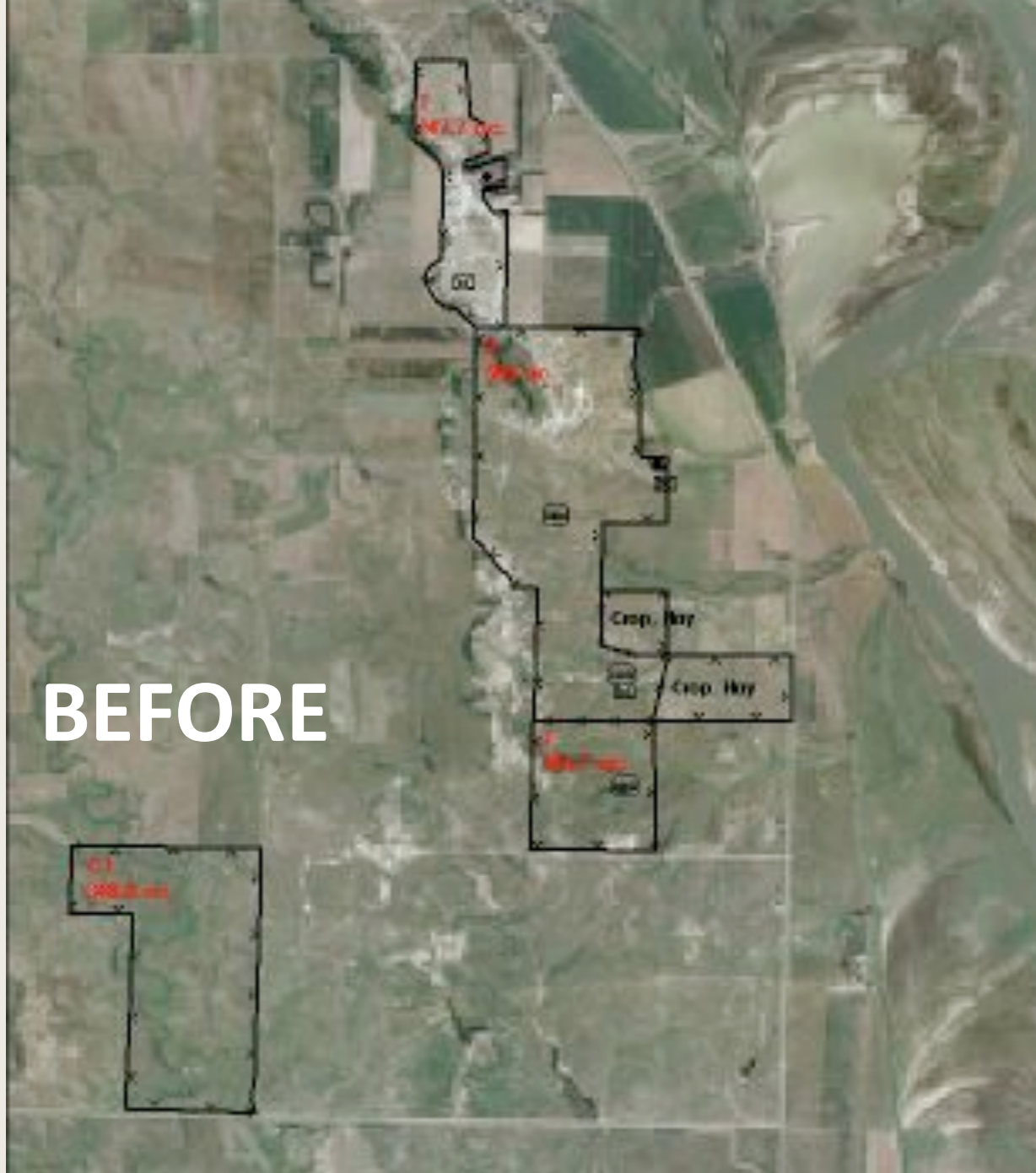


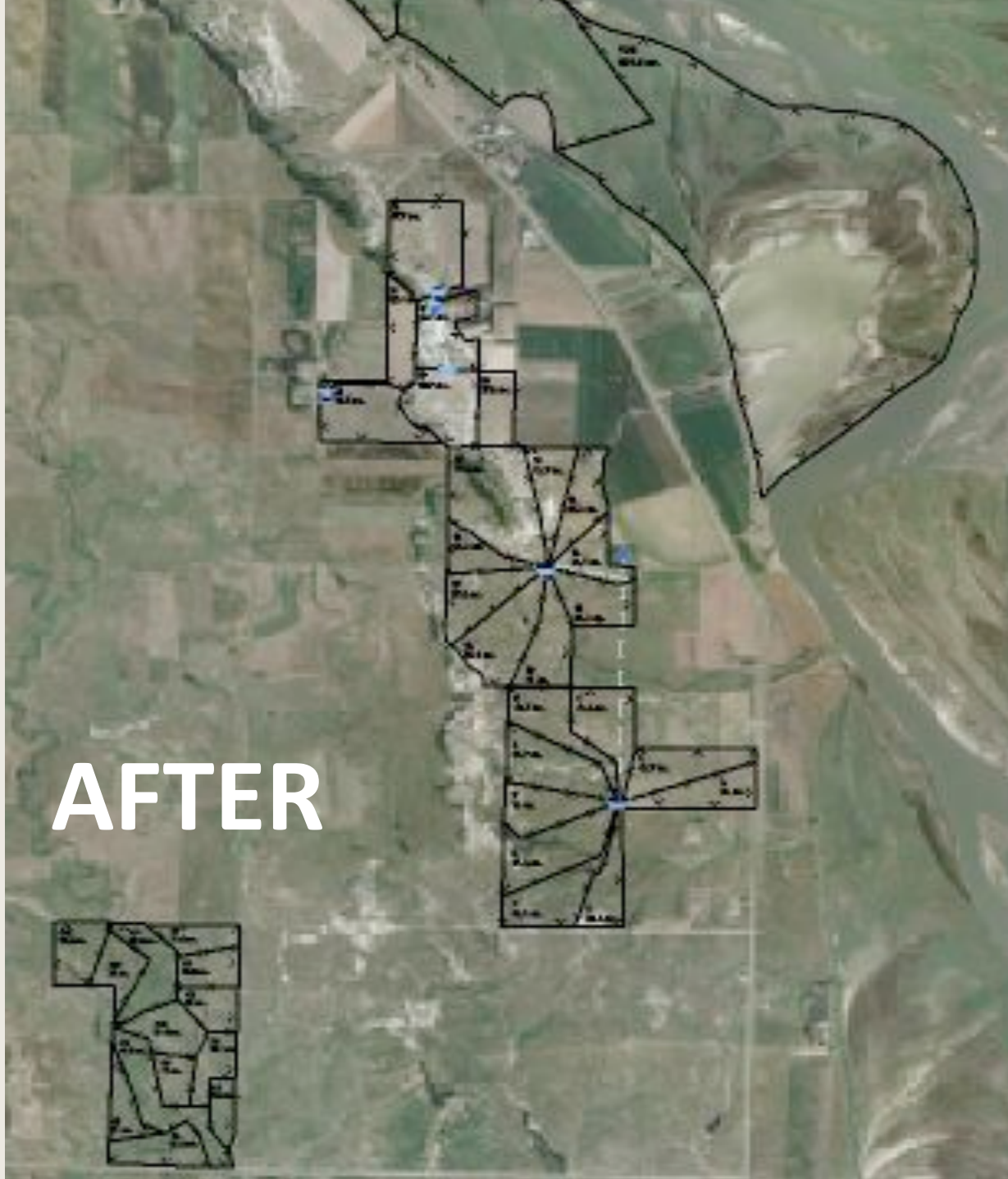
# Grazing Alternatives to Create Soil Health

