North Dakota Grazing Lands Coalition

Healthy Grazing Lands – A Natural Resource

The mission of the North Dakota Grazing Lands Coalition is to enhance private grazing land health, productivity and profitability through public and private partnerships and support of voluntary grassroots management.

Integrating Livestock & Cover Crops for Soil Health

Gabe Brown

Bismarck, ND

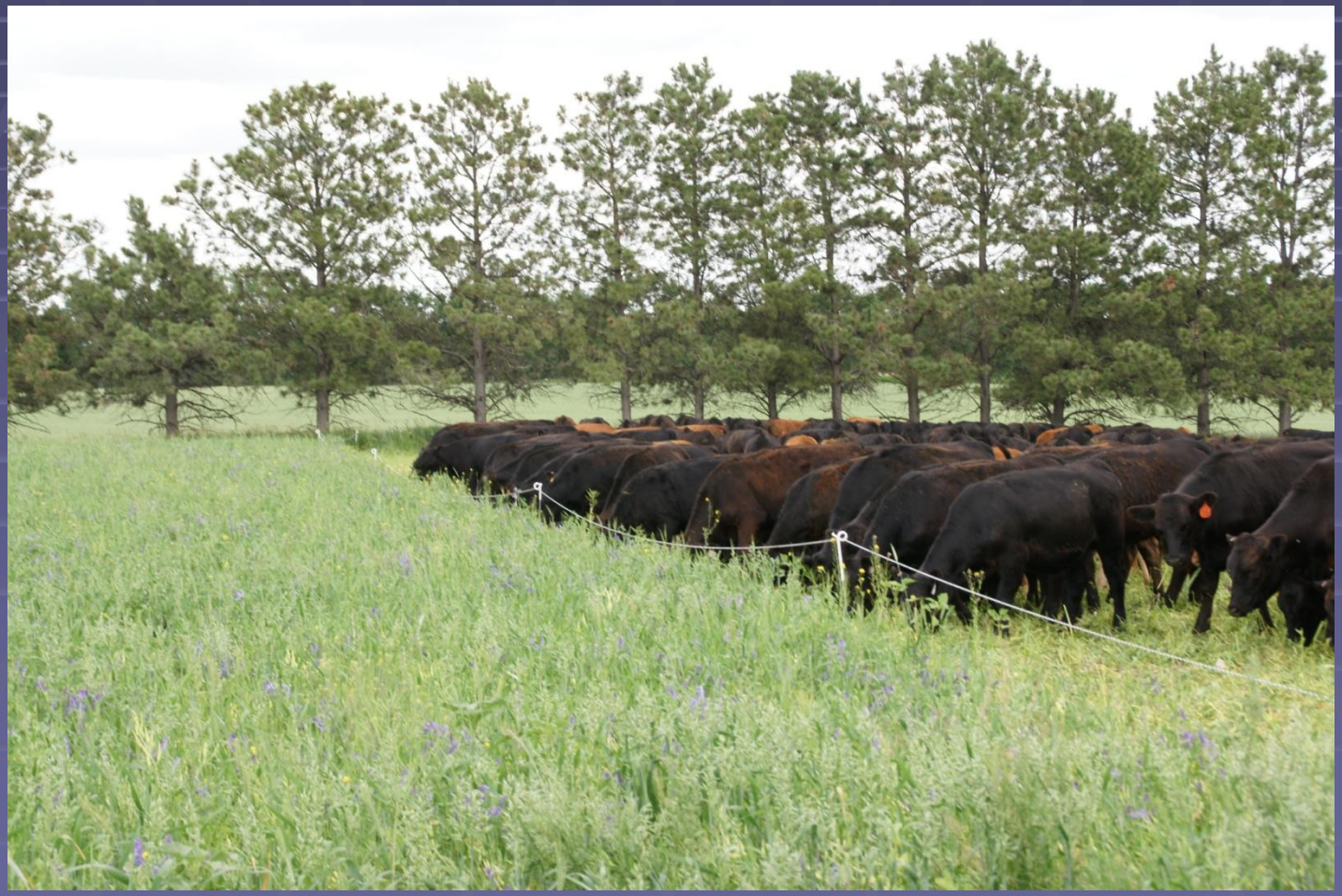
Ranch Goal

Sustainability Through Soil Health

Cool Season Cocktail

Before Mob Grazing
July 2010

July, 2010



After Mob Grazing
