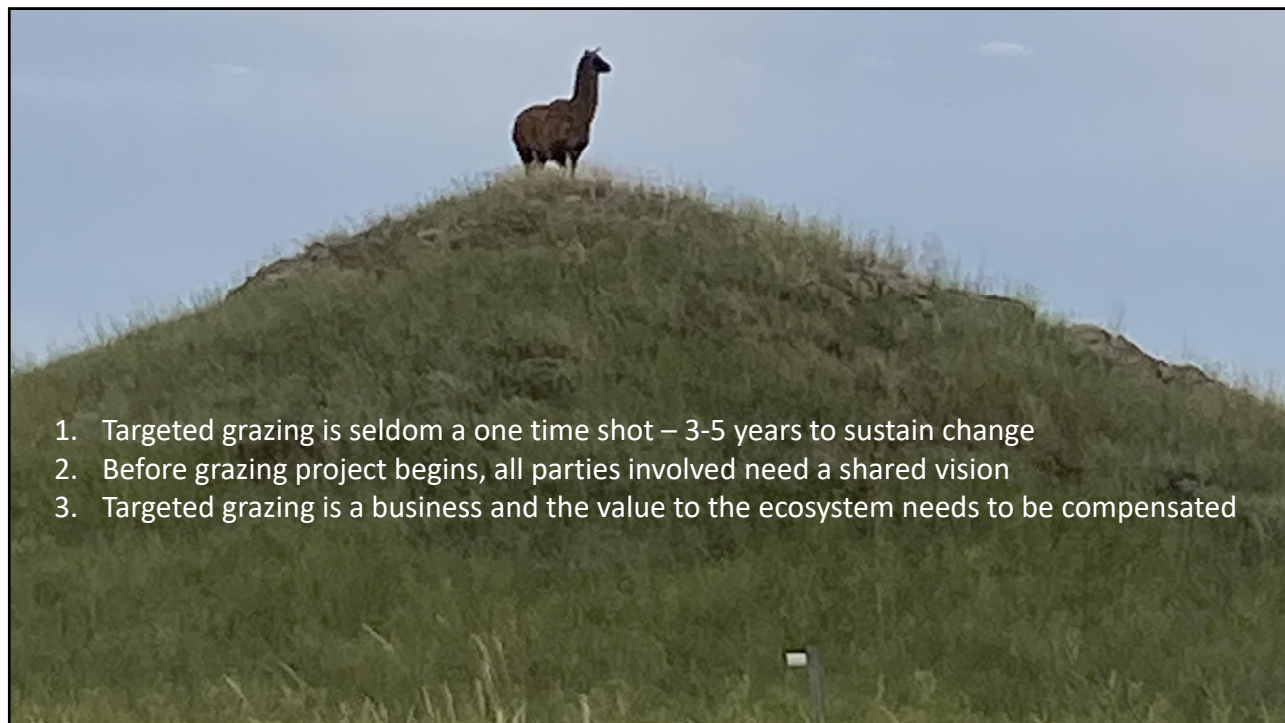


Targeted Grazing of Weeds and Invasive Species

Dave Ollila – SD Soil Health Specialist – January 2025

1



1. Targeted grazing is seldom a one time shot – 3-5 years to sustain change
2. Before grazing project begins, all parties involved need a shared vision
3. Targeted grazing is a business and the value to the ecosystem needs to be compensated

2

Another tool in the tool box: Improved utilization

- sheep ahead?, sheep behind?, sheep & cattle together?



3

Sustainable Agriculture Research & Education (SARE) Grant

USDI – Bureau of Land Management

SDSU Extension

SDGFP

Doug and Carol Pavel (local producers with grazing experience) cooperated in the project.

Goals:

1. To determine the effectiveness of timed grazing upon Dalmation Toadflax infestations
2. Develop planning protocols to make the grazing application “scalable”
3. Learn and identify logistical considerations to successfully apply a grazing treatment.

