



Fall/Winter 2017
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ND Leopold Award Winner Ken & Bonnie Miller of Fort Rice

In 2016, the Sand County Foundation, in partnership with the ND Grazing Lands Coalition, ND Association of Soil Conservation Districts and the ND Stockmen’s Association brought the Leopold Conservation Award to North Dakota. This award honors private landowners that display “extraordinary achievement in voluntary conservation.”

The 2017 ND Leopold Conservation Award winner was Morton County’s own, Ken and Bonnie Miller from Ft. Rice, ND. The Miller’s take a holistic approach to their ranch management - balancing all of their ecological, economic and social resources. Their grazing strategy is that of high stock density for a short period and is followed up by long recovery periods. Their cropland is managed using low disturbance methods, cover crops, perennials, and livestock. All of these methods tie into the Miller’s core belief of building Soil Health on their ranch. In doing so, they have increased the livestock carrying capacity of the ranch nearly threefold while “leaving more grass at the end of the season than we ever used to grow ,” as Ken has said.



*“In our attempt to make conservation easy, we have made it trivial.”
— Aldo Leopold*

One of the many other reasons the Miller’s were chosen for the Leopold Award was the selfless manner in which they share their story and methods when called upon. They have hosted many events throughout the years ranging from small county tours to international events that bring in hundreds of ranchers. Kenny is also one of the founding members of the ND Grazing Lands Coalition and has served as a mentor to many ranchers throughout the state.

All in all you would be hard pressed to find individuals with more of a conservation ethic than the Miller family, which is why they are so deserving of this prestigious award.

*Congratulations
Ken & Bonnie!*



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O-M-G Grassland Improvement Project

Overview

Soil Conservation Districts from Oliver, Morton, and Grant counties received a \$900,000 grant for the purpose of installing grassland improvement practices. Funding is available at a 60% rate to producers in those counties. Pasture cross-fencing, water developments, and grass plantings are an example of the practices that can receive cost-share. The funding was received in 2016 from the North Dakota Outdoor Heritage Fund (OHF). The OHF was established in 2013 to provide grants that enhance conservation practices in our state. The OHF receives its funds from ND oil and gas tax revenue.



Who is Eligible

Any producer or landowner that grazes animals or owns land that is grazed in Oliver, Morton or Grant Counties

Requirements

- Must agree to a 3-year prescribed grazing plan.
 - In simple terms: Can you manage to rest each pasture 45-65 consecutive days during the grazing season and rotate season of use from year to year? (this is a general guideline based on actual plant growth and grazed height)
- Maintain all structural practices for their designated lifespan.
 - Fixing the fence, repairing water tanks/pipelines etc.
- Be **willing** to allow tours of the pasture and improvements. This doesn't mean that you WOULD have one.
- Monitor forage use in your pastures and record the dates of rotation and animal numbers.

A sign-up period runs from October 2, 2017 to November 10, 2017.

Morton County Northeastern Watershed Project

Providing **technical** and **financial** assistance in the:
Crown Butte, Otter Creek/Harmon Lake, Square Butte, and Sweet Briar Watersheds

60% Cost Share Available for these Practices:



Cropland Management

- Cover Crops
- Nutrient Management
- Saline Soil Management
- Grassed Waterways
- Forage Plantings



Rangeland Management

- Prescribed Grazing
- Range Planting
- Cross Fencing
- Livestock Water Systems



Also Available for 60% Cost Share:

- Windbreak/Shelterbelt Establishment
- Wildlife Plantings
- Septic System Renovations



For more information or questions, Contact Brandon Schafer at (701) 667-1163 ext. 6279

It's 5 O'Clock Somewhere

With the mixed emotions of jubilation and remorse, I am bidding FAREWELL to my 30 year career with USDA Natural Resources Conservation Service. There is a time for everything, and now it is time for me to retire. I am hanging up my "District Conservationist cap" and throwing my energies into whatever the next chapter of life unfolds for me.

