



AG Digest ²⁰¹⁴

A special
publication of

THE
**MONTANA
STANDARD**
montstandard.com

**Independent
Record**
helenaTy.com



FROM THE GROUND UP

Contributions of women in Agriculture

STORY AND PHOTO BY PAT HANSEN
for *The Montana Standard*

Grandmothers, mothers, daughters, grand-daughters, and great-granddaughters each have a story about their life on the farm or ranch.

These stories are creating a colorful tapestry depicting the contributions women have made historically and are making today to agriculture in Montana.

The stories are being preserved in an exciting new program called "From The Ground Up: Women in Agriculture."

Linda Brander, Department of Natural Resources and Conservation resource specialist, is coordinator of the project sponsored by the DNRC, local conservation districts and the Montana Historical Society.

On March 8, more than 150 people gathered at the Montana Historical Society to hear their stories: Glenna Stucky, Montana Stockgrowers Association 2014 Ranching Woman of the Year from Avon; Townsend-area ranchers Dolly McMaster and Pauline Webb; Philipsburg rancher Esther McDonald; and Big Timber rancher Arlene Pile. At the conclusion, the Divine Bovines of Townsend distributed "bovine ears" and entertained the audience with songs from the cow's point of view.

"It's the first time we've done a public event as part of Women's History Month," Linda Brander said. "We wanted to coordinate it with the 100th anniversary of the women's suffrage movement. We care and want to hear about agriculture men and women, but this year we are focusing on the women. Each woman has a unique story to tell, and the project has been received very well."

Pam Bucy, Commissioner of Montana Department of Labor and Industry said she meets many farmers and ranchers and recognizes the important role agriculture has played historically and today.

"Women make 67 cents on the dollar compared to men," Bucy said. "Additionally, a lot of women's labor goes unrecorded, especially on farms and ranches."

From The Ground Up will bring together young people, educators, conservation districts and community leaders. It started with Oral History in the

See WOMEN, Page 5



LINDA BRANDER, left in photo above, DNRC resource specialist and coordinator for From The Ground Up: Women in Agriculture oral history project, visits with Dolly McMaster, a Townsend area rancher and one of five women who shared their stories at the Montana Historical Society event recently.

A DISPLAY for From The Ground Up: Women in Agriculture, left, highlights women who have given their oral histories and conservation district staff across the state who are working with the oral history program sponsored by the Department of Natural Resources and Conservation Districts.

Women ranchers tell their stories

STORY AND PHOTO BY PAT HANSEN
for *The Montana Standard*

Glenna Stucky

"Ranchers are the original conservationists, said Stucky, a Powell County rancher. "We have to be so conscious of taking care of the land. We are responsible for feeding the world and taking care of the land is so important."

Stucky said her parents and grandparents were farmers. She married a rancher, and today the legacy continues as their children and grandchildren are responsible, hardworking citizens taking care of the land on the family ranch or their own operations.

Glenna and Earl moved their family to Avon in 1976 when they purchased the Keiley Ranch on Nevada Creek.

Ranching is a lifestyle rather than a typical job. By 8:30 a.m. Glenna has prepared breakfast for her husband and two employees, done dishes, tidied the kitchen and mixed up a batch of dough to make into loaves of bread when she returns from doing chores. Later, she does the ranch bookkeeping. Calving starts in February, and as the season progresses Glenna often has some calves to feed on nurse cows.

Since her childhood Glenna has been actively involved in 4-H as a member and then as a parent and a leader for 35 years. She helped start the Powell County CattleWomen and is a member of the district and state CattleWomen associations, the Montana Stockgrowers Association, and volunteers her help with many community activities.

Esther McDonald

The Granite County rancher said agriculture is a renewable resource and stressed the importance of being involved in organizations that impact the industry.

Esther wasn't raised on a ranch, but her interest in cattle and horses led her to get a degree in animal husbandry. She met her husband at a bull sale in Hamilton. They settled on the family ranch his great aunt homesteaded in

1864, then brought milk cows to Philipsburg in order to sell butter to the miners.

"When my father-in-law was killed in an accident, we bought the ranch in 1956 from his mother and sisters," Esther said. "Ranching provided our family, including eight children, everything we needed. Everyone in the family contributed to agriculture and continues to help out around the ranch. It's a way of life, and a beautiful way of life."

Esther has always been interested in legislation affecting farmers and ranchers. She held many offices in Granite County, has been a member of CattleWomen for 50 years, and a member of Montana Stockgrowers Association. She was president of Montana CattleWomen for 10 years and enjoyed working with youngsters with Ag in Montana Schools program.

Arlene Pile

"I've been a mechanic, a truck driver, a cowboy and veterinarian; it's all tied to the ranch activities, the lifelong Sweetgrass County rancher said."

Arlene's story began with her Grandmother Inga who was raised in Norway and came to Montana, met and married a sheep rancher.

"Inga was a petite 5'2" gracious, tough little Norwegian who managed her life with a velvet hammer until she died in 1938," Arlene said. "The women in our family are strong willed, strong minded and durable."