4

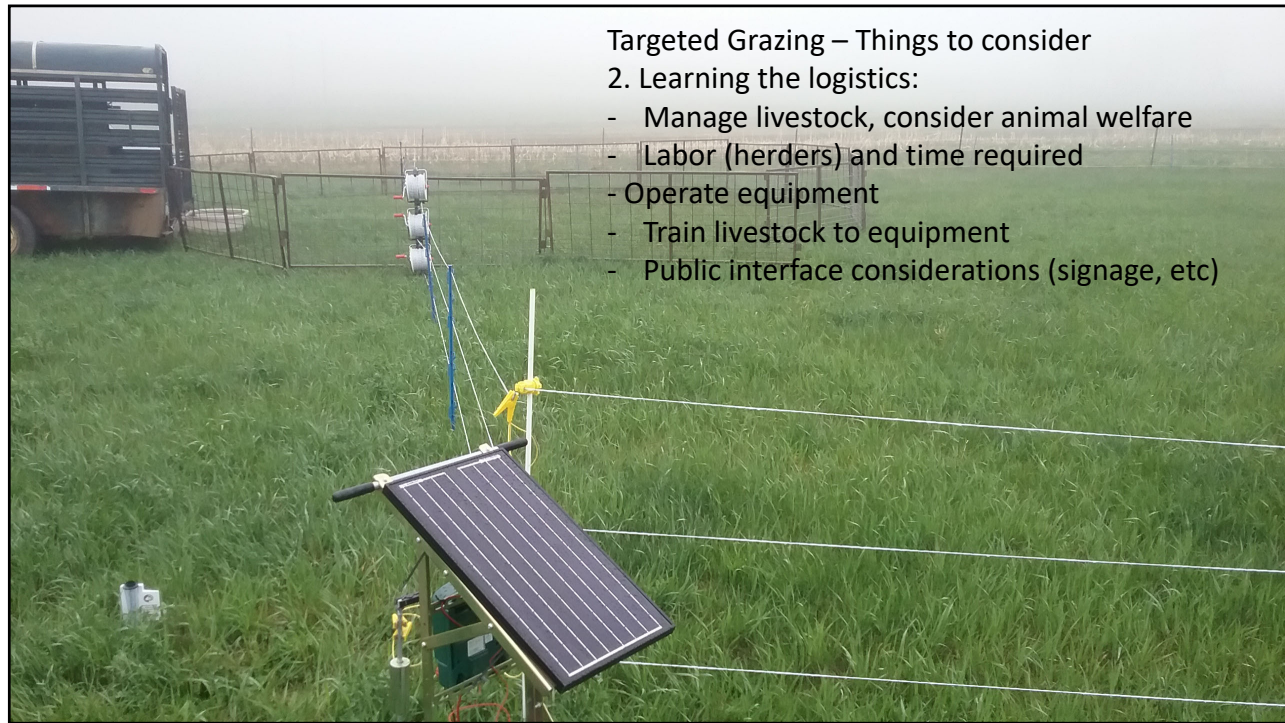


5

Dalmatian Toadflax

- an introduced, invasive, deep-rooted perennial forb, growing up to 3 feet tall. It can spread by seed and lateral roots.
- overall form of the plant is narrow and upright, with multiple stems growing from a single woody base.
- Snapdragon-type yellows are found along the stalk of each stem.
- Mature plants can produce up to 500,000 seeds and seeds remain viable in the soil for up to 10 years.
- Leaves are pale green, waxy-rubbery, dense, alternate, and heart-shaped; the upper leaves clasp the stem.
- Chemical control of toadflax can be difficult. The waxy leaves make it necessary to add an oil-based or silicon surfactant to the herbicide mix.
- Biological controls methods such as stem weevils and targeted grazing with sheep/goats can be used to suppress and reduce infestations.