July, 2010

Cowpea & Sudan Grass

Warm Season Cocktail

Livestock Integration


Livestock Harvest
Bare Ground?

Extending the Grazing Season with Cover Crops

1st Choice – Winter Grazing

Unacceptable Bare Ground


CROPLAND

Planning Winter Grazing Alternatives

Implementing Winter Grazing Alternatives


July 2, 2009

Baled Grazed

Concentrated Area

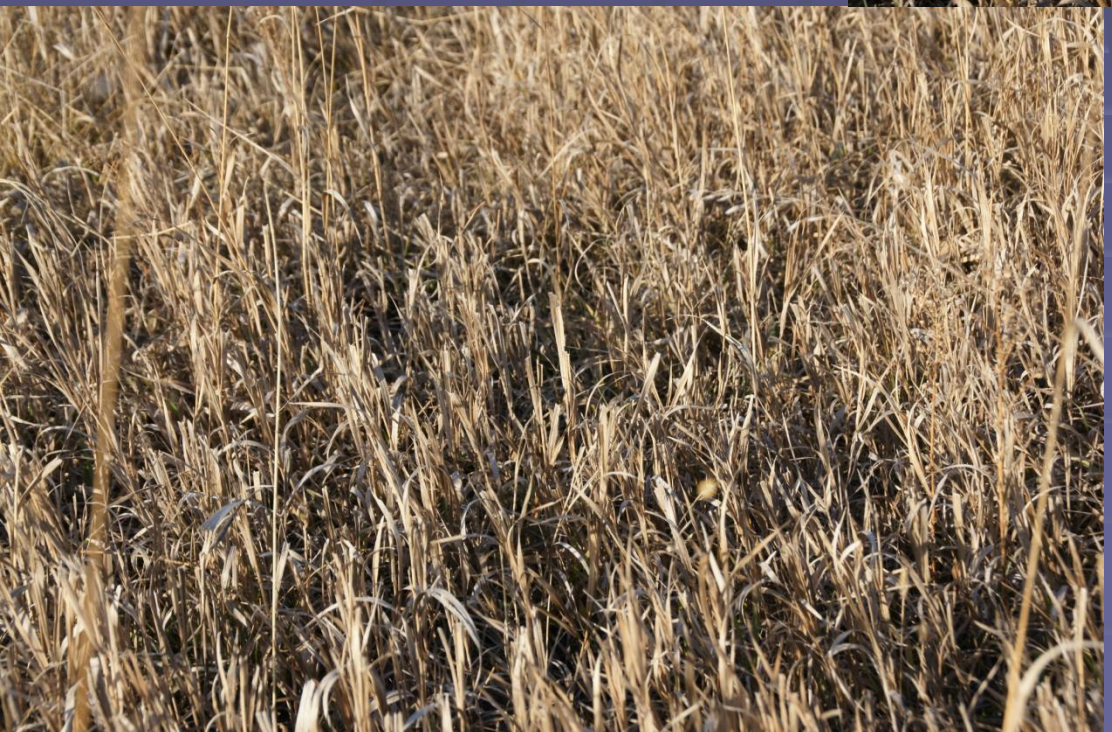
Non-Bale Grazed

Quality & Quantity Comparison

Bale Grazed	Non-Bale Grazed
8573 lbs/ac	2559 lbs/ac
11.9% Crude Protein	7.9% Crude Protein
59.4 TDN	60.7 TDN