I look back on my years of serving the good folks of Morton County with humble gratitude. It seems impossible that over 21 years have flown since I started at the Mandan field office in 1996. Very sincerely, I am grateful for having been privileged to work with the most insightful and conservation-minded farmers, ranchers, and agricultural service community the great state of North Dakota has to offer.

I am so grateful for the fine and conscientious people I have met along the way. You love the precious land, cattle, wildlife, and wild landscapes as I do. We have witnessed many changes over the last 2 decades, good & bad depending on your perspective. More change is coming, guaranteed! But through all the natural and man-made challenges, our ag producers have kept focus on what's best for their land, their soil, their pastures, their wild & scenic places. I leave knowing the natural legacy of beautiful Morton County is in good hands.

I want to pay tribute to my USDA and SCD colleagues for their support, friendship and dedication to what it is to serve our clients with our best efforts. I will always remember with a smile our shared laughter, our joys and triumphs, as well as our struggles. Thank you for the notes of appreciation, words of encouragement, sharing of resources and scarce time, but mostly for your sincerity and trust.

So, what am I going to do now, you ask? I'm going to do a lot of things and very few of them conform to the notion of "retirement". I am going to travel to places I've always wanted to go to and haven't been. I am going to read FAT books that have been waiting for me for years. I will make quilts, garden more, learn new skills, visit museums & art galleries, enjoy doing for friends & family. And I plan to stay in Morton County-the BEST county EVER!

To all of the wonderful people whom I have had the opportunity to work with over the past 21 years - Thank You. The times shared, friendships forged and the incredible successes which we have enjoyed have been an extraordinary part of my life. I will miss you profoundly. But I do hope to see you around the county from time to time. The timing to end this chapter seems about as right as it could be. Good-bye and good luck!

Michele Doyle

*"And in the end its not the years in your life that count. It's the life in your years."
-Abraham Lincoln-*

Acting District Conservationist in the Mandan NRCS/SCD Office



With the recent retirement of Michelle Doyle, District Conservationist, Val Hartman will assume the role of Acting District Conservationist in the Mandan Field Office. Val is currently the District Conservationist in the Center NRCS/SCD office and will be maintaining those duties as well. She plans to be here in the Mandan office at least a couple of days a week and will be going back and forth between the two offices, depending upon workload.

Val may be a familiar face to you if you are in southwest Morton County as she and her husband, Steve, lived and raised their family in Carson, ND. Val worked in the NRCS office in Carson for 20 years before moving on to Devils Lake & Fargo in the engineering field. Val is happy to be back "out west" working with producers on their conservation needs. If you would like to visit with Val about please stop in the office or give her a call.

Please welcome Val Hartman!

Cattle Ration Tool

By: Brandon Schafer

With what Mother Nature gave us in 2017, chances are that you made hay from any type of forage you could – wheat, corn, weeds, didn't matter. Thankfully, the late rains provided a bit of respite as forages "took off" around August and provided some extra grazing or another cutting.

A wide variety of hay likely means a wide variety of feed value in those bales. As we know, it is always best to sample your hay in order to know exactly what you have. However, this doesn't always happen with other pressing matters around the operation. A couple useful tools that I came across, regarding cattle nutrition, are the "UM Beef Cow Ration Balancer" and the "UM Feedlot Ration Balancer." Both of these tools come from the University of Minnesota and can easily be found online by "Googling" the names provided. The program is an Excel workbook and has a very handy instruction page and an EXTREMELY extensive list of feedstuffs (kochia included). The workbook also allows you to input your own feed test values, adjust weather conditions, breed of cattle, weight, stage of gestation and lactation. This, in no way, would replace veterinarian recommendations but at least it can give you a ballpark of when your cattle may become deficient, during winter feeding.

