Growing Conservation and Successful Ranch Communities Through Grassbanking



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You cannot save the land apart from the people or the people apart from the land. To save either, you must save both.

- Wendell Berry



Matador Grassbank



Matador Grassbank Area









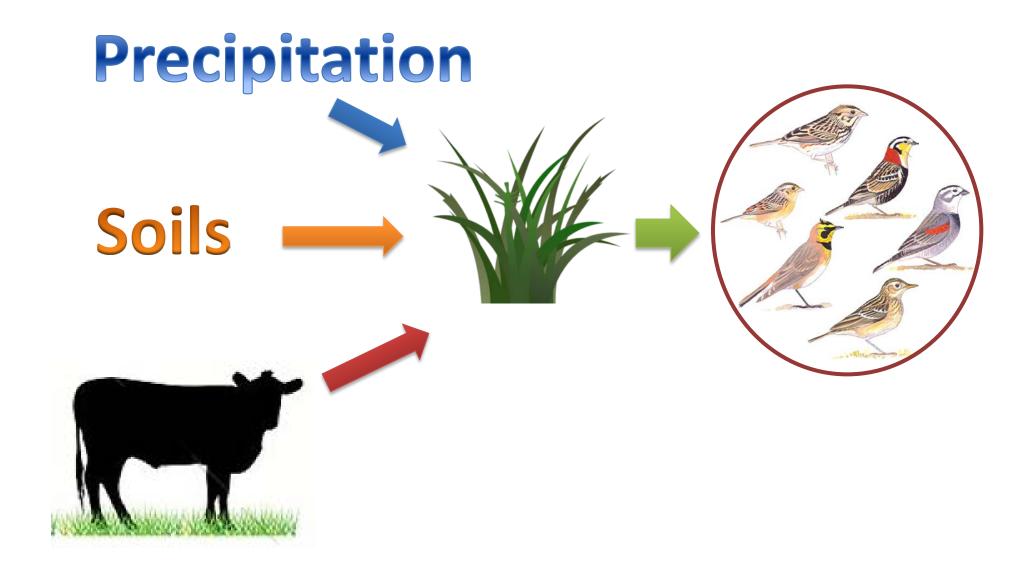








Northern Great Plains: Herbivory, Precipitation, and Soils interact to influence grassland bird habitat selection





The Primary Threat is Conversion to Cropland



Northern Great Plains

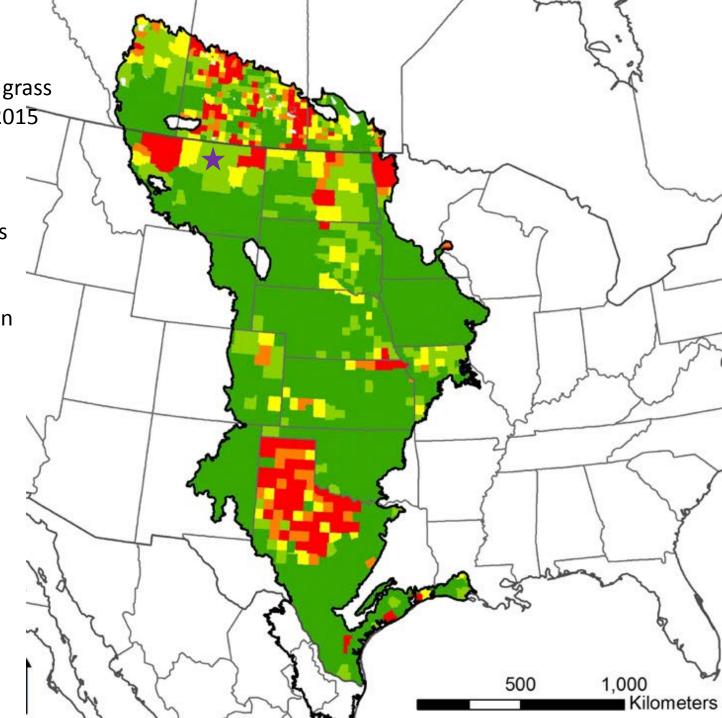
• 3.3 million acres of grass to crop from 2011 to 2015

- WWF, 2016

• Rate of loss exceeds the Amazon

 Expansion mostly on highly erodible soils

- Lark et al. 2015



Grassland Bird Species	Avg. annual % change since I 966	Population Loss
	No har alle	
McCown's Longspur	-5.3%	-91%
Chestnut-collared Longspur	-4.3%	-86%
Lark Bunting	-4.0%	-84%
Sprague's Pipit	-3.5%	-80%
Loggerhead Shrike	-3.2%	-77%
Baird's Sparrow	-3.0%	75%
Mountain Plover	-3.0%	-75%
Grasshopper Sparrow	-2.5%	-68%



