Grazing Plans for Wetlands

Using livestock to meet ecological objectives
WHAT IS A GRAZING PLAN?

- Objectives and Goals
- Resource Inventory
- Forage Inventory
- Animal Inventory
- Forage/Animal Balance
- Grazing Schedule
- Contingency Plan
- Monitoring Plan
S.M.A.R.T GOALS AND OBJECTIVES

- Specific
- Measurable
- Achievable
- Realistic
- Timely
S.M.A.R.T GOALS AND OBJECTIVES

- Convert this field into productive grassland.
S.M.A.R.T GOALS AND OBJECTIVES

Implement grazing strategy to convert this piece of land to a productive grassland with a mixed grass prairie plant community that produces 2500 #/ac within 5 years.
S.M.A.R.T GOALS AND OBJECTIVES

• Seed this piece of land to a diverse mixture of grasses, grass-likes, forbs and native shrubs which approximates the reference plant community as listed in the ecological site descriptions to achieve a productive grassland which will produce 2500 #/ac and established and ready to graze within 5 years.
Reduce the amount of reed canary grass and increase the amount of high seed producing forbs, annual grasses and other species highly utilized by waterfowl.
Reduce the amount of reed canary grass to less than 10% of the plant community (production by weight) through a combination of grazing, mechanical treatment and chemical treatment and increase the amount of high seed producing forbs, annual grasses and other species highly utilized by waterfowl to 80% or higher within 3 years and to maintain the amounts of desired plants each year forward.
RESOURCE INVENTORY

• Ecological Sites
• Plant Communities
• Sedimentation
• % wetland that is deep wetland
• % of shallower wetland
• Water locations/fence locations
FORAGE INVENTORY

- Average forage production
- Pasture/paddock/field
- Ecological Site Descriptions (ESD)
  - (Ecological Site Information System)
- Forage Suitability Group Descriptions (FSG)
  - NRCS eFOTG
FORAGE INVENTORY

- Desired Utilization Level
  - Targeted Grazing
FORAGE INVENTORY

• Harvest Efficiency
  • Livestock
  • Insects
  • Wildlife
  • Waste (trampling, fouling, etc.)
FORAGE INVENTORY – HARVEST EFFICIENCY

3000 lbs. forage

• Take Half-Leave Half
  • 50% utilization = 25% Harvest Efficiency
  • 750# of forage would be available to livestock

• Grazing system
  • 60% utilization = 30% Harvest Efficiency
  • 900# of forage would be available to livestock
FORAGE INVENTORY – HARVEST EFFICIENCY

3000 lbs. forage

• Targeted grazing
• 65% Harvest Efficiency
• 35% Trampling and Wastage
• 1950 # forage available
ANIMAL INVENTORY

• How many animals
• What kind of animals
• Age/growth stage of animals
How many AUM’s forage are needed to support the planned animals.

An AU (animal unit) is a 1000 pound cow with a calf.

A 1300 # cow with calf is equivalent to 1.3 AU.
FORAGE / ANIMAL BALANCE

Yearlings: AU value is dependent upon average weight. 0.1 AU per 100 pounds.

Sheep (mature): 0.20 AU

Goats (mature): 0.15 AU

Dry Cow: 0.92 AU / 1000 pounds
How many AUM’s forage are needed to support the planned animals and is adequate forage available.

An AUM is the amount of forage an Animal Unit will consume in a month.

1 AUM = 26-30 pounds / day or 780-912.5 pounds / month
GRAZING SCHEDULE

Timing and Duration of Grazing

- Start Date
- End Date
- Multiple Occupations
# Grazing Schedule

**Number of Days:** 90  
**Planned Grazing Dates:** 4/15 - 7/15  
**Date:** 8/25/2016

<table>
<thead>
<tr>
<th>Field no.</th>
<th>Kind of forage</th>
<th>Acres</th>
<th>AUM Information</th>
<th>Dates are estimates - actual moves should be based upon plant growth which will vary from year to year</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start Date</td>
</tr>
<tr>
<td>R1 Range</td>
<td>160</td>
<td>200</td>
<td>42.55 38.3 Ap3</td>
<td></td>
</tr>
<tr>
<td>R2 Range</td>
<td>100</td>
<td>150</td>
<td>31.91 28.7 Ma4</td>
<td></td>
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<tr>
<td>R3 Range</td>
<td>160</td>
<td>120</td>
<td>25.53 23.0 Jn4</td>
<td></td>
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</tbody>
</table>

**Note:** The table above shows the planned grazing dates for Year #1, starting from April 15th to July 15th. The dates are estimates and actual moves should be based on plant growth which will vary from year to year.
CONTINGENCY PLAN

Description of actions to be taken if forage production is adversely impacted by:

• Drought
• Late Frost
• Grasshoppers
• Hail
• Wildfire
What attributes are you going to measure to:

Determine Success
Set Future Stocking Rates
Set Future Grazing Dates
Incorporate other actions to achieve success.
Reduce the amount of reed canary grass to less than 10% of the plant community (production by weight) through a combination of grazing, mechanical treatment and chemical treatment and increase the amount of high seed producing forbs, annual grasses and other species highly utilized by waterfowl to 80% or higher within 3 years and to maintain the amounts of desired plants each year forward.
GENERAL ITEMS: WATER

- Water does not need to be permanent
- Does need to meet the daily needs of livestock
GENERAL ITEMS: ANIMAL HEALTH

- Foot rot
- Supplementation
- Energy, Protein, Dry Matter
GENERAL ITEMS: GRAZING STRATEGY

- Flexible
- Stock Density
- Be ready to adapt based on last year’s results
GRAZING PLANS ON WETLANDS

- S.M.A.R.T GOALS
- GOOD ESTIMATES OF FORAGE
- MONITOR TO MEASURE SUCCESS
- ADAPT TO ACHIEVE RESULTS
GRAZING PLANS ON WETLANDS

- BE CREATIVE AND DOCUMENT YOUR SUCCESSES