"When I was getting ready to come to Helena it rained and calves were popping out everywhere," she said. "Only my 13-year-old great granddaughter and I were at home. She brought a cold calf in off the calving ground with a 4-wheeler and worked with that calf trying to get some warm colostrum into it. She kept saying

See **STORIES**, Page 4

On the cover

This photo of a pastoral scene along the Little Blackfoot River was taken by Ag Digest writer Pat Hansen.



PRESENTERS at the From The Ground Up: Women in Agriculture program held at the Montana Historical Society recently were, seated from left, Pauline Webb and Dolly McMaster; standing, Arlene Pile, Esther McDonald and Glenna Stucky. The "bovine ears" were worn as part of the fun entertainment program.

YOUR CHALLENGE

FINDING A SxS THAT WORKS AS HARD AS YOU.

Your Honda: The All-New 2014 Pioneer™ 700.
For Every Challenge, There's A Honda.

HONDA
BEST ON EARTH™

POWERPLAY MOTORSPORTS
1 Block South of 4 Corners
587-1473 • WWW.POWERPLAYHONDA.COM

powersports.honda.com PIONEER IS ONLY FOR DRIVERS 16 YEARS AND OLDER. MULTI-PURPOSE UTILITY VEHICLES CAN BE HAZARDOUS TO OPERATE. FOR YOUR SAFETY, BE RESPONSIBLE. ALWAYS WEAR A HELMET, EYE PROTECTION AND APPROPRIATE CLOTHING. ALWAYS WEAR YOUR SEAT BELT, AND KEEP THE SIDE NETS AND DOORS CLOSED. AVOID EXCESSIVE SPEEDS AND BE CAREFUL ON DIFFICULT TERRAIN. ALL MUV DRIVERS SHOULD WATCH THE SAFETY VIDEO "MULTIPURPOSE UTILITY VEHICLES: A GUIDE TO SAFE OPERATION" AND READ THE OWNER'S MANUAL BEFORE OPERATING THE VEHICLE. NEVER DRIVE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. ON PUBLIC ROADS OR WITH MORE THAN ONE PASSENGER, DRIVER AND PASSENGER MUST BE TALL ENOUGH FOR SEAT BELT TO FIT PROPERLY AND TO BRACE THEMSELVES WITH BOTH FEET FIRMLY ON THE FLOOR. PASSENGER MUST BE ABLE TO GRASP THE HAND HOLD. RESPECT THE ENVIRONMENT WHEN DRIVING. Best On Earth™ and Pioneer™ are trademarks of Honda Motor Co., Ltd. ©2013 American Honda Motor Co., Inc. (10/13)

Stories ...

Continued from Page 3

I should be leaving, but I stayed to help. After tending him for two hours and the colostrum went into the calf you could see him improve.”

“Wow! Isn’t that awesome,” Morgan said. “I thought about how proud Grandma Inga would be of that little girl busting her butt to save that calf.”

Dolly McMaster

The Broadwater County rancher said she helped on the ranch from the time she was a little girl.

“I had three brothers and was one of them,” she said. “Dad made me a short-handled shovel and pitchfork to use.”

She recalled the day her Dad bought her mother a new washing machine for \$22, thinking it would make her life easier. “Mother scolded Daddy, saying the money would have bought 22 good acres of land,” Dolly recalled. “I was learning a lesson — to value every dollar before you spend it.”

Another time she was admiring her grain crop and second cutting of hay, when five minutes later a hail storm shredded the grain field and the hay was lying flat.

“With no hail insurance and no extra money to pay the loan, we all did without and the payment was made because we always pay our bills,” Dolly said.

The next spring Dolly didn’t borrow any money. Instead, she learned how to trap. “The neighbors paid me 10 cents a tail for gophers. I was making big bucks!” she said.

In time, she and her brother changed from farming to ranching. “I trained my cows to voice command. I would point and tell them either to go this way or that and they listened. They understood me and I also understood them,” she said.

Pauline Webb

“I like the leadership of a good man, but it takes a good woman to stand behind him to encourage him to go on; just like we all need — encouragement,” the Broadwater County rancher said. “Anything I could do, I would do for my husband. When he needed help to pull a calf, I helped.”

The Montana cowboy visited his family in Pauline’s hometown in Iowa and won her heart. After they married, the couple returned to the Crow Creek Valley near Radersburg.

Earl worked in the mines for a short time, but quit, then worked as a



THE DIVINE BOVINES of Townsend distribute “bovine ears” to the audience and entertains with songs from the cows’ point of view.

Memories, changes

Arlene Pile has many fond memories of the ranch near Big Timber, but one of her favorites is an early morning summertime scene: “Dew is heavy on the grass and the grass heads are full of seed. The sun comes up and it shines across the top of the grass, there will be a little puff of pollen that comes off the top of the grass. That’s just a beautiful moment.”