Recovery Response

Response from Bale Grazing



Non-Bale Grazed

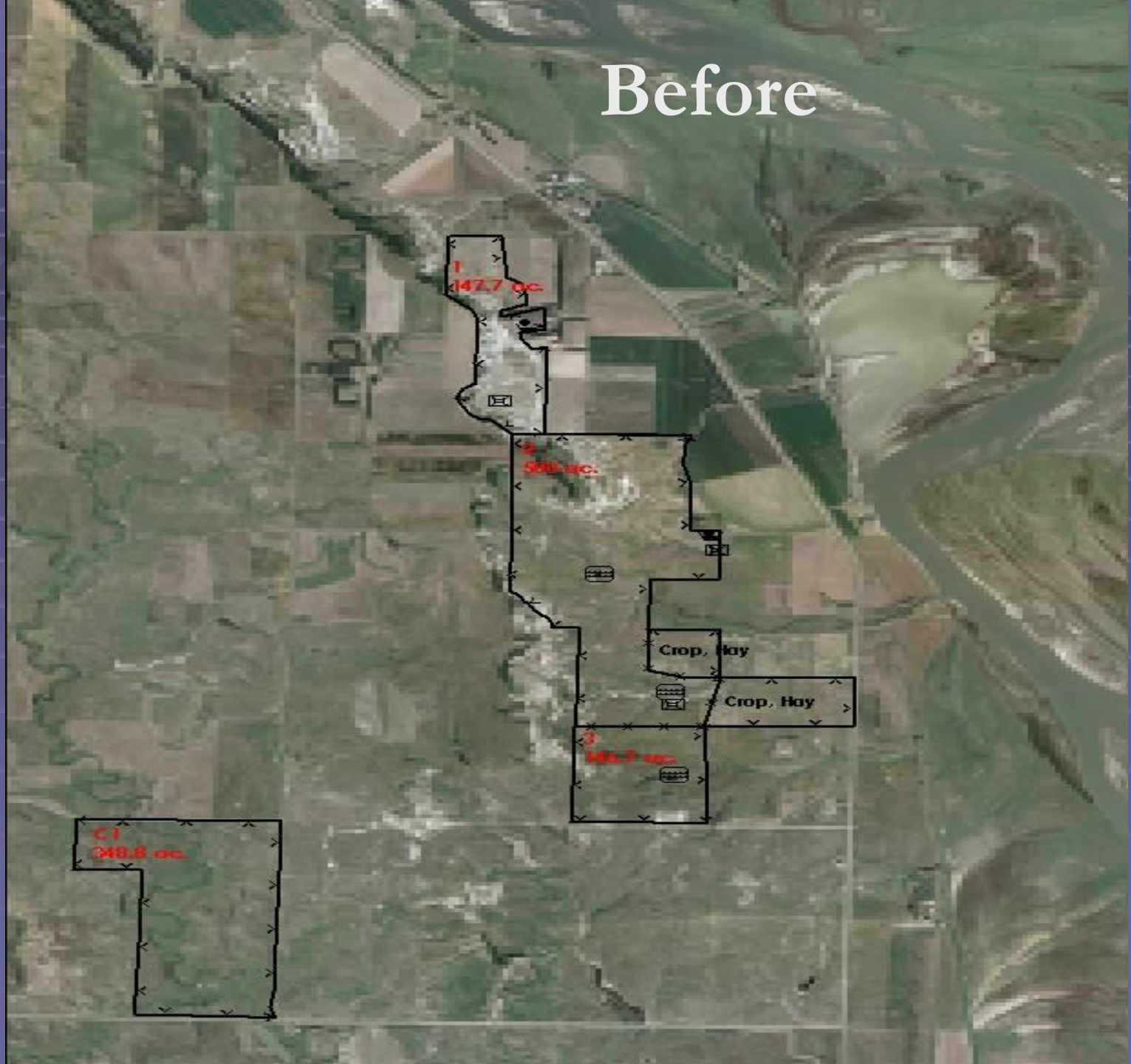
