2017 WINTER GRAZING SEMINAR HOSTED BY
VALLEY COUNTY CONSERVATION DISTRICT
FOR THE RANGELAND RESOURCE COMMITTEE

Tuesday, January 17

8:30 – 9:30AM Registration
9:30 – 10:00AM Opening comments
10:00 – 10:30AM Luke McCarty, SGI Range Conservationist – SGI and Range Monitoring
10:30 – 11:00AM Eric Belasco Ph.D., Economist Montana State University - Long Run View of the Cattle Market
11:00 – 11:15AM BREAK
11:15 – 11:45AM Marisa Sather, Ph.D in Fish and Wildlife Biology - “Why Grassland Birds Need Ranching”
11:45 – 1:00PM LUNCH
1:00 – 1:30PM Andy Roberts, Beef Cattle Research Specialist, Fort Keogh Livestock Range & Research Laboratory - Management Approaches to Improve Efficiency
1:30 – 3:00PM Burke Teichert, Ranch Management Consultant - Profitability in Beef Cattle Business
3:00 – 3:15PM BREAK
3:15 – 3:30PM Dr. Emily Glunk, Forage Extension Specialist Montana State University - Winter Feeding and Forage Management
3:30 – 4:00PM Conservation District Briefs
5:00PM No host social
6:00PM Banquet with Guest Speaker Bruce Vincent - “So You Want to Date My Daughter?”

Wednesday, January 18

9:00 – 9:15AM Opening Remarks
9:15 – 9:45AM National Weather Service - Weather and Ranching
9:45 – 10:15AM Dr. Rachel Endecott, Beef Cattle Extension Specialist, Montana State University - Beef Cow Considerations Before and After Calving
10:15 – 10:30AM BREAK
10:30 – 11:00AM Dr. Mark Peterson, Research Leader Fort Keogh Livestock Range & Research Laboratory - Do Your Cows Eat the Expected Amount of Mineral or Supplement and Drink Similar Amounts of Water?
11:00 – 11:30AM LUNCH
11:30 – 1:30PM Dr. Angus McIntosh, Consultant, Private Property Right Expert - Explaining Grazing Rights
ONLY $40 FOR TWO DAYS INCLUDING YOUR MEALS!!

A big thank you to our sponsors who helped make this possible:
- Montana DNRC
- USDA NRCS
- Farm Equipment Sales, Inc.
- Montana Livestock Ag Credit
- Missouri River Realty
- Cornwell Ranch
- GLCI
- Thrivent Financial
- Valley County Grazing Office
- Cottonwood Inn & Suites
- First Community Bank
- Montana Aviation Research Co.
- Northwest Farm Credit Services
- Thrivent Financial
- The Nature Conservancy
- Ezzie’s Wholesale Inc.
- Pro Co-op Ag Center
- Free Trader
- Valley Bank
- Glasgow Stockyards Inc.
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- CHS Farmers Elevator
- Lefse Shack
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- The Glasgow Courier
- Red Foxx Real Estate, LLC.
- Town & Country Furniture
- Fossum Ready Mix
- CHMS, PC
- Prairie Ridge Village
- Alison Molvig

COME AND JOIN US FOR A FUN AND EDUCATIONAL TIME!!
23rd Annual Outdoor Classroom:
The Valley County Conservation District held its 23rd Annual Outdoor Classroom for all of the Valley County’s fifth grade students on Tuesday, May 10th at the Valley Event Center.

Thank you to all of the participating agency presenters, teachers and students who continue to make the Outdoor Classroom possible!!

2nd Annual Arbor Day Open House and Student Tree Presentation
Over 200 Trees were given to students and the community!

GET YOUR TREE ORDERS IN FOR 2017 DELIVERY

Order forms for trees to be delivered in 2017 are now available. Order early for a better selection. Orders are filled in order received.

Call 228-43321 ext 101, email or come in to get a tree order form. We have a big selection from several nurseries to choose from.

Email vccdm20@gmail.com. Located 54059 US HWY 2 W Ste 2, Glasgow, MT 59230
Valley County Conservation District has been busy applying for, and fortunate enough to be awarded, DNRC grants to purchase conservation based rental equipment for our local producers. Featured below is the larger equipment VCCD has available at affordable rates. Please contact the office at (406) 228-4321 X 101, email vccdmnt20@gmail.com, or stop by our office at 54059 US Hwy 2 W in the USDA Building for information or to receive a brochure.