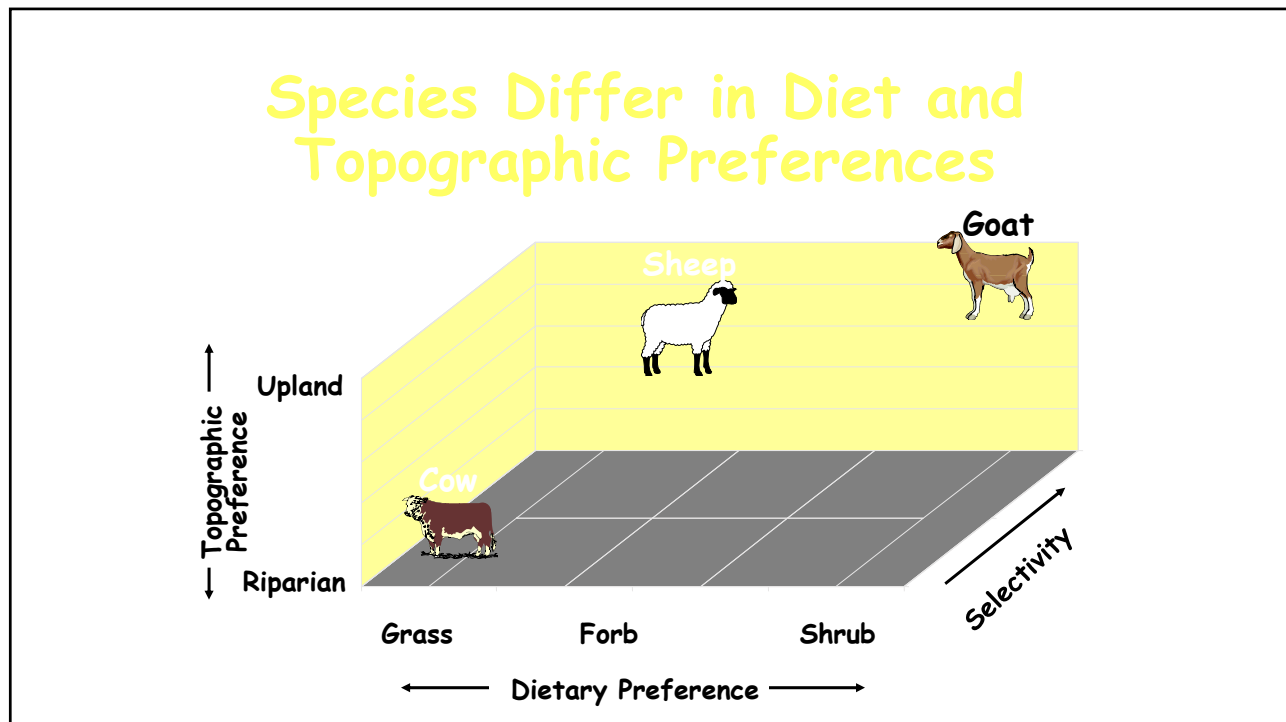
6



7



8



9

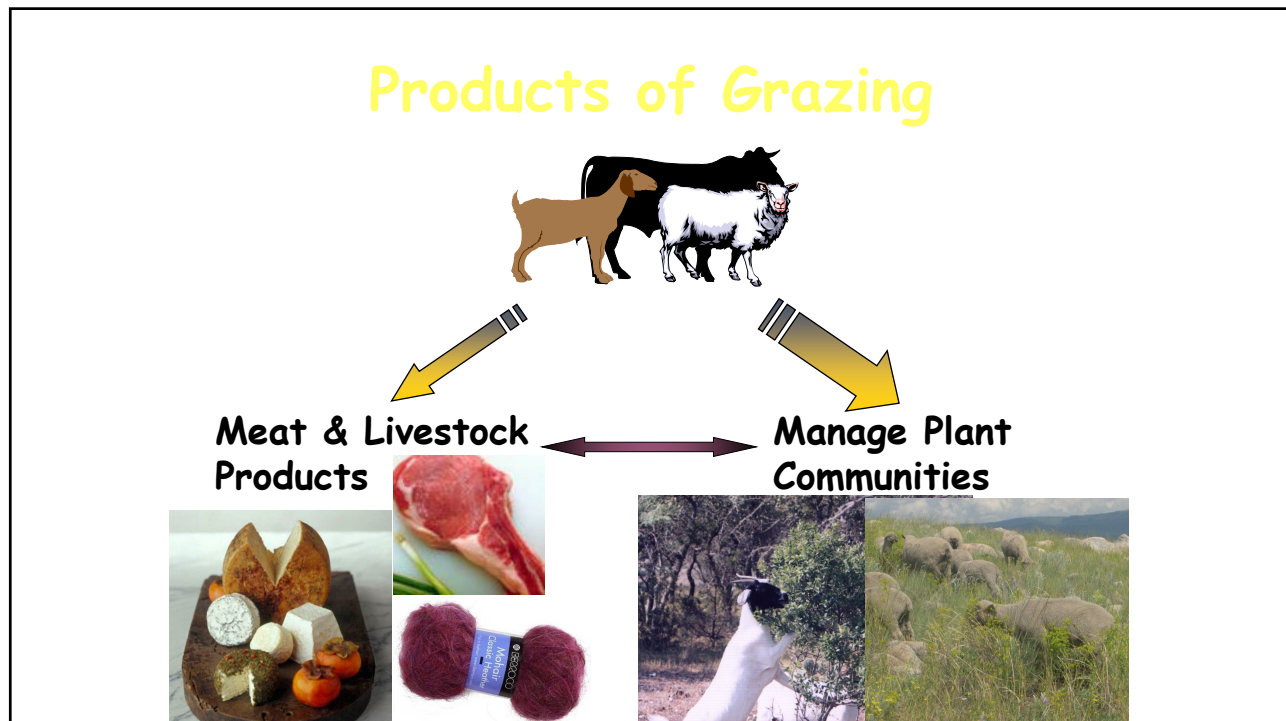


10

Targeted Grazing has a great story to tell by:-

- Improving the ecosystem – both native and cultivated
- Managing weeds
- Can create firebreaks and consume understory to reduce fuel loads-