Benefits are Obvious

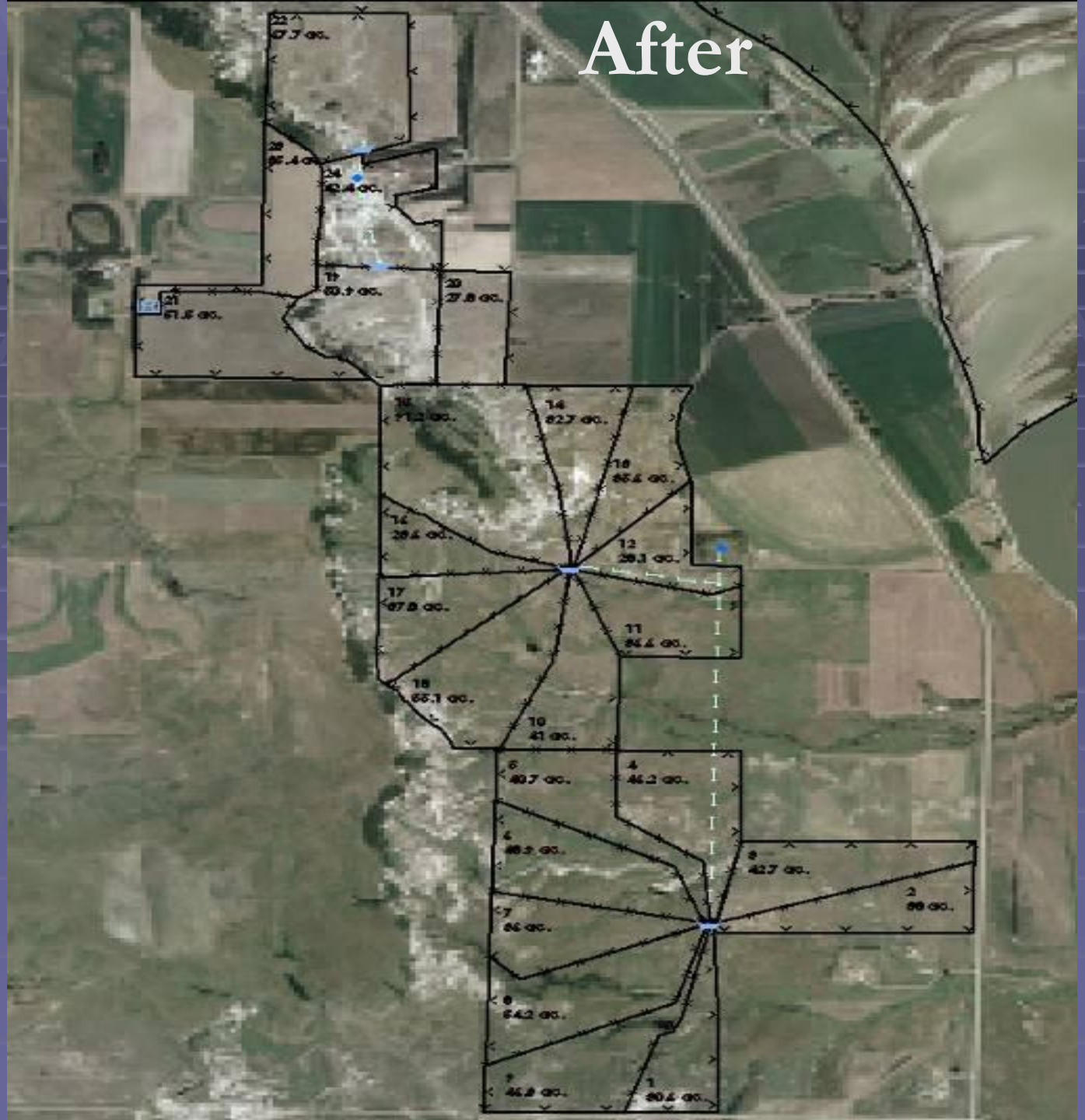
Using Cover Crops to Enhance Soil Health