Ken Miller



**BEFORE**

**AFTER**



# High Stock Density







# Irrigated Pasture System



# Spring 2007





May 9 , 60 head





May 11, 60 Head 2 days grazing  
4 acres



May 11 H-2, 9 acres





May 16 90 head H-3





May 19 after 90hd grazed 3 days



# May 19 pivot system





# High Stock Density on Pivot





# Abby June 9



June 9 135 head H-1





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





# COVER CROP COCKTAIL SEEDED AUGUST 2



# EARLY SEPTEMBER





# SEPTEMBER 23





# GRAZED 22 ACRES, 7DAYS 122 HD



# High Nutrition





# Forage Left



# Late November





# Fall 2006 Expenses

## Winter Triticale

**\$ 14.00 Seed Cost**

**\$ 10.00 Seeding Cost**

**\$ 10.00 Chemical Cost**

**\$ 7.50 Starter Fertilizer 50#**

**\$ 26.50 Urea Fertilizer 100#**

**\$ 30.00 Land Cost**

**\$98.00 Total / Acre Expense,**

**Triticale**

# Expenses

## Cover Crop Cocktail

**\$ 20.00 Seed Cost**

**\$ 10.00 Seeding Cost**

**\$ 10.00 Chemical Cost**

**\$ 40.00 Acre Expense Cover Crop**

**\$ 138.00 / Acre Total Expense  
for 2 crops**



# **Income From Grazing**

## **Winter Triticale & Cover Crops**

**2598 Grazing Days Winter Triticale**

**1222 Grazing Days Cover Crop**

**3820 Total Grazing Days**

**3820 days x 2 lbs /day gain =**

**7640 lbs of beef @ \$1.00 =**

**\$7640.00 ÷ by 22 acres =**

**\$347.00 Gross Income – \$138.00 Expense =**

**\$209.00 Profit / Acre**

# Barley Crop 2008





# April 18, 2008



**June 9, 2008**

**Fertilized  
North Field**



**No Fertilizer  
South Field**





# Harvest July 22, 2008





North Field

South Field

No

Cover Crop

Cover Crop

**Fertilizer**

Yield 65 bu/ac

65 x 5.00 =

**\$325 Gross Income**

100# Urea 46-00

50# Starter 12-34-5-6

Fertilizer cost \$44.00/ac

**\$281/Acre**

**No Fertilizer**

Yield 85 bu/ac

85 X 5.00 =

**\$425 Gross Income**

**Difference +\$144/ac**

# Seeding July 26, 2008





# October 4, 2008





# Corn Seeded May 23, 2009



# December 13, 2009





# Cool Season Mix



- Forage barley 48 lbs
- Field pea 40 lbs
- Hairy vetch 12 lbs
- Pasja turnip 1 lb
- Radish 2 lbs
- Rye grass 2 lbs
- Sunflower 2 lbs
- Sweet clover 1 lb

# Cool Season Mix



July 7, 2010





# August 17, Regrowth



# Cool Season Mix





# Rejuvenating Tame Grass Pastureland





# Diverse Cocktail Mix



Cow Pea	10 #
Soybean	15 #
Pearl Millet	6 #
Sudan Grass	3
#	
Corn	0.5
#	
Sunflower	2
#	

# August 10, 2009





# November 15, 2009



# August 17, 2010





# Cowpea and Soybean with Nodules



# Grazing Cover Crops

## December, 2010





# 2011 Cover Crop Mix



August 23, 2011





# Economics

- 27 Grazing days, July and August with 44 pairs.
- 5 Grazing days, late November with 80 pairs.
- Total of 63 grazing days/acre on 25 acres.
- Grazed both low and high carbon in the same year to feed different soil biology.



# Bale Grazing





# 6 Days of Feed



# 12 Days Grazing





# Electric Fence



# Have Fun





# Spring Calving Cows



# Fall Pair



# Bale Grazing





# January 5, 2012



January 15, 2012





# Carbon Left





June 4, 2010



June 4, 2010



# Area Not Bale Grazed





# Baled Grazed

## Concentrated Area





# Non-Bale Grazed



# Quality & Quantity Comparison

## Bale Grazed

- 8573 lbs/ac
- 11.9% Crude Protein
- 59.4 TDN

## Non-Bale Grazed

- 2559 lbs/ac
- 7.9% Crude Protein
- 60.7 TDN



# Soil Health, Priceless...