Changes are coming fast today Dolly McMaster observed. Today’s ranch wife is a modern girl who drives a high-powered tractor with GPS and computerized precision farming technologies, with her laptop or iPad can check the commodity market, and she knows what it costs to transport her product. With her smartphone she can start the oven in the kitchen so supper will be ready early because the family is going to the ball game this evening.

range rider for the Crow Creek Stock Association in the Elkhorn Mountains.

Pauline recalls, “We were 18 miles from civilization, and our only contact was with the phone at the Eagle Ranger Station. Later, when Mr. Parker needed a manager for his ranch, we gathered up our son and moved to the old stage stop where we lived for more than 50 years. Things were very good; we just had a wonderful life.”

The Ag in Schools Program has been a joy in Pauline’s life. “This program is really important to the school system,” she said. “People need to know where their food comes from. Supermarkets would not operate without agriculture. One lady asked me, ‘Why do we need cows; there is plenty of meat in the stores?’”



Give your operation a lift.

Raise the level of your game today with a John Deere 6R Series™ or 6M Series™ tractor from Moodie Implement.

- 115 to 170HP engine (6M) / 125 to 240HP engine (6R)
- More powerful PFC hydraulic system for ancillary equipment
- Available integrated front hitch and front PTO
- The John Deere 6R Series™ offers the PowerTech PVX engine with GreenEfficiency fuel economy and DirectDrive transmission
- 6M and 6R Series™ tractors are built on John Deere’s full frame concept for increased strength and lower overall weight
- Backed by Moodie Implement’s unmatched service and support

Visit your Moodie Implement dealer today to learn more!



Founded on Service



JOHN DEERE

Belgrade	205 Floss Flats	(406) 388-2100
Livingston	1122 East Park Street	(406) 222-3150

www.moodieimplement.com



Students learn old skills



STORY AND PHOTOS BY PAT HANSEN
for *The Montana Standard*

Being a blacksmith is more than making hoof picks, Lyndel Meikle says while starting a coal fire in a forge at the Powell County High School Ag-Ed shop.

Meikle is the blacksmith at Grant-Kohrs Ranch National Historic Site and for the past 21 years has shared her expertise by teaching PCHS Ag-Ed students basics of the trade. The first year she had six boys, but during the years she has had as many as 23 boys and girls, and this winter quarter 14 co-ed students are in the Ag 1 class.

A blacksmith is one who creates objects from wrought iron or steel by heating the metal and using tools to hammer, bend, or cut it to shape.

BLACKSMITH LYNDEL MEIKLE, left, explains to Annie Hart the next step in making a decorative candle holder during a lesson at the Powell County High School Ag-Ed shop.

The “black” in “blacksmith” refers to the color of the oxidized iron. The word “smith” is from the word, “smite” (to hit). Blacksmithing began when primitive man first began making tools from iron – start of the Iron Age.

The students selected tools and began working on their projects. Half of the class was learning blacksmithing while the others were across the shop with Ag-Ed instructor Bill Lombardi who was teaching soldering and brazing.

The blacksmith projects for this day were decorative candle holders made from steel rods. Originally bellows were used to keep the forge fire at temperature, but they have been replaced with a rotary fan blower. Myron Bennett tended the blower as Annie Hart heaped the coal into a cone shape to trap the heat and form coke, a high carbon fuel made from the coal.

Blacksmithing in America thrived until the Industrial Age when mass production became the norm. Meikle says, however,

See SKILLS, Page 6

Women ...

Continued from Page 2

Classroom, to show young people that history can be found in the day-to-day experiences of ordinary people. Brander is delighted the project has evolved and grown as adults became interested in it.

“People like to hear the stories,” Brander said. “Our mission is to inspire people to do oral histories of their neighbors and friends. I am willing to work with community organizations who are interested in going ahead.”

The DNRC website has a tutorial with the steps needed to produce an oral history to be added to the Montana Historical Society’s Montana Memory Project Website. Fifteen women from across the state have given their histories so far, and the first transcribed interviews are on DNRC’s website.

For more details, contact Linda Brander, Montana DNRC resource specialist and coordinator of the oral history project at 406-444-0520, or LLBrander@mt.gov.

ARCTIC CAT
SHARE OUR PASSION.™

YELLOWSTONE
MOTORSPORTS

Check out the Arctic Cat
Prowler 700 HDX!

- ◆ Made in the USA
- ◆ Power Steering
- ◆ Large Capacity Dump Box
- ◆ 2" Receiver Hitch

Perfect for all your Ranching needs!

540 Alaska Frontage Rd • Belgrade, MT • 59714 • (406) 388-1313
www.yellowstonemotorsports.com • Mon - Sat, 9am-6pm

SHOWN WITH ACCESSORIES

ARCTIC CAT
SHARE OUR PASSION.™

Where Service Matters



Skills ...

Continued from Page 5

that during the Depression blacksmiths were critical to “holding the country together” with their ability to repair equipment and build new parts. She hopes by the second year, her students are learning the ethic of repair.

