

## TSP Grazing Training – Class Exercise

Producer Objectives: Currently grazing 18 cow/calf pairs on 26 acres for 150 days, like to expand the herd and convert an additional 133 acres to pasture using the 103 acres surrounding the pasture and the 30-acre field across the road. The 22-ac. field on the west side of the road will be used for summer annuals and winter bale grazing. The current pasture is Kentucky bluegrass but will be inter-seeded with orchard grass and red clover. The new pastures will also be a mix of orchard grass and red clover with a potential forage yield of 2.5 tons/ac. A rotational grazing system will be implemented with a 3-day residency period in each paddock.

1. Using the following information determine the carrying capacity (in cow/calf pairs) for the total 159 acres:

Average weight of cow = 1300 lbs.  
Forage production = 3.0 tons/year  
Grazing Efficiency = 55 percent  
Intake = 2.6 percent of body weight  
Grazing Period = 180 days

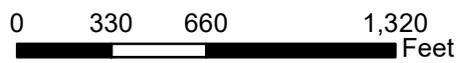
$$\text{Animal Number} = \frac{\text{Total Forage Production/Ac.} \times \text{Ac.} \times \text{Harvest Efficiency}}{\text{Animal Weight} \times \text{Intake Rate} \times \text{Grazing Days}}$$

2. Determine the number of paddocks needed and the average size of each paddock. The longest rest period is 35 days.

$$\# \text{ of Pastures/Paddocks} = \frac{\text{Longest rest period}}{\text{Residency period} + 1}$$

3. How will you position the paddocks according to landscape and soils, animal movement and haying efficiency? How will you provide water?
4. Are there any sensitive areas that should be grazed separately because of wetness or vegetation?

# Existing Pasture



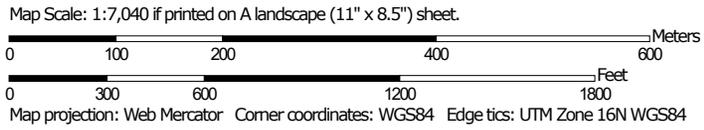
## Legend

 Current Pasture

Soil Map—Columbia County, Wisconsin



Soil Map may not be valid at this scale.



## MAP LEGEND

### Area of Interest (AOI)

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### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Columbia County, Wisconsin

Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 29, 2011—Sep 10, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FrB	Friesland fine sandy loam, 1 to 6 percent slopes	7.2	3.3%
GeB	Grellton fine sandy loam, 1 to 6 percent slopes	8.7	4.0%
LaB	Lapeer fine sandy loam, 2 to 6 percent slopes	86.7	39.6%
LaC2	Lapeer fine sandy loam, 6 to 12 percent slopes, eroded	28.9	13.2%
LaE2	Lapeer fine sandy loam, 20 to 30 percent slopes, eroded	2.3	1.1%
MnB	Military fine sandy loam, 2 to 6 percent slopes	4.4	2.0%
OkB	Okee loamy fine sand, 2 to 6 percent slopes	33.6	15.4%
PfC	Plainfield loamy fine sand, 6 to 12 percent slopes	0.2	0.1%
PkB	Plainfield loamy fine sand, loamy substratum, 2 to 6 percent slopes	6.8	3.1%
PuB	Puchyan loamy fine sand, 2 to 6 percent slopes	2.9	1.3%
RoC	Rodman gravelly loam, 2 to 12 percent slopes	5.2	2.4%
RoD	Rodman gravelly loam, 12 to 20 percent slopes	4.8	2.2%
RtC2	Rotamer loam, 6 to 12 percent slopes, eroded	3.7	1.7%
SbB	Salter fine sandy loam, 2 to 6 percent slopes	2.7	1.3%
SnB	Sisson fine sandy loam, 2 to 6 percent slopes	0.3	0.1%
SnC2	Sisson fine sandy loam, 6 to 12 percent slopes, eroded	0.1	0.0%
SnE	Sisson fine sandy loam, 20 to 30 percent slopes	0.7	0.3%
WoC2	Wyocena loamy sand, 6 to 12 percent slopes, eroded	12.4	5.7%
WoD2	Wyocena loamy sand, 12 to 20 percent slopes, eroded	4.6	2.1%
WxC2	Wyocena sandy loam, 6 to 12 percent slopes, eroded	2.6	1.2%
<b>Totals for Area of Interest</b>		<b>218.9</b>	<b>100.0%</b>