		U of M Beef Cow Ration Balancer																		
		Developed by: Mike Boersma																		
		U of M Beef Team																		
		boers010@umn.edu																		
Average Cow Weight (lbs):	1300	Number of Cows:		100																
Stage of Lactation:	Not Currently Nursing a Calf	Duration of Feeding Period (number of days):		120																
State of Gestation:	5 Months Pregnant	Level of Peak Milk Production:		Med Production (20 lb peak)																
Current Body Condition Score (1-9):	4.5	Average Temperature (Day and Night, 'F)		Between 23 and 41'F																
Target Body Condition Score (1-9):	5	Breed of Cows:		Angus																
CLICK HERE FOR BODY CONDITION SCORING INFORMATION		Additional Breed (if any):		(None)																
FEEDSTUFFS:	Price \$/ton	INTAKE			ENERGY			PROTEIN		FIBER				MINERALS						
		As-Fed	DM %	TDN %	NEM Mcal/cwt	NEG %	NEL %	CP %	UIP %	CF %	ADF %	NDF %	eNDF %	FAT %	ASH %	CA %	P %	K %	S %	
Kochia Hay	7	6.3	90	53	53	18	53	14	0	27	0	0	0	1.7	14	1	0.2	0	0	
Sudangrass Hay	16	14.1	88	57	57	25	57	9	30	36	43	67	98	1.8	10	0.5	0.22	2.2	0.12	
Triticale Hay	7	6.3	90	56	56	23	56	10	0	34	41	69	98	0	0	0.3	0.26	2.3	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Proposed Diet:		30	26.7	88.9	55.8	55.8	22.9	55.8	10.4	15.8	33	32	52	75	1.4	8.6	0.57	0.22	1.70	0.06
Requirements, Adjusted for Conditions:			26.6		45.8	42.8			6.3							0.17	0.12	6-3.0	15-4	

Upcoming Winter Workshop



In the past year, the Morton County SCD has been able to partner with the Burleigh County SCD, Dakota Prairies RC&D, and the ND Grazing Lands Coalition to hold some fantastic workshops. The last workshop was this summer and featured Allan Savory.

On February 28th, we will be hosting a Winter Workshop that will center on Soil Health for livestock and/or crop producers. There will be a "Farmer Panel" with representatives from the East and West side of the state (Derrick Dukart and Joe Breker) with a few crop consultants (Mark Huso and Ron Kessel) and Dr. Mark Liebig presenting.

Some of the main topics will be Erosion, Crop Diversity, Cover Crops, Livestock Integration, Planting Green, Weed Control, Salinity and Infiltration. It will be held at Bismarck State College in the Bavendick Room. Keep your eye out for another announcement closer to the February 28th date.



Winter Care for Trees

Winter is fast approaching, and there are a number of things a person can do this fall to help maximize the survival of trees through our harsh winters and maximize health and vigor when spring arrives.

- ◆ Rake up or destroy fallen leaves and debris that have accumulated around your trees. Many fungal leaf diseases can survive the winter in these leaves and will quickly establish in your trees come spring.
- ◆ Wrap the lower main stem of young trees to help protect their thin bark from winter damage such as sun scald, winter burn, and rodent damage.
- ◆ Prune any dead or damaged branches. This will help reduce overwintering sites for pests and diseases. Any living wood should be pruned after the tree has gone dormant, but while they still have leaves is a great time to mark any living branches to be pruned later.
- ◆ Watering is a great idea. Giving trees water in the fall, even after they have dropped their leaves, is a great way to help improve survival through the winter. A good rule of thumb is to weekly give 2 gallons of water per inch of stem diameter.
- ◆ In addition to caring for the trees, make sure to clear off any dirt and debris that may have accumulated on your weed barrier fabric. It doesn't take much organic matter for weeds to start growing on top, and once they do their roots can penetrate the fabric and ruin it quickly.

Preparing for Spring Planting

If you are thinking about planting trees in the spring, now is the best time to get started. If you want to have the district plant for you, contact us and set up an appointment to get started. Once you have met with us and we have figured out where the rows will go, there are a few things you should be doing to get ready for the spring.