The art of blacksmithing almost became extinct, but a renewed interest occurred as part of the “do-it-yourself” and “self-sufficiency” trend during the 1970s. Today’s blacksmith uses many of the same techniques and methods, but power tools and acetylene torches reduce the physical labor.

In Meikle’s class the students are learning traditional skills using hammers, anvil and jigs.

Heating iron to a “forging heat” makes it pliable. As iron is heated, it first glows red, then orange, yellow, and finally white. The ideal heat for most forging is the bright yellow-orange.

McKenna Stafalo hammered a piece of hot steel to begin her project. Meikle tells her to hit harder, but then demonstrates what the sound and rebound of the hammer on the anvil should be.

Meikle said, “You can read all you want about

See SKILLS, Page 7

BETI LOMBARDI uses elbow grease and a steel bristle brush to clean oxidization and carbon off her finished blacksmith project.

AT RIGHT, MCKENNA STEFALO begins the process of shaping a piece of hot steel on the anvil.



Big Sky Reclamation is a land reclamation contractor that works on numerous environmental clean up and superfund sites in Montana, Idaho, Wyoming and Utah. The primary focus of BSR is vegetation construction and management. Services are: Soil amending, seeding, weed control, fertilizing, erosion control, integrated site management and vegetation assessment. In addition to construction BSR acts as a consultant for numerous engineering firms. BSR is accredited and licensed by the Montana Dept. of Agriculture. Big Sky Reclamation employs 8 full time and has offices in Butte and Anaconda.

BSR

Mark Moodry, President
PHONE: 406-565-5626 • CELL: 406-490-5377

Big Sky Reclamation

LISAC'S TIRE

WE DO FARM TIRES



Lisac's Tire
On The Farm Service

2109 Yale • Butte
782-4294



Skills ...

Continued from Page 6

blacksmithing. Or, I can tell you to hit the iron 'hard,' but what is hard? Or, I can say the iron needs to be a bright orange to work it, but what color is 'orange?' When students hear the tone or see the working color of the steel, they understand more clearly."

A good working temperature for low carbon steel is 1400-1800 degrees, she said, although the fire is much hotter, about 2600 degrees. Steel can be destroyed at 2100 degrees, so it's important to keep a sharp eye on the project or it will burn up the iron.

"Safety is more important than anything else," Meikle said. "When I hear a student behind me say, 'aawh!' I don't need to look. When I do, it looks like the Fourth of July in the forge as burning carbon in the steel creates sparks."

Kolten Ferguson gave Meikle his candle holder to check the balance. He said, "I like working with hot metal and I like the hands-on process from starting a forge fire to completing a project."

Students used files to remove burrs and sharp edges. Beti Lombardi applied elbow grease and a wire brush to remove

oxidation and to further smooth the surface of her project. A clear coating was applied to the finished object to inhibit oxidation.

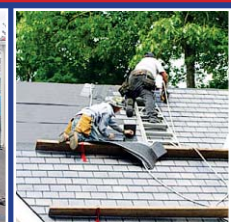
According to the Artists Blacksmith Association of North America website, "about 5,000 men and women belong to ABANA. Add to that all of the farriers, bladesmiths, gunsmiths, and armourers and perhaps 20-30,000 Americans practice the metal arts of our earlier days.

The association believes the quality of work, especially in the arts, is more impressive now than it's ever been, and the quality of work by today's bladesmiths and gunsmiths rivals any time in history.

Meikle said, "I instruct because it's fun. I'd like to find a student who wants to interpret the history of blacksmithing to visitors as well as showing the work. One who understands the ethic of repair that held this country together during the Depression as well as the benefits of the skill today. Those who build not only save money but it is an investment in their future, like the young man who wanted to stay on the farm, where he was needed, so developed a product to contribute to the family finances."

Her greatest satisfaction is seeing the look in a student's eyes the moment they realize, "I did this and it is good!"

FOR ALL YOUR ROOFING NEEDS



**R
&
S
SUPPLY**

(406) 582-1615

BOZEMAN, MT

**on the corner of
Cottonwood & Huffine**

ROOFING, WATERPROOFING AND INSULATION

YOUR CROPS ARE CALLING. NOW YOU CAN ANSWER.

All it takes to irrigate effectively is knowing how much water your crops need. Easier said than done... until now. With Valley® SoilPro™ 1200, powered by AquaSpy, your plants can tell you when they're thirsty. Monitor your soil moisture to find out exactly how much water your crops need.

www.valleyirrigation.com

VALLEY 
The Leader in Precision Irrigation

PIVOTS PLUS
AG IRRIGATION

VALLEY 
PERFORMANCE
PLUS DEALER

AG SPRAY
EQUIPMENT

1045 SELWAY DR., DILLON, MT • (406) 683-4418

Churchhill

Churchhill
20405173

AG SNAPSHOTS

Hollenback recognized by Conservation District

John Hollenback was recognized by chairman Jeff Janke for more than 40 years of volunteer service on the board of supervisors of the Deer Lodge Valley Conservation District.