2016 WHEATHEART HEAVY HITTER POST POUNDER DOES THE WORK FOR YOU!
Self contained—no truck or tractor needed
Convenient Controls—One man operation
Independent Hydraulic Drives
Stability Spike—For safe and accurate position
$95/Day    $550/7 Day Week

2015 Great Plains 10’ 1006NT No-Till Drill With Harrow
3 Seed Boxes—Main Grain, Native Grass, and Small Seed Boxes
4 Speed Gear Box
Automatic Clutch
Lock Out Hubs
Wavy Turbo Blade Coulter
$12/Acre    Minimum $120/Day

TREE PLANTER HAS BEEN RESTORED!!
$50/day plus $.15/tree with 100 tree minimum

VCCD CAN:
-Prep your tree site $55/hr. plus $1/mile round trip.
-Plant your trees for $150 for 1st 100 trees and $.15 thereafter plus $1/mile round trip.

PASTURE AERATOR
Break up club moss and improve the absorption of precipitation by aerating your pastures.  $25/day plus $.50 per acre.

All equipment and service agreements must be signed and a deposit of 50% secured prior to any usage.
A NOTE FROM JEFF PATTISON, THE CHAIRMAN OF OUR BOARD AND THE MILK RIVER WATERSHED ALLIANCE

The Milk River Watershed Alliance is on track again with a new administrator, Jenifer Anderson from Malta, to work with Glasgow Chairman Jeff Pattison. After a short funding situation, MRWA has a lot of new and some former people on board. MRWA has as one of its main objectives, education: education of the diversity and complexity in this unique watershed; how the river gets its water; the international treaty and shared compact with Canada for the 300+ miles it flows north to the 525 miles it runs back into Montana; to the confluence at Fort Peck in the Missouri.

MRWA Partnerships. Partnerships of wildlife, sportsmen, municipalities that draw water for their communities, recreationalists, and of course irrigators. One of the unique facts of the partnerships is that for a public works project, a non-governmental entity “the irrigators” pay 75% of the operating costs that are shared by all. Another leg of the stool is working on weed control in the effort to prevent this watershed from turning purple and yellow from noxious weeds. Lastly, MRWA has chosen to be ready with identifying cost and water efficiency savings shovel-ready projects when a funding source comes up.

The MRWA will have participated in 2 Trans-boundary workshops working with the above goals to bring a knowledge and presence to the table of Global environmental groups. Exciting to think three bodies of water Hudson Bay, Pacific Ocean and the Gulf of Mexico all receive water from this project completed in the very early 1900’s.

One of the biggest, current challenges will be the 2017 legislative session funding priorities. A small request of $160,000 will be sought for the biennium for projects, administrator, travel, office expenses and more work to keep the water flowing. Ninety-eight percent of the water that flows thru Valley County actually comes out of two eight-foot siphon tubes. The recent cost of repairs to the diversion project is around $200 million. The economic impact if the Milk returns to a seasonal stream is BILLIONS! What a return for an investment! MRWA will need support for the request to the legislature. Hopefully you will help when needed. Thanks.
Montana’s Beneficial Bees

By Kevin Farr
NRCS Soil Con Tech

In 2007 I don’t think I saw more than maybe 2 honey bees all summer, 2008 & 2009 weren’t much better. The only Bumble bees I saw, (two or three) were all up north, close to the Canadian border. What the heck is going on? Well, it’s complicated, bear with me as I ramble. Just eight to ten years ago in our large back garden, (mostly my wife’s) she had years ago changed it from a vegetable garden to a wild place you might expect to find at the foot at some mountains complete with streams and waterfalls (fountains and bird baths). It is now mostly a wild flower, fruit tree, shrub and vine jungle that we planted, nurtured and pruned in hopes of attracting pollinators and as much small wildlife as one can expect in a town. Well, it worked, it was full of honey bees, bumble bees and butterflies, a toad, a couple of rabbits, a few hummingbirds, mice and a variety of birds and pollinating insects. It was a wild paradise inside the city limits. Then, as if it was planned by some diabolical villain it happened.

