

2020 MSU EXTENSION HIGHLIGHTS

Stillwater County



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Lee Schmelzer, Ashley House, Karen Marts, and Haley Barker; by Lee Schmelzer.

As MSU Extension Agents, our job is to identify local needs and provide information and education to the people of Stillwater County based on these needs. Often this takes the form of a phone call or office visit. The service provided can be as simple as looking up a safe internal meat cooking temperature, or as complex as balancing a least-cost ration for multiple classes of cattle. These calls range from horticulture to holiday cooking and from food preservation to farm financial management.

These contacts often lead to a more in-depth home or ranch visit and provide guidance on needs for in-depth training, linking Stillwater County to subject matter specialists on the Montana State University-Bozeman campus as well as other research-based experts. In Stillwater County, MSU Extension has been an integral part of local education since 1914 when the first agriculture agent arrived in the county, followed in 1917 by the first family and consumer sciences agent.

Stillwater County MSU Extension is proud to serve the people of Stillwater County. MSU Extension is a partnership of Stillwater County, Montana State University and the United States Department of Agriculture. The three-way partnership provides funding for educational resources dedicated to improving the quality of people's lives by providing research - based

knowledge to strengthen the social, economic and environmental well-being of families, communities and agricultural enterprises.

The Stillwater County family and consumer sciences agent uses expertise in food and nutrition, housing, health, family issues, personal finances, and environmental health to provide innovative and targeted programs based on the needs of Montana families, individuals, businesses and communities.

The agriculture agent works with farmers, ranchers, small landowners and researchers through field demonstrations, workshops, and individual visits to help producers and landowners remain profitable.

Stillwater County 4-H strives to provide ample opportunities to the nearly 200 enrolled 4-H members and over 50 volunteers. 4-H members in market animal projects and Cloverbuds (youth ages 5-8) continue to have the highest enrollments.

Stillwater County Forage Testing

Between drought and grasshoppers, this fall has seen a shortage of good quality pasture here in Stillwater County. Much of the Stillwater County MSU Extension Ag Program revolves around providing services to assist producers, including in-house testing for nitrates and for sulfates in water, water quality testing, insect and weed identification, plant disease

diagnostics, forage crop variety information, ration balancing, feed analysis, and range monitoring.

Small grains, sudan grass, sorghum, corn, and several common weed species can accumulate toxic levels of nitrate while growing under stressful conditions such as drought. When livestock consume forages containing elevated levels of nitrate, severe health problems can occur; including decreased weight gain, decreased milk yield, abortion, and death.

As a result of educating producers about the importance of testing their small grain forages for nitrate, producers brought 47 feed samples to MSU Extension to be tested. Twenty producers using Extension’s free, effective, accurate nitrate testing received peace of mind to feed or sell their hay, while six producers were prevented from feeding high nitrate feed which could have resulted in abortions or death of cattle and sheep. Educating producers about nitrate and testing forage has prevented livestock losses. Twenty-six producers representing 3,600 acres of hay saved \$650 in testing and shipping expenses. All producers know what, if any, actions are needed to protect his or her herd from abortions from nitrate poisoning or death.

Cover crop cocktail mixes are increasing in acreage for grazing, haying, or planting as annual forages. Those contemplating cover crops should know that plants that work well as cover crops may not be suitable for forage or grazing. In fact, some species can be toxic or fatal to livestock. Stillwater County MSU Extension evaluated 10 sorghum sudan grass fields for prussic acid. Four of the fields had potentially-fatal levels of prussic acid, requiring producers to adjust grazing plans to prevent livestock sickness or loss.

Nineteen producers used our available core sampler to core and submit 24 samples for forage analysis, resulting in increased production efficiency, reducing costs by eliminating excess nutrients, and ensuring animal health by accounting for antagonists effects.