Hollenback

Hollenback has been operating his family ranch near Gold Creek since 1957. He is a long-time manager of good management of rangeland, and earlier this year he was honored as Range Leader of the Year. His knowledge and experience is respected by his peers and others. Hollenback serves on the Montana Grazing Lands Conservation Initiative and the Governor's Rangeland Resources Executive Committee, Deer Lodge Valley Conservation District, weed council and others.

Water quality and livestock

Montana has 59,000 miles of flowing streams and rivers and of those 17,263 miles are impaired, said Thomas M. Bass, Livestock Environment Associate Specialist, MSU Extension Service.

Most impaired waters are because of non-point-source pollution that includes run-off from roads and parking lots, construction sites and development, lawns and landscaping, mining sites, agriculture and forestry.

Bass discussed the importance of best management practices for livestock producers to help manage storm water and to prevent animals, waste and waste water from contaminating water sources.

Agricultural animals are not alone in the issue, he said. Cities with dog waste or failing water treatment plants, as well as large accumulations of wildlife and birds are also being addressed in an effort to best contain pollution.

Water philosophy: keep clean water clean.

Livestock producers need to consider how manure is managed, how corrals are built and managing run-off by minimiz-



PAT HANSEN PHOTO

A HEALTHY GRASSY ZONE like this one along a portion of Gold Creek is one best management practice that can help prevent water pollution during run-off.

ing the amount of water coming into corrals to reduce mud and potential run-off. Solutions can include: divert water around lots, put gutters along roofs, maintain water lines and tanks, fix leaks and maintain a good stubble or grass

strip for 25 feet from the creek.

More information is in the new water quality publication by MACD and MSU Extension titled, "On-site Guide for Livestock Operations!"

See **SNAPSHOTS**, Page 11

AK DRILLING, INC.

Residential & Commercial
Water Wells
782-8506
 Fax: 782-2793
www.akdrilling.com
sharon.king@akdrilling.com
 Corporate Office:
 185 South Parkmont, Butte, MT 59701

WE ARE CURRENTLY HIRING DRILLING OPERATORS
 Contact Will Steyh for More Information
will.steyh@akdrilling.com

- EXPLORATION DRILLING SERVICES
- WATER DRILLS
- MONITORING WELLS
- ENVIRONMENTAL
- CONSTRUCTION
- MINING & COAL BED METHANE
- LARGE & SMALL DIAMETER HOLES
- OFFERING THE DUAL ROTARY SYSTEM:
Unmatched Performance In Boulders & Gravel

POLARIS XP SALES EVENT

REBATES UP TO **\$1000***

PLUS FINANCING AS LOW AS 2.99%**

FIND YOUR RIDE TODAY!

ADVENTURE CYCLE SLED INC.

406.683.2205
 201 E. Helena Street • Dillon, MT 59725
www.adventurecycleandsled.com

Offers good on new and unregistered units purchased between 3/1/13 and 4/30/13. *On select models. See your dealer for details. **Rates as low as 2.99% for 36 months. Offers only available at participating Polaris® dealers. Approval, and any rates and terms provided, are based on credit worthiness. Other financing offers are available. Applies to the purchase of all new, qualified ATV and RANGER models made on the Polaris Installment Program from 3/1/13 to 4/30/13. Fixed APR of 2.99%, 6.99%, or 9.99% will be assigned based on credit approval criteria. An example of monthly payments required on a 36-month term at 2.99% is \$29.08 per \$1,000 financed. An example of monthly payments required on a 36-month term at 9.99% APR is \$32.26 per \$1,000 financed. See participating retailers for complete details and conditions. Warning: The Polaris RANGER and RZR are not intended for on-road use. Driver must be at least 16 years old with a valid driver's license to operate. Passengers must be at least 12 years old and tall enough to grasp the hand holds and plant feet firmly on the floor. All SxS drivers should take a safety training course. Contact RIDEVA at www.rideva.org or (800) 255-2569 for additional information. Drivers and passengers should always wear helmets, eye protection, protective clothing, and seat belts. Always use cab nets. Be particularly careful on difficult terrain. Never drive on public roads or paved surfaces. Never engage in stunt driving, and avoid excessive speeds and sharp turns. Riding and alcohol/drugs don't mix. Check local laws before riding on trails. ATVs can be hazardous to operate. Polaris adult models are for riders 16 and older. For your safety, always wear a helmet, eye protection and protective clothing, and be sure to take a safety training course. For safety and training information in the U.S., call the SVU at (800) 887-3882. You may also contact your Polaris dealer or call Polaris at (800) 342-3164. ©2013 Polaris Industries Inc.

Snapshots ...

Continued from Page 10

Livestock seminar benefits Rialto

A standing-room-only crowd filled the historic Rialto Theatre to enjoy the Bar J Wranglers concert that kicked off the 42nd annual Livestock Seminar in Deer Lodge recently. It was a toe-tapping, hand-clapping, laughter-filled evening of Western music and cowboy humor by the band from Jackson Hole, Wyo., and great entertainment for people of all ages who came from as far as Kalispell and Livingston and everywhere in between.