- ◆ Get your utilities marked. The district has a policy that we will not plant on any easements, and we have to give 10 feet on either side of any utility lines. We also have to stay at least 100 feet off any roads, and some other situations warrant additional setbacks. In addition, we may refuse to plant if your area is in native range and certain criteria are not met. The point is, until we know where all of these things are, we can't truly know where we can put your trees and you should not start your site prep until you have talked with us.
- ◆ Prepare the ground. In meeting with us we will decide if it would be best to do a no till planting or to work the soil. If the soil is going to be worked, start doing that this fall. You will want the soil to be the consistency of a vegetable garden- not lumpy, but not a powder either. This can take a lot of time to do, so you want to start this fall. If it is a no till site, it needs to be sprayed multiple times and mowed.
- ◆ Mark your rows. If the rows aren't marked, we don't know exactly where to put the trees! Even though we have met on site and discussed the plan for a while, without the rows being marked we have to make a guess on site where to put them, and that might end up with them not being exactly where you had imagined. In addition, we have to take the time to mark the rows so we know where each one will be, and there will be an extra charge if we have to do that on site.

The importance of the preparation for tree rows should not be underestimated. Even the best plans with the best trees can be hindered if the site is poorly prepared.

If you have any questions with any of these steps, please contact Adam, our District Technician, at 701-667-1163 ext. 3.



Good Site Prep



Good Site Prep



BAD SITE PREP

Tree of the Quarter



Ohio Buckeye (*Aesculus glabra*)

The Ohio buckeye, also known as Horse chestnut, is a deciduous tree that can be found in certain parts of the state. It is a medium sized tree with an oval to rounded crown. It can grow to be 20-40 feet tall in the most favorable conditions, although we generally do not see this type of growth in our area. It is a tree that is not drought tolerant and requires a fair amount of water. If it is on a drier site it can sometimes become more of a thicket-forming shrub. They have a unique palmate compound leaf that usually has 5 leaflets. The leaves are a medium green color that turn yellow to amber in the fall. There are some trees in North Dakota that produce a bright red leaf in the fall. The flowers are greenish yellow and form on an upright stem, and produce a dark brown, glossy nut.

Ohio buckeyes are a tree whose size and shape would lend itself to use in a windbreak and riparian planting. However, because of its need for water, it is a tree that tends to struggle in our area of the state. Because of this it is used more often as a landscape or specimen tree in a yard. This is especially true because of its unique leaf structure along with the flowers and fall colors it can provide.

One cause for concern with the buckeye is the toxicity of the fruit it produces. While the seed that it produces is valued by some wildlife species, all parts of the plant are highly toxic if ingested by humans or livestock. Some of the symptoms if ingested can include vomiting, diarrhea, muscle weakness, and paralysis. Because of this it has been removed from many agricultural landscapes and is primarily found in forested areas with no livestock, or as an ornamental tree. Although it is toxic, some people carry the buckeye seeds as good luck charms.



Spooky Facts

There are an average of 50,000 spiders per acre in green areas!!!

By eating pest insects, bats save the U.S. agriculture industry an estimated \$3 billion per year.

Happy Halloween!



Morton County Soil Conservation District
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Mandan, ND 58554-1593

www.mcsd.com
Phone: 701-667-1163 ext. 3

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All Programs and Services of the Soil Conservation District are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, marital status, age, or handicap.



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K2S Engineering Inc.—Ypsilanti, ND
Earth Energy & Water Systems, Inc.—New Salem, ND
PAN AG—Mandan, ND

Upcoming Events

November

9th—SCD Board Meeting @ USDA Service Center, Mandan
10th—Veteran's Day Holiday—Office Closed
19th-21st—NDASCD Annual Convention @ Ramkota in Bismarck
23rd—Thanksgiving Day Holiday—Office Closed

December

25th—Christmas Day Holiday—Office Closed
SCD Board Meeting @ TBD

January

1st—New Year's Day Holiday—Office Closed
11th—SCD Board Meeting @ USDA Service Center, Mandan
15th—Martin Luther King, Jr's Birthday Holiday—Office Closed

"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."

— Aldo Leopold