Better Food, Better Mood

As a new agent in Stillwater County MSU Extension, it has been an interesting ride. I began teaching monthly culinary education classes featuring different topics, including meals in minutes (featuring the Instant Pot); cooking with herbs (taught twice); and pies and cobblers. Once the pandemic halted our in-person courses, I participated in teaching statewide virtual courses held throughout April and May. The meal planning course featured a new online app designed to allow individuals to choose a specific diet (including low carbohydrate, paleo, keto, and a number of others), as well as a feature to eliminate foods they dislike. The video was recorded and put online, where it received 49 likes, 6 shares, 229 views and numerous comments.

Meal Planning
How to tips!

MAKE A PLAN
FIND ABOUT 30 MINUTES TO:
Take inventory of your pantry, cupboards and fridge. What do you have that still needs to be used, what needs to be purchased. Then make a list and stick to it.

BUY WHAT YOU KNOW YOU WILL EAT
Buying in bulk is great, and a money saver, but not if you are just going to throw it away. This means you may have to shop more frequently for some things, but you won't be wasting food, or your money.

FREEZE IT
Freeze what you can avoid throwing out. Milk, fruit, veggies, prepared dishes like soups etc. Blanch some veggies and freeze them for a quick side dish for dinner time meals.

EAT YOUR LEFTOVERS
Leftovers don't do any good sitting in the fridge. Put them in individual containers for easy access, or repurpose them into other meals.

FIFO (FIRST IN FIRST OUT)
Put those items that need to be used first in the front of the fridge or where you will see them. In your pantry or cupboard, use the oldest items first.

When in doubt throw it out!
While we try to avoid wasting our food, if you are unsure of something, don't risk it.





Previous Page: (top) Meal Planning Infographic, by Haley Barker; **(bottom)** 4-H Wind Workshop, by Ashley House ; **This Page:** Sampling for Prussic Acid & Nitrates were a large part of Stillwater County MSU Extension's forage testing program, by Lee Schmelzer

In September I offered an in-person ServSafe training to 15 participants and have another course planned for December. ServSafe protection manager certification is a nationally-acclaimed program sponsored by the National Restaurant Association, American National Standards Institute (ANSI), & Conference for Food Protection (CFP). This course includes eight hours of intensive hands-on and classroom instruction of safe food preparation and handling. This workshop offers the opportunity for participants to become officially certified in ServSafe by attending the full day's workshop and passing an exam. ServSafe Food Protection Manager Certification is valid for five years and meets the most urgent food safety training challenges in the industry. ServSafe food safety managers training has not been offered in our county for a couple years and it has been found to be a large need in the county.

The Four H's In Action - HEAD, HEART, HANDS, HEALTH

As we went into the new year of 2020, who could anticipate challenging ourselves, stepping out of the "norm" and comfort zones, and overcoming many obstacles? The 4-H program could. We have successfully offered youth what the 4-H program has always delivered (education/knowledge, skills, friendships, interactive and engaging workshops, etc.). Many project area leaders sought to create unique and safe ways to deliver to local youth. Whether workshops were switched to outdoors, social distancing/masks/hand sanitizer, etc. were used for indoor workshops when guidelines allowed, or putting on virtual workshops, the goal of supporting and teaching youth was achieved.

Because of the changes in 2020, the 4-H programs social media presence became even more prevalent, reaching many

youth and families during the stay-at-home order and other restrictions. Various workshops, club, council, and project meetings continued to be held, just in a different form - virtually. Many joined the meetings via web conferencing or by group calls to continue 4-H business, ensuring another productive and successful year. Our volunteers, members and families learned new ways to connect and work together that will forever be beneficial in their lives.

Our county 4-H program has tackled the year with dedication, determination, patience, hard work, an open mind, and a giving heart. It was a great year to see the four H's truly in action: Head, Heart, Hands, Health. Thanks to our county officials, community members, volunteers, 4-H families, and Extension staff for making this year as "normal" as possible. It is because of the wonderful county and community we live in that our enrollment numbers remained stable and youth remained engaged in 4-H.

Stillwater County Staff



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

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