As spring of 2013 slowly came, we noticed a loss of bees, mostly honey bees and bumble bees. We really didn’t think too much of it, we just put it down to a slow coming of spring. As summer rolled around it became obvious to us and many people all over the country that something was wrong. Our precious honey bees were disappearing and a lot of people were noticing it also. Beekeepers were beginning to complain that their bee colonies were dying off, and in large numbers. In the following years, much study was done on “Colony Collapse Disorder”, the name scientists gave the phenomenon of the disappearing bees. Many reasons and many things were blamed for the disorder but, after several tense years of the disorder was proven to be caused by several perfectly timed events. A very small protozoan form the genus Nosesma spp. was found to be the critical factor for the honey bee mortality. The Varroa mite along with pesticide over use and stress on the bees, it all came together to create a “perfect storm” so to speak, affecting the honey bees and creating a die off of epic proportions never seen before.

Also, in the last decade, the problem of bee mortality has included the declining numbers of bumble bees. Scientists and Entomologists have noticed a significant shortage of the docile bumble bees all across the Americas. There is also some talk and evidence that possibly one more species of bumble bees may have already gone extinct. There are several species of the bumble bees in the USA (Bombus sp), but there are only a few of the species that call Montana home, mainly the Western Bumble Bee (Bombus Occidentalis) and the Yellow banded Bumble Bee (Bombus Tericola).

Bumble bees are major pollinators as well as the honey bee and they share some of the same predators and pathogens. Some bumble bees in California are used in greenhouses to pollinate tomatoes and other produce and this practice it growing and spreading across the globe. There has become a large and growing market for rearing bumble bees commercially to the greenhouse grown vegetable market and glass houses that grow a multitude of flowers and plants locally as well as foreign markets. Selling colonies of insectary raised bumble bees for worldwide sale and distribution may be one possible reason for the sharp decline of this species due to the spread of disease, pathogens and predators.

So what is the result of having fewer bees and pollinating insects in this world? In a very short sentence we would be short food! In today’s global community, the effects would be devastating to say the least. It is said that bees (honey bees, bumble bees) pollinate about 30% of the world food crops and 90% of our wild plants. In a world constantly striving to feed all of its population at present time, we cannot afford to lose even a very small population of our main pollinators. With the present human population of about 7 billion, it is expected to reach 10 billion by 2050 and almost 11 billion by the turn of the century. Along with longer life spans, humans will consume almost 1/3 more food crops in the next 30 years as we do now. We need to keep and increase our pollinators and keep them healthy in order for them to pollinate 30-50% more in the coming years and keep up with our increasing population growth. We are still learning how much we depend on our pollinating bees and how important they are in our ecosystem.

Every time I drive down a highway and see honey bee hives set near roads, I cringe. Because I know my windshield will get in the way of some very important yellow fuzzy friends. Friends that are simply and humbly going about their natural course of life and as nature planned it, helping us all to live in a more beautiful and tasty world. I know what you are thinking, a few bees on the windshield is not going to matter. But, if you think about it, how many bees did you hit on your last road trip in the count less than 10? In 2007 I don’t think I saw more than maybe 2 honey bees all summer, 2008 & 2009 weren’t much better. The only Bumble bees I saw, (two or three) were all up north, close to the Canadian border. What the heck is going on? Well, it’s complicated, bear with me as I ramble. Just eight to ten years ago in our large back garden, (mostly my wife’s) she had years ago changed it from a vegetable garden to a wild place you might expect to find at the foot at some mountains complete with streams and waterfalls (fountains and bird baths). It is now mostly a wild flower, fruit tree, shrub and vine jungle that we planted, nurtured and pruned in hopes of attracting pollinators and as much small wildlife as one can expect in a town. Well, it worked, it was full of honey bees, bumble bees and butterflies, a toad, a couple of rabbits, a few hummingbirds, mice and a variety of birds and pollinating insects. It was a wild paradise inside the city limits. Then, as if it was planned by some diabolical villain it happened.

