

Using cover crops for forage

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Options for forage?

- Depends on planting date!
- How long of growing season available?
- What animal will be grazing and when?

- If planting mix and forage is a goal don't skimp on the grass

- Planting guidelines:
<http://beef.unl.edu/planting-annual-forages>



Timing is everything

Planting date	Forage type	Grazing date
March 15 to May 1	Winter sensitive cool season	May 1 - July 15
May 1 to August 15	Warm (summer) season	July 1 - winter
August 1 to Aug 25	Winter sensitive cool season	Sept. 15 - winter
Sept 1 to Nov 1	Winter hardy cool season	April 10 - June 15



Late spring planting

Cool-season -Winter sensitive

- Oats
- Spring triticale
- Spring barley
- Annual rye
- Spring field peas
- Turnips
- Rapeseed



Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov
Plant cool season			Graze					



Warm-season Annuals

- Sorghum x Sudan hybrids
- Sudangrass
- Pearl Millet
- Sorghum
- Foxtail Millet
- Crabgrass
- Corn
- Soybeans



Late summer planting

Cool-season Annuals-Winter sensitive

- Oats
- Spring triticale
- Spring barley
- Annual rye
- Spring field peas
- Turnips
- Rapeseed



Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov
				Plant cool season			Graze	



Fall planting

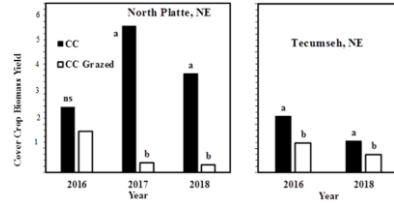
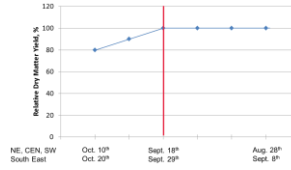
Winter hardy
Cereal rye
Winter wheat
Triticale
Hairy vetch



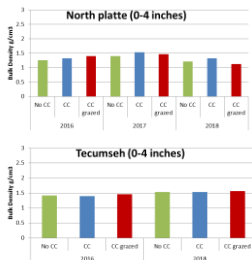
Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov
	Graze	Graze				Plant winter annual	Plant winter annual	



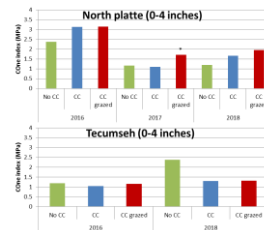
Spring grazing in corn/bean systems



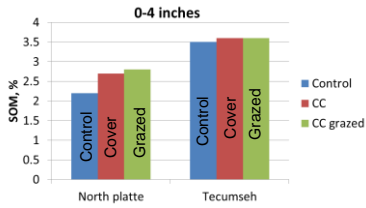
No effect on bulk density



Penetration resistance



Organic matter



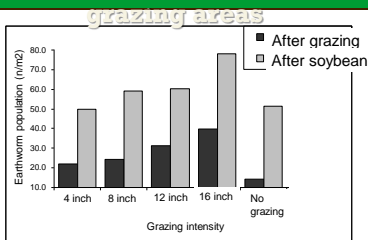
Soil biological attributes comparing grazing vs non grazing areas

Microbial attributes	Graze			
	4inch	8 inch	16 inch	NG
Microbial biomass (mg C kg ⁻¹ of soil)	648 a	574 b	515 c	465 d
Basal respiration (daily mg C-CO ₂ kg ⁻¹ of soil)	8.1 a	7.6 b	7.4 b	6.3 c

Damacena et al., 2008. Carbono orgânico e fósforo microbiano em sistema de integração agricultura-pecuária submetido a diferentes intensidades de pastagem em plantio direto. Rev. Bras. de Ciência do Solo. v. 32, p. 1273-1282



Soil biological indicators comparing grazing