Ken Miller

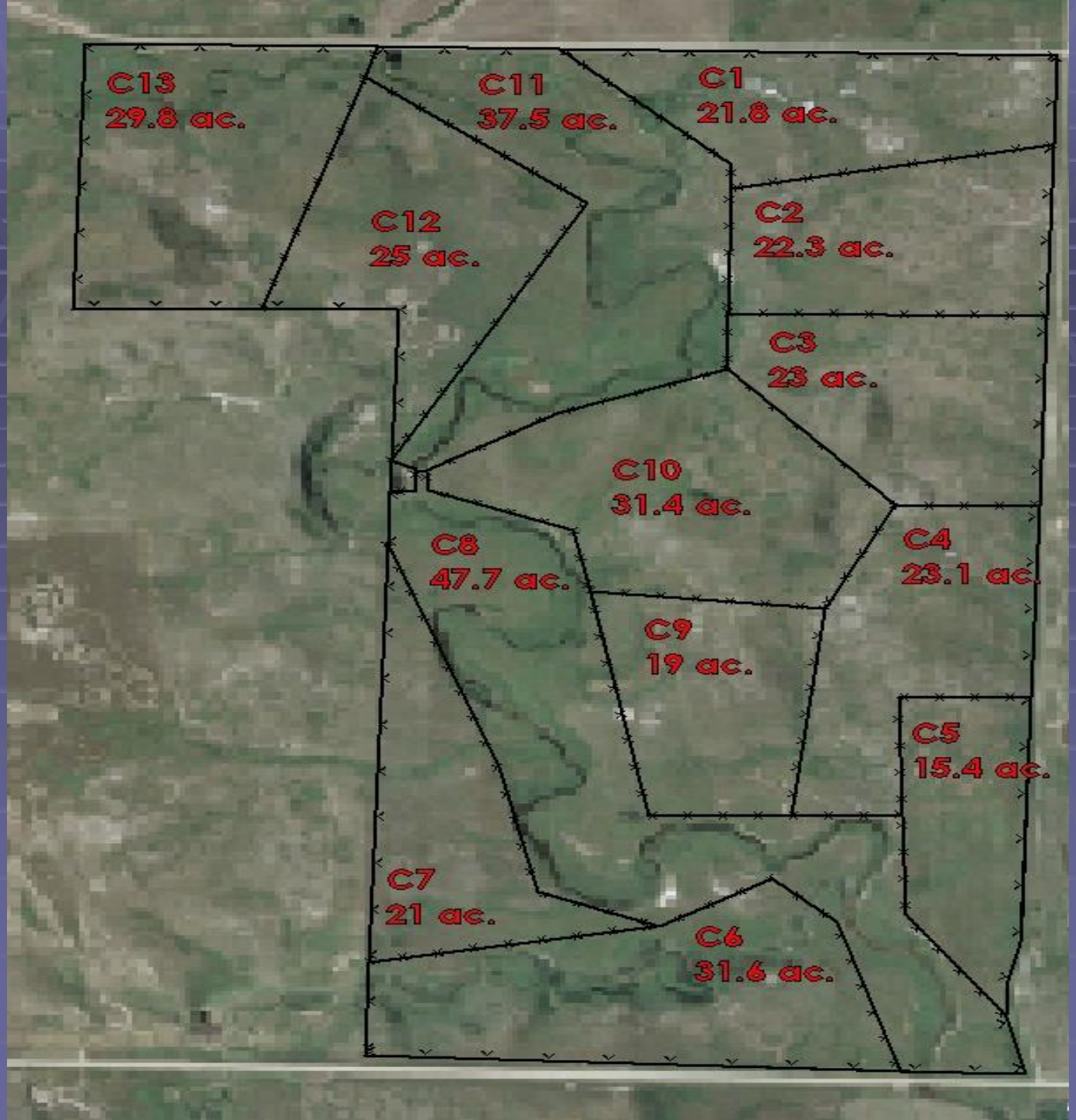
Fort Rice, ND

Before




After


C1
348.8 ac.