Goal = Keep Grass in Grass





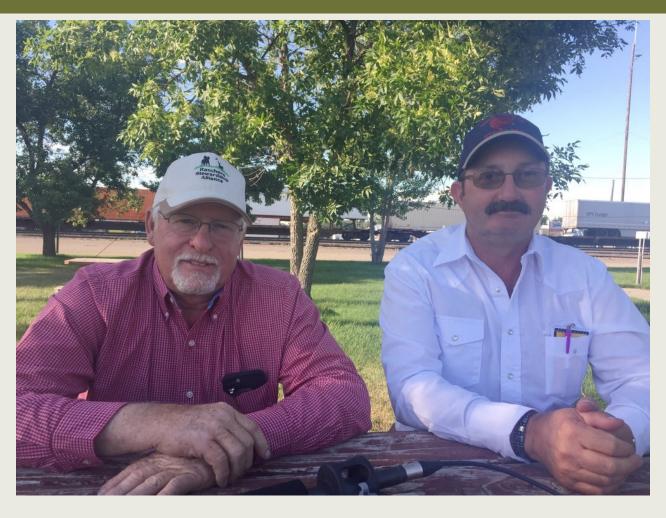
Goal = Keep Grassland Stewards on the Land



- Retain family ranches
- Support transition
 - Purchased conservation easements
 - Beginning rancher program little to no fee land, but significant cattle ownership and interest in buying a ranch



Matador Grassbank Origin



Began in 2003 during the middle of a 7 year drought



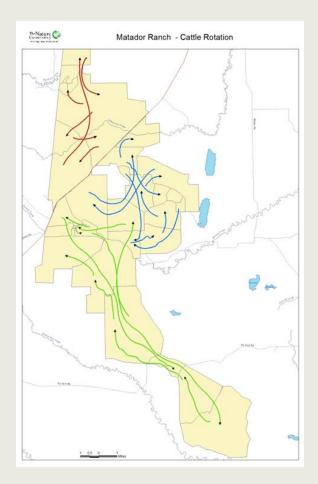
Matador Grassbank Principles – established 2005

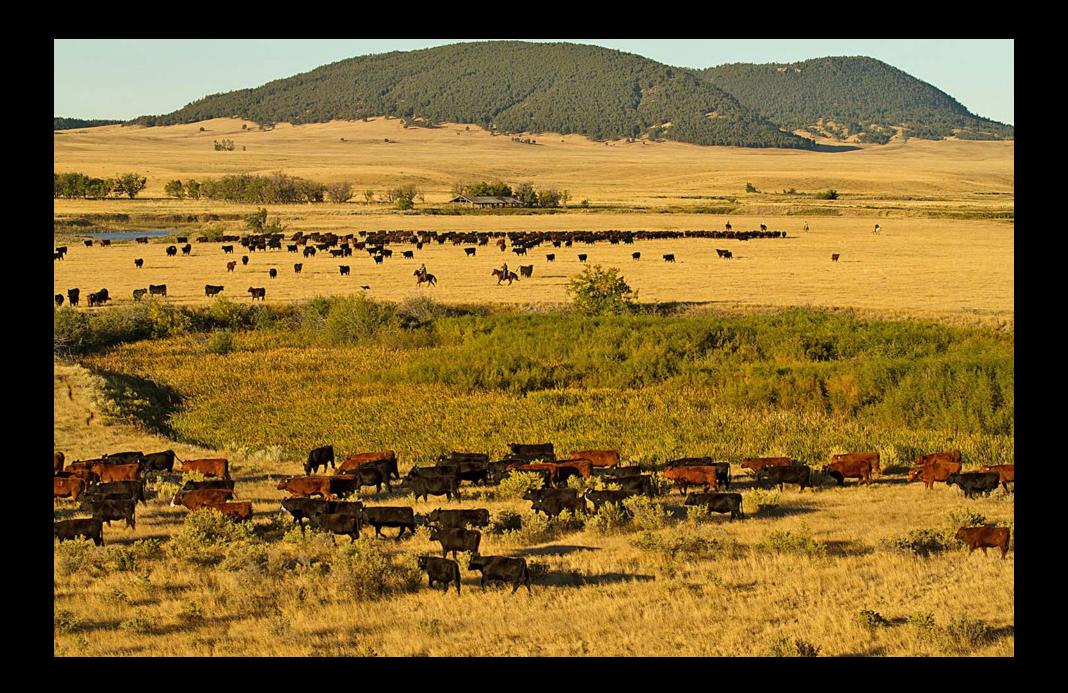




Grassbank 101

- Grassbank = discount the cost of forage on Matador to incentivize conservation actions on member ranches
- TNC Leases Grass to Ranchers based on conservation values on their home ranches
- TNC maintains fencing and water. TNC develops grazing plan in winter with rancher review. Adaptive over grazing season.
- Three cattle herds (2 cow/calf of 500 each; 1 yearling heifer of ~1,200). Each herd has blended ownerships. Each ranch brings 1 bull for every 25 cows/heifers in a herd.