Instead of the customary banquet, this year the Deer Lodge Valley Conservation District decided to host the popular Bar J Wranglers, not only as entertainment for the audience, but as a fundraiser for the Rialto Community Theatre. The Conservation District board members donated \$5,000 in concert proceeds to the Rialto board members for continuing restoration and enhancement of the theatre.

Making the presentation were: chairman Jeff Janke, vice chairman John Hollenback, Jim Lee, Dwight Crawford, Troy McQueary and Dean Despain.

Hollenback praised the Rialto board members: Steve Owens, John Snell, Ron Scharf, Susan Blair, Kirk Sanquist, Ron Mjelde, Ed McCarthy, Kathy Thompson and Jackie Thompson for their hard work in making the concert a success.

Hollenback said, "It worked out well for everyone and because of the community effort it turned out better than we even hoped. The band really liked the

setup at the Rialto and they look forward to coming again."

The Conservation District and Rialto Theatre boards agreed to invite the Bar J Wranglers for a return performance next year.

Livestock seminar workshops

A sizable group of area ranchers and ag supporters gathered at the Deer Lodge community center recently for seminar presentations dealing with livestock best management practices for water quality, grazing management for healthier land and profits, and the Confederated Salish Kootenai Tribal Compact Treaty (CSKT).

Grazing management for profit

Grazing management principles that emulate nature can improve a struggling ranch's profitability as well as land and animal health.

NRCS Pasture Specialist Justin Morris talked about

how it is done.

n Profit revenue — costs.

n Net return value of product — operating costs — ownership costs.

Morris said, "The easiest money to be made in ranching is the money you do not spend! Every dollar not spent is money that goes towards profit."

Making/feeding hay and pasture maintenance are usually the two highest production costs.

"Attacking the largest production costs will make the most improvement in profitability," Morris said.

"Reduce petroleum use and magnify solar energy with grass, and input costs can be significantly reduced with grazing management."

Grazing management affects all four ecosystem processes:

n Water cycle — rain/irrigation,

A look for EVERY HOME

ELEGANT • CLASSY • RUSTIC



Your HOME...
Your WAY

STEELE'S

FURNITURE • TV • APPLIANCE

Milltown Water Right acquired through Arco agreement

BY PAT HANSEN
for *The Montana Standard*

The State acquired the 2000 cfs Milltown Dam Water Right as part of the Arco Superfund decree.

Under the Compact, the CSKT and Montana Fish, Wildlife and Parks (MFWP) will become co-owners of the Milltown right.

They propose creating two separate enforceable water measurements. One for 700 cfs, measured at the U.S. Geological Survey Station (USGS) at Bonner, for the Blackfoot River from its confluence with the Clark Fork River upstream to the East Fork of Twin Creek. The other for 500 cfs, measured at the Turah USGS site, for the Clark Fork River above the Blackfoot River, including the tributaries of Rock Creek and Flint Creek.

However, the state will retain the entire 2000 cfs right for any future legal availability analysis and as protection for existing users in the basin.

The Compact assures that all non-irrigation rights and irrigation rights senior to Dec. 11, 1904 are protected.

If flows drop below the enforceable amounts either MFWP or Tribes could make call on rights junior to 1904 and irrigation wells producing over 100 gallons per minute.

A call on the junior rights could only be initiated on the day following a five-consecutive-day period where four out of five average daily river flows fall below the respective daily enforceable flows. The call will be made through the district court and would continue until two daily average flows of the previous consecutive five days exceeded the enforceable flow. An emergency drought plan was drafted for the



MISSOULIAN PHOTO

THE MILLTOWN DAM site is pictured in January.

Blackfoot River in 1999.

According to the DNRC water rights data base, there are a total of 5,017 junior surface water rights in the Clark Fork, Flint Creek and Rock Creek and Blackfoot drainages of which 1,299 are used for irrigation.

The Montana Power Company did not make a call on junior rights at any time since 1904. Some argue that removal of the dam and its non-replacement means the existing purpose for the right ceases to exist. That still must be determined by the Water Court.



O'KEEFE DRILLING

Also specializing in:

- Water Wells
- Large Diameter Wells
- Caisson Foundation Drilling
- Geotechnical Drilling
- Environmental Drilling
- Air Rotary Drilling
- Pump Sales & Service
- Enhance Your Water Well Performance With Our Airburst® Well Rehabilitation Technology!

SERVING
MONTANA
SINCE 1959



494-3310

Toll Free 1-800-745-5554

BEAVERHEAD LIVESTOCK AUCTION



Auctions Every
Thursday at 1:00pm

406-683-2002

5747 Hwy 91, South • Dillon, MT 59725

Intensive grazing maximizes forage



STORY AND PHOTOS BY PAT HANSEN
for *The Montana Standard*

A Whitehall producer finds intensive grazing practices can maximize forage, increase livestock production and improve net income.