C13
29.8 ac.
C11
37.5 ac.
C1
21.8 ac.
C12
25 ac.
C2
22.3 ac.
C3
23 ac.
C10
31.4 ac.
C8
47.7 ac.
C4
23.1 ac.
C9
19 ac.
C5
15.4 ac.
C7
21 ac.
C6
31.6 ac.

Before Grazing Management "Season Long"

Managed Grazing
“Short Duration”

Winter Triticale Pastures 2007

May 9, 2007 60 head

May 11, 2007 60 Head
2 days grazing; 4 acres

May 16, 2007 90 head H-3

May 19, 2007 after 90hd grazed 3 days

May 19, 2007 pivot system

Stock Density

Abby June 9, 2007

May, 11

June 9, 2007 135 head H-1

H-2 June 18, 2007
after 135 hd grazed 4-days

Cover Crop Cocktail Seeded August 2, 2007

Cover Crop Cocktail Mix

Cowpea 10 lbs.@ .60/Lb. =$6.00
Soybean 15 lbs. @ .35/Lb. =$5.25
Proso Millet 8 lbs. @ .28/Lb. =$2.24
Pasja Turnip 1 lb. @ 2.05/Lb.. =$2.05
Forage Radish 1 lb @ 2.40/Lb =$2.40
Sweet Clover 1 lb. @ .81/Lb . =$0.81
Sunflower 1 lb. @ .25/LB. =$ .25

Total Cost / Acre =$19.00

Early September

Late September

September 23, 2007

Turnip and Radish Re-growth Nov.1, 2007

Barley Crop 2008

April 18, 2008

Harvest July 22, 2008

Seeding July 26, 2008

September 15, 2008

October 4, 2008

Corn 2009

Hayed July 7,2010

Regrowth September

October 29, 2010

November 15, 2009

December 13, 2009

Bale Grazing

January 2, 2010

Electric Fence

6 Days of Feed

Carbon Left Behind

June 4, 2010

Not Baled Grazed June 4, 2010

Soil Health, Priceless…

Winter Grazing

Hettinger Research Center
January 28, 2010

Lance Gartner
Glen Ullin, ND

Can it be done???

- **Depends on type of cows**
  - **Large frame and/or heavy milking**
  - **Small frame and/or easy fleshing**
- **Depends on time of calving**
  - **January – March**
  - **April – June**
- **Depends on how much snow**
- **Depends on your thinking and your resolve**

Management of Grass

- **Try to flash graze winter pasture once during the growing season**
- **Try not to use same pasture in consecutive winters**
- **Try not to overgraze in the winter**
  - **Maintain healthy mineral and water cycles**
- **Allow adequate recovery time before summer grazing**
- **Need to be flexible**

Photo Point

Dec. 2nd – Jan 1st 185 Hd.

5500 Cow **Days/400** Ac = 13.9 CD/Ac 13.9 x $.85=$11.82 /Ac

- 2008 - 1100#
- 2009 - 5900#

Supplement ???

- **Fecals in March ’08 on native prairie**
- **Salt and mineral**
- **No supplement**
- **Meeting protein but short on energy**
- **Looking to supplement energy in very cold or very harsh conditions**

December 2008
4# Corn Screenings

December 2008

December 2008

February 2008

Water Source

Why Winter Graze???

- **Reduce labor year around**
- **Reduce machinery cost**
- **Simplify**
- **Get your cows working for you instead of you working for your cows**