Grassbank Discounts

Market-based Grazing Rate = \$26/ cow-calf pair/month (AUM)

Discounts:

- Running Livestock in Common: \$2/AUM
 - Recognizes loss of breeding control
- No Sodbusting Tillable Native Range: \$.40/acre
 - On private land with tillable soils
- Approved Ranch Management Plan: \$.10/acre
 - Native range grazed within feed/forage balance, change of season of use, wildlife-friendly fences/structures
- Prairie Dog Towns: \$2/\$4/\$6/acre
 - No poison/shooting; price on size to meet species thresholds
- Sage-grouse Habitat and Infrastructure: \$.125/acre
 - Maintain habitat through grazing and infrastructure

Maximum Discount = 50% of Grazing Bill



Example of Grassbank Discounts

Discount Amounts

No	Grazing	Weed	Sage-	Prairie Dog		
breaking	Plan (ac)	Prevention	grouse (ac)			70+
(ac)				1-14 acres	15-70 acres	acres
				(\$2/ac)	(\$4/ac)	(\$6/ac)
4156	6403		5286	3	110	72

No breaking	Grazing Plan	Weed Prevention	Sage-	Prairie Dog			Subtotal
(.40/ac)	(.10/ac)	rievention	(.125/ac)	1-14 acres	acres	70+ acres (\$6/ac)	Discounts
\$1,662.40	\$640.30		\$660.75	,	,	,	\$3,841.45

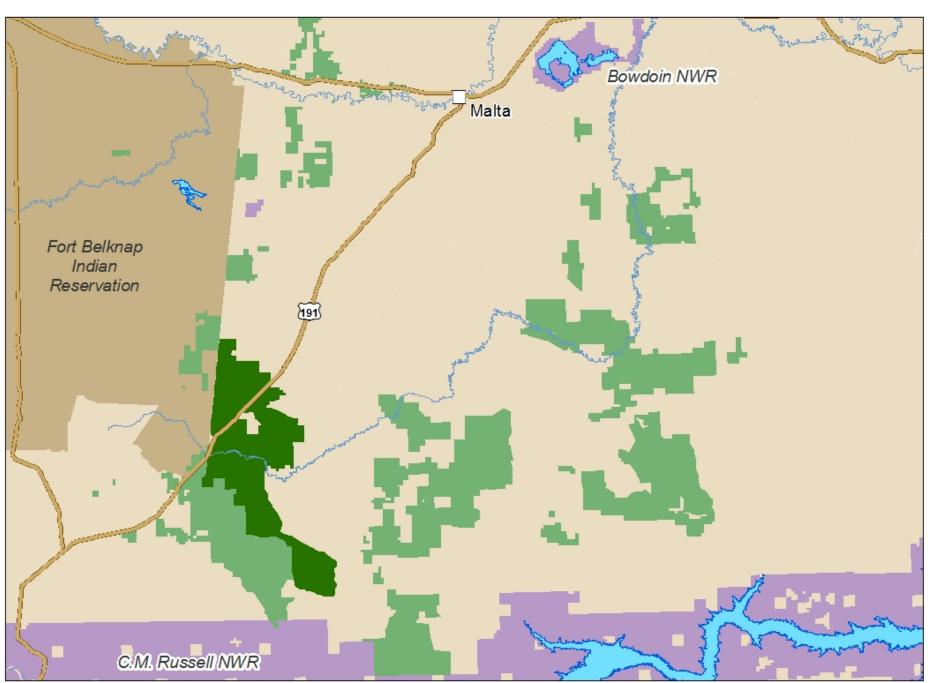


Grassbank Outcomes by the Numbers - 2016

Ownership	Ranch Acres	Native Grassland Tillage Avoided (Acres)	Prairie Dog Habitat (Acres)	Sage Grouse Habitat (Acres)	Discount Value
Grassbank Ranches	263,398	74,247	3,492	66,873	\$59,391.81
Matador Ranch	60,000	23,379	1,949	13,253	
Total	323,398	97,626	5,441	80,126	\$59,391.81

• 2017 –13 Ranches; 7 Beginning Ranchers ~280,000 ranch acres Waiting list of ranches

Matador Ranch and Grassbank Ranches - 2017







How has the Grassbank benefited the Barthelmess Ranch?

- The grass bank allows us to build more flexibility into our grazing operation at home. We have been able to extend our winter grazing season by 30 or more days.
- Although skeptical at first about grazing in common with other ranchers at the grassbank it has been a valuable learning opportunity. All the grassbank members manage a little differently, genetics, feeding, grazing, marketing and stockmanship, by grazing in common it gives us a real world opportunity to compare our management outcomes with our peers.
- We look at ourselves as service providers for the Nature Conservancy of Montana. We are tasked with improving wildlife, and range condition while maintaining our grazing animals. This paradigm shift has facilitated a better understanding of our role as grazing managers in maintaining grass land health in the Northern Great Plains.



How has the Grassbank benefited the community?

- 1. Grass bank members come from a large area around the Matador Ranch. Normally Barthelmess Ranch would not be working with some members because of extreme distance from our ranch to theirs, but meeting at the Matador to move the commingled herds has been a positive benefit for building new community relationships.
- 2. Grass Bank members take pride in the shared successes that everybody has enjoyed, this gives members confidence to try more conservation innovations that would not have been discussed before the development of the Grass Bank.
- 3. The Nature Conservancy has become a valuable neighbor that can be trusted to bring beneficial programs to our community.

- Leo Barthelmess

Questions?