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We should remember how important and fragile our pollinating bee colonies are and how we can protect them and even increase their numbers. We need to think about how we can live with and increase the numbers of the beneficial insects that help feed us every day and grow the fibers that we use for clothes. We need to think about what is happening every time we use a pesticide for urban use as well as for farm and industrial use. We need to protects, appreciate and enjoy our truly wonderful and amazing bees.
Native range or perennial cover crops are the most efficient systems we have available to us for dealing with soils with high levels of salts. This is because plants take up soil water then the water will not evaporate through the soil surface and leave behind the salts that crust the surface of the soil. When there is enough precipitation or irrigation water run through the system and the water is able to move freely down through the soil to the ground water, then the salts will not accumulate on the surface. Three things keep the water from moving down through the soil. Even clayey soils can have good drainage. Those three things are high water table, dense layers called lenses or layers of rock. When the lenses or rock layers are continuous, it is obvious that the water cannot get through but even when those layers are broken, the delay in the downward movement of soil can cause water to move upward. After all, water moves through soil in all directions but of course, most of the water moves downward due to gravity.

Therefore, managing water is how to manage for salty soil. If your operation includes crop-fallow, it would be helpful to include a five to ten year perennial forage/hay rotation in those areas with the biggest saline problems. The following are a few crops considered salt tolerant with the most tolerant at the top:

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>VARIETY</th>
<th>LIMITATIONS</th>
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<tbody>
<tr>
<td>Tall Wheatgrass (Thinopyron ponticum)</td>
<td>Jose, Alkar, Largo, Orbit</td>
<td>Competitive, wet or dry, unpalatable when mature</td>
</tr>
<tr>
<td>Green wheatgrass (Elymus hoffmanii)</td>
<td>AC Saltlander</td>
<td>Looks like quackgrass</td>
</tr>
<tr>
<td>Slender wheatgrass (Elymus trachycaulus)</td>
<td>Pryor</td>
<td>Short-lived, not flood tolerant, good seedling vigor</td>
</tr>
<tr>
<td>Western wheatgrass does (Pascopyrum smithii)</td>
<td>Rosana, Rodan</td>
<td>Plant fall or early spring, well in heavy clay</td>
</tr>
<tr>
<td>Barley (Hordeum spp.)</td>
<td>Haybet, Horsford, Westford</td>
<td>Better for hay</td>
</tr>
<tr>
<td>Alfalfa (Medicago sativa)</td>
<td>Ladak 65, Spedor III, Shaw, Rambler, Cooper, Travois, TS- 4002, Rugged, Bullseye</td>
<td>Ladak 65 and Rambler have the deepest roots</td>
</tr>
</tbody>
</table>
The Valley County Conservation District Board consists of 7 volunteers: five elected area supervisors and two appointed urban supervisors. The board consists of:

**Elected Supervisors:**
- Area 1: Jody Mason
- Area 2: Jeff Pattison, Chairman
- Area 3: Ron Stoneberg
- Area 4: Ronald Garwood
- Area 5: Gene Granada

**Urban Supervisors:**
- Fort Peck: Nancy Heins, Vice-Chair/Treas.
- Opheim: Hanna Redfield

**Administrator:**
Penny Shipp, Ext. 101

**NRCS PERSONNEL:**
- Tracy Cumber, District Conservationist
- Joan Spence, Soil Conservationist
- Kevin Farr, Soil Con Technician
- Levi Doll, Civil Engineer
- Douglas Jones, Civil Engineer Technician

The public is always invited to the Conservation District’s monthly board meetings, which are held the second Wednesday of each month at 1:00 P.M. in the Conference Room of the USDA Building. Call 228-4321 Ext 101 to verify time and date. VCCD and NRCS are equal opportunity employers, and programs are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, age, marital status or handicap.

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**MERRY CHRISTMAS AND HAPPY NEW YEAR!!**

**TREE ORDER FORMS ARE READY FOR 2017 DELIVERY. GIVE US A CALL OR SHOOT US AN EMAIL!**

**CHECK OUT OUR NEW NO-TILL DRILL, NEW POST POUNDER, TREE PLANTER AND OTHER EQUIPMENT FOR RENT.**

WE HOPE TO SEE YOU AT OUR FIRST EVENT OF 2017...THE WINTER GRAZING SEMINAR ON JANUARY 17-18 AT THE COTTONWOOD INN!! DETAILS ARE ENCLOSED.