On Dave and Jenny Scott's farm, Montana Highland Lamb, a handsome flock of 200 ewes and 320 lambs grazed contentedly on high quality forage in a 30-acre pasture. The pasture is divided into 21 paddocks fenced with electric netting to keep the sheep in and coyotes out.

Scott, who has been using intensive grazing practices for the past 31 years says the advantages include being able to double the stocking rate compared to continuous grazing, reduce harvesting

DAVE SCOTT, left, closely monitors the need for irrigation on his Montana Highland Lamb farm, and says this Paul Brown Probe is a handy and inexpensive tool for determining soil moisture.

costs by 7-10 times compared to haying, control parasites, increase grass and legume production. It allows him to stockpile winter forage and minimize water use because grass uses 25 percent less water than alfalfa. Hay is fed the last six weeks before lambing in April, unless weather conditions require it earlier as it did this year.

Scott is a livestock specialist with the National Center for Appropriate Technology (NCAT) in Butte. During a workshop at the farm last summer, he told more than 40 livestock producers and others there is no one right way to implement intensive grazing, but it can work for both small and large operations. It depends on your goals, labor constraints, soil health, plant diversity, fertilization or no fertilization, parasite control measures and water availability. These factors will determine how you set up your system, he said.

He admitted intensive grazing requires a bit more planning and management and is more labor intensive

because you are harvesting your crop every day or two. It also requires more temporary fencing than continuous grazing and more soil fertility for higher forage production.

His sheep graze each paddock for one or two days, then the grass is given a 30-day recovery period. The rotation – recovery period has provided the highest parasite control and the greatest forage production, averaging 5.5 – 6 tons of dry matter per acre per year, he said.

Grazing for one or two days leaves grass stubble about five inches high. He cautioned against the temptation to allow animals to graze grass shorter because it takes longer than 30-days to recover.

To increase soil nitrogen and decrease the commercial fertilizer bill, Scott is planning to seed more legumes this year with a goal of 30-35 percent legumes in the paddocks.

The 30-day recovery period will
See FORAGE, Page 14

Bozeman Saddle Outlet

BozemanSaddleOutlet.com

All Major Brands ~ Best Prices
Saddles ~ Tack ~ Pack Equipment

Circle Y • High Horse • Tucker • Billy Cook • Dakota • Courts • McCall
Custom Saddles by Paul Van Dyke • Pack Saddles • Pack Equipment

WE SHIP 
Gift Certificates Available
2 Miles South of 4 Corners
Mon-Sat 10-5 • Closed Sundays

80155 Gallatin Hwy. • Bozeman, MT 59718
406-586-8225 (TACK)
bzmsaddleoutlet@qwestoffice.net
Cid Klebenow, Manager



POLARIS
XP
SALES EVENT

REBATES UP TO
\$1300

PLUS
FINANCING AS LOW AS
2.99%

**FIND YOUR
RIDE TODAY**

**Gallatin
RECREATION**
POLARIS / VICTORY

21 Fork Horn Trail
Bozeman
(Near Four Corners)

(406) 586-9141

WWW.GALLATINREC.COM

**TERRAIN
DOMINATION**

 **POLARIS**

*XP Sales Event offers valid 3/1/14 to 4/30/14, see dealer for details. Warning: The Polaris RANGER® and RZR® are not intended for on-road use. Driver must be at least 16 years old with a valid driver's license to operate. Passengers must be at least 12 years old and tall enough to grasp the hand holds and plant feet firmly on the floor. All SxS drivers should take a safety training course. Contact ROHVA at www.rohva.org or (949) 255-2560 for additional information. Drivers and passengers should always wear helmets, eye protection, protective clothing, and seat belts. Always use cab nets or doors (as equipped). Be particularly careful on difficult terrain. Never drive on public roads or paved surfaces. Never engage in stunt driving, and avoid excessive speeds and sharp turns. Riding and alcohol/drugs don't mix. Check local laws before riding on trails. ATVs can be hazardous to operate. Polaris adult models are for riders 16 and older. For your safety, always wear a helmet, eye protection and protective clothing, and be sure to take a safety training course. For safety and training information in the US call the SVIA at (800) 887-2887. You may also contact your Polaris dealer or call Polaris at (800) 342-3764. ©2014 Polaris Industries Inc.

Deemo's Meats
Ennis, Montana

**OPEN 6 DAYS
A WEEK!**

Owner, Chris DiMichele

NOW OFFERING
on-site custom butchering of domestic meats

- 3 Flavors of Our Homemade Beef Jerky • Prime & Choice Grades of Beef Available
- Large Selection of Our Homemade Sausages • Boars Head Products • Fresh Lamb & Veal
- Front Street Market Products • Gourmet Pastas & Sauces • Fresh Product & Baked Goods

10 N. Main St. - Ennis, MT - phone (406) 682-7306 - fax (406) 682-4444



SOME OF THE 200 EWES and 320 lambs are seen grazing on 30 acres of high quality forage in one of 21 paddocks at Montana Highland Lamb.

