

# Fred Houzvicka

## Northwest of Plevna

Cow/calf operation  
Dryland crop and hayland  
Little Beaver Conservation District board  
member

# Field-northwest of Plevna

## 45 acres

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# Resource Concerns:

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- ◉ Cheatgrass and field bindweed
- ◉ Low fertility
- ◉ “Droughty”

# Kremlin Loam soil

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**Available Water Capacity= 10.8"**

**Depth in Inches**

**Available water storage**

0-12"

2.16"

12-48"

6.48"

48-60"

2.16"

- **Web Soil Survey**

<http://websoilsurvey.nrcs.usda.gov>

# Full Season Cover Crop

*Planted May 2010*

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- *Millet-warm season grass*
- *Peas-cool season broadleaf*
- *Lentils-cool season broadleaf*
- *Turnips-cool season broadleaf*
- *Radishes-cool season broadleaf*
- *Berseem Clover-cool season broadleaf*
- *Oats-cool season grass*
- *Sunflower-warm season broadleaf*

# Field- 45 acres

split into 3-15 acre paddocks

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*Bring in the cattle-*  
50 yearlings

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# Grazing

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Planned to leave 50% of forage on the surface.

50 yearlings grazed 15 ac. for 1 week each.

Electric fence moved the herd to the next paddock.

45 acres split into 3 paddocks ran 50 yearlings for 3 weeks.

**Grazed from July 30<sup>th</sup> until August 21st**



# Livestock added to a full season cover crop





# Results:

- Clean seedbed (few weeds)
- No added nutrients applied to next years crop

Increase organic matter



# Cost benefits

No chem fallow-3 operations @ \$4 each = \$12/ac

Less chance of saline seep development = bonus

Weed control the following year = 1 less herbicide operation = \$4/ac

Less nutrients applied the following year = \$20/ac

Better crop the following year = undefined due to hail

Grazing benefits = \$15/AUM X 30 AUM's = \$450/45 = \$10/ac

**Actual Cost Benefits = \$46/ac**

## **Cost to Seed Cover Crop**

Seed/Innoculant=\$25/ac

Seeding Cost = \$10/ac

Herbicide = \$4/ac

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**Cost to seed cover crop (\$39)**

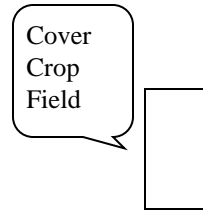
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**Actual Cost Benefits = \$46/ac**

**Net Profit = \$7/acre**

*+ Continuing Soil Health Benefits*

# Pilot Project



**93A**



# Cover Crop Pilot Project— Planted 7/1/2011

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● · Millet (Pearl) 2.5 lbs.

● · Millet (Proso) 2.5 lbs.

● · Sudangrass 3.5 lbs.

● · Corn 2 lbs. *Total of 36 pounds of seed per acre.*

● · Cowpea 9 lbs.

***5 Acres***

● · Soybean 13.5 lbs.

● · Sunflower 1 lb.

● · Turnip 1 lb.

● · Radish 1 lb.



# The tentative plan for the next five years is:

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## **Year 1-2011**

June-Plant full season/warm season cover crop mix  
Late August- Terminate by rolling and/or spray  
September-Plant winter wheat

## **Year 2-2012**

July/August-Harvest winter wheat  
Aug/Sept.-Plant winter cover crop mix (winter triticale/hairy vetch/winter rape)

## **Year 3-2013**

May/June- Terminate winter cover crop mix by rolling and/or spray or grazing  
May/June-Plant crop

## **Year 4-2014**

June-Plant full season cover crops  
August/Sept.-Terminate...hay or graze  
August/Sept.- Plant winter cover crop mix

## **Year 5- 2015**

May-Terminate by rolling and/or spray  
May-Plant corn =)

**Year 1-2011**

*June-Plant full season/warm season cover*  
crop mix

**Week 3**













# Comparing the soil in the cover crop on the left to the wheat crop on the right



September 30th





*October-Terminate by frost*  
*October-Plant winter wheat*

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*Wait for spring*

