applications were conducted by Clean Lakes, Incorporated, with the method used being variable depth injection (Littline). Permitted aquatic herbicides used on the project included Triclopyr, Endothall and Diquat. The

Early season Eurasian watermilfoil regrowth along North Shore Recreation area.



operational goal of treatment is to reduce infestations of Eurasian watermilfoil to a "maintenance level" on Noxon Rapids and Cabinet Gorge reservoirs. Being an integrated program, management strategies include mapping, chemical treatment, education, bottom barriers and two boat check stations, separately funded through Montana Fish, Wildlife and Parks. Treatment costs in 2016 came to approximately \$180,000.

Additionally, the Task Force participated in a grant project with Dr. Ryan Thum from Montana State University to study the Hybrid milfoil (invasive Eurasian watermilfoil x native Northern milfoil) in Noxon Reservoir. Test plots were identified and new herbicides were tested for efficacy against this hybrid that has historically displayed a resistance to conventional control methods. Initial post treatment surveys show 90+% control, but next year's surveys will reveal how effective treatments will be long-term.

Soil Analysis Helps Producers Maximize Yields

Analysis and interpretation of soil samples is an offered service for residents of Sanders County through MSU Extension. To date in 2016, our office has submitted 13 soil samples from 12 different clients to a private lab in Nebraska. These samples represent a wide range of clientele including homeowners and hobby gardeners to commercial farmers. Soil analysis describes soil characteristics. This is the basis for making soil amendment recommendations. Soils education has been and continues to be a very popular service in Sanders County. Some clientele submit samples each year and use results and recommendations to build soil management programs to boost crop production over time. This service has resulted in many producers increasing their yield.

Farm Management Plans Help Local Landowners Prioritize and Reach Goals

Our office worked with five different landowners and producers to develop individual management plans for their properties during 2016. The plans vary from managing their land for wildlife to diversifying forage production. One particular highlight comes from a producer in Trout Creek. After working on implementing their plan for a couple of seasons, with discussions on species and varieties, analyzing soil samples and making fertilizer recommendations, they have implemented appropriate and effective weed and insect control techniques. In spite of reduced production seen across much of Sanders County, his forage crop yields and quality were above average and he was able to participate in the Noxious Weed Seed Free Forage Program this year. This resulted in higher prices for his hay, as well as ecological benefit.

Noxious Weed Seed Free Forage Program Slows Due to Drought

Administered by the Montana Department of Agriculture and certified inspectors from governmental organizations, the Noxious Weed Seed Free Forage Program's goal is to reduce or eliminate the spread of noxious weed seeds on public lands. Only certified forages are allowed on government managed lands. At the same time, producers may market certified weed free forage above uncertified retail prices. MSU Extension Agent Jason Badger is the inspector for Sanders County. In 2016, only two local producers requested certification and both passed. Below average growing condition brought on by drought and spotty grasshopper infestations prompted several other producers to forgo the expense and effort this year. This program offers positive economic and environmental impacts. Producers receive more money for product while minimizing the risk of spreading noxious weeds to our public lands.

Apiculture Workshop Helps Shed Light on Beekeeping Challenges

In 2016 our office held its first Apiculture workshop. We have been receiving an increasing number of inquiries on this topic so we teamed up with Western Bee Supply, the University of Montana's Master Beekeeping Program, and Montana Fish, Wildlife and Parks to provide this educational training. Eighteen people attended and the workshop received great reviews. Many attendees got answers on site about why previous apiculture attempts have been failing. We are excited to see how changes in husbandry practiced after this class will affect apiculture in Sanders County.



Apiculture workshop held in May 2016.

Grasshopper Infestation Spotty but Still Causing Mayhem

There were scattered two-striped grasshopper infestations throughout Sanders County in 2016. In general, this infestation was fairly mild compared to 2015, though it did affect crop production in many areas. Between a lack of precipitation and grasshoppers, dryland forage production was about 70-75% of normal. Once again, our office worked with USDA-APHIS to arrange for a bait-spreading vehicle to be housed in Sanders County. This vehicle was loaned out to local producers to help them alleviate some of the grasshopper damage. MSU Extension also consulted with many landowners individually, explaining treatment options. After devastating results in 2015, landowners and producers seemed more willing to act early and control methods were implemented in time to help minimize the infestation in many areas.

Family & Consumer Science

Strong Hearts Healthy Communities

Thompson Falls was one of six Montana communities selected to participate in the Randomized Controlled Intervention Stage of the Strong Hearts Healthy Communities (SHHC) Study. SHHC is a research project that is exploring programs that will help prevent cardiovascular disease in rural communities. Cornell University chose several communities in Montana to conduct the research and worked in conjunction with Montana State University and Extension in those towns. If the results of the study are favorable for positive change, the programs will potentially be replicated in rural communities all across the nation.

Eleven participants were selected in Sanders County to complete the 24-week community-based randomized



controlled intervention trial. This group met twice per week, for one hour each time, for approximately six months and focused on eating and physical activity for a healthy lifestyle. Participants

reported improvements in their lives, which they attribute to SHHC. Improvements reported include sleeping better, more energy and stopping the use of painkillers.

This group also participated in six monthly community events during this period as part of the “Heart Club” portion of the curriculum. The group chose a Heart Club mission *to increase and encourage physical activity through the development of an indoor exercise/activity program*, which they planned and implemented. The results of the Thompson Falls SHHC group and others throughout the state were gathered and finalized in August 2016. Impacts will be published through Cornell University communication soon.

Strong Women

One by one, women in Sanders County have been getting stronger with Strong Women. The Strong Women Strength Training program was developed at Tufts University to increase strength, muscle mass, bone density, and balance in women. Those who attended the sessions twice a week for two to four months reported moderate to considerable improvements in general health and balance, feeling stronger physically, doing everyday activities more easily, and increasing weight they are able to lift and flexibility. Through this program, women of all ages in the county will continue to improve their quality of life.

Contact Us



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