11



12

Expectations Monitoring Assessment

Targeted Grazing Handbook link
<https://www.sheepusa.org/wp-content/uploads/2022/01/Targeted-Grazing-Book-compressed.pdf>

13



Nutrient Composition of Dalmatian toadflax from Photo Plots

Item	DM, %	NDF, % of DM	ADF, % of DM	CP, % of DM	IVDMD , %
Cox Ranch					
2005	93.8	52.1	39.0	8.2	64.7
2006	94.9	47.9	37.6	7.7	64.1
2007	95.7	49.5	37.4	7.8	66.7
Doug Potter Ranch					
2005	94.2	65.6	49.2	7.2	52.3
2006	94.9	44.6	33.7	9.8	68.9
2007	95.5	43.7	32.2	7.7	63.9
John Potter Ranch					
2005	94.1	61.8	46.3	7.7	45.2
2006	94.8	44.8	34.3	9.8	66.5
2007	95.7	45.1	33.4	7.5	64.0

- NDF reflects intake

Lower # is better

- ADF reflects digestible fiber

Higher # is better

- IVDMD – Invitro Dry Matter Digestibility

14



15



16



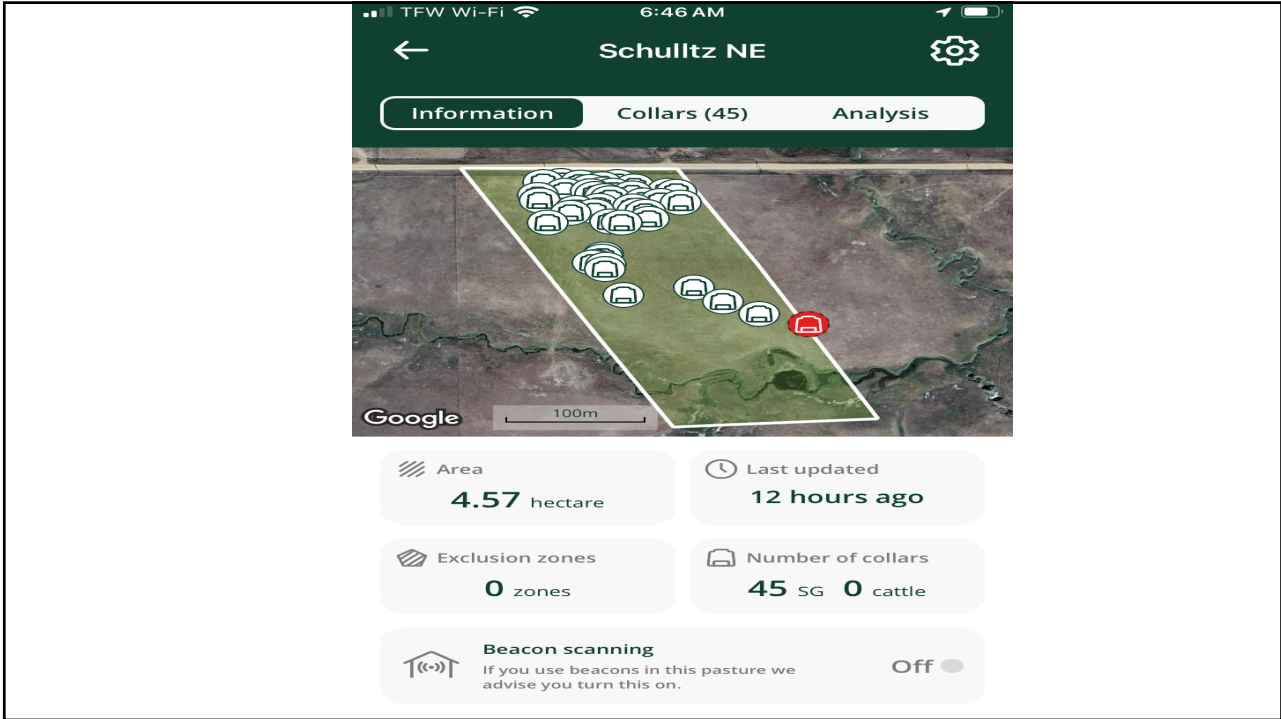
17



18



19



20



21



22

Questions?



When you have a livestock integration itch, you need to scratch it.