Forage ...

Continued from Page 13

benefit legumes as well. The sandy loam soil of the pasture has been enhanced by adding compost made from waste on the farm, in addition to the natural benefits from livestock grazing. In the beginning Scott used raw manure but that resulted in a lot of weeds, so for the past 20 years he's composted waste, enough for their use and some to sell.

Regar meadowbrome was planted 12 years ago at a rate of 20 lbs. per acre. "It costs more to seed at that rate, but you will reap the benefits," he explained.

Scott monitors the grass during each grazing cycle saying that when it "blows in the wind" at 14 days, it will be ready to graze 16 days later. He also samples pounds of forage production with a hoop and scale. In addition to the compost, 135 units of Nitrogen are applied each year. Paddocks are irrigated by pivot and handline at a rate of 1.25 inches of water

per week, but he closely monitors the need for irrigation using soil moisture sensors and a Paul Brown Probe saying they have saved him a lot of water.

An interactive grazing spreadsheet developed by NCAT, greatly facilitates management, Scott said, allowing producers to plug in their own data. It can be found at:

<https://attra.ncat.org/attra-pub/summaries/summary.php?pub451>

CREATING PRODUCTIVE SOIL

In 2012 Scott started rehabilitating a former dairy loafing area by planting turnips to capture nitrogen and break up the soil. He said the sheep grazed the crop in October and loved the plants that provided 29 percent protein while their hoof action and waste benefited the soil. Last year the cover crop mix included oats, peas, berseem clover, turnips, radishes, and annual rye grass. His goal is to make the soil productive enough to use as a full-season grass pasture.

Dan Durham of the Sheridan NRCS

See **FORAGE**, Page 15

Clearwater Pump & Supply

Experience you can depend on for water system supplies

SHAWN TONEY

Complete Irrigation Supply Store!

- Wheel Lines • Hand Lines • K-Line Irrigation Systems • Irrigation Fittings
- Irrigation Pipe Repair • Pipe Threading • Ritchie Stock Waters

We also sell Rainbird Spinklers and all the fittings for lawn sprinkler systems

227-8010

P.O. Box 919 • 4150 Hwy. 12 East, East Helena, MT 59635



VERSATILE



MAXIMUM VERSATILITY

PROVEN POWERTRAIN



Your Premier Dealer in the West!

Please Call

877-253-WEST (9378)

or (406) 388-2335



**378 Briar Place
Bozeman, MT
59714**

www.pioneerwestinc.com

Forage ...

Continued from Page 14

(Natural Resource and Conservation Service) explained not all soils are created equal, but almost all can be improved to meet or exceed their expected potential.

Functioning soil reduces erosion, absorbs nutrients effectively, allows water to infiltrate better and holds it longer, is resistant to weeds and other pests, and it is more profitable, Durham said.

Justin Morris of the Dillon NRCS said high density grazing is a way to reduce the cost of hay and fertilizer because it is cheaper for livestock to harvest solar energy. However, grazing larger numbers of animals in a small area for a short period of time requires longer periods for plant recovery; don't graze the plants until they are fully recovered, he said.

Morris explained this process really starts to build soil on a ranch, because the livestock consume 30 percent of the plants and add 70 percent carbon, thus increasing organic matter in the soil so less fertilizer is needed. In time, plant productivity doubles and soil water holding capacity increases.

For more information about intensive grazing and cover crops used for soil



DAVE SCOTT demonstrates how he determines forage production by using a hoop, scissors and scale to clip and weigh grass in a paddock that has been rested for 30 days.

fertility contact NCAT, Natural Resource and Conservation Service (NRCS) or MSU Extension personnel.

Scott can be reached weekdays at 406-533-6642 or at daves@ncat.org.



RAMSAY, MT

For the Best In Cattle Sales

CATTLE SALES

EVERY TUESDAY

OWNERS
TED ODLE 406-533-8773 • BLAKE NUFFER 406-533-5904
100 Cattle Drive • Ramsay, MT 59748
406-782-1884



NO OTHER MEDIA COMES CLOSE.

Sell it Faster.

When you use The Independent Record, Montana Standard and Mini Nickel Classifieds, you are accessing the area's #1 classified marketplaces with proven results. Next time you are looking to buy or sell, visit us first.

ASK THE MEN WHO DRIVE THEM

PHOTOGRAPH THOMAS LEE



DICK MORGAN & SONS

OCCUPATION:

Ranchers in the Gallatin Valley for over 60 years

CLAIM TO FAME:

Driving Danhof trucks for over 50 years

DRIVES:

¾ Ton Chevy Pickup or whatever has gas in it and a set of keys

Pictured left to right:
Dick Morgan,
Wade Morgan
& Craig Morgan

QUALITY YOU CAN COUNT ON



7 mi. south of Manhattan
6685 Amsterdam Road
406.282.7231 • 800.750.7231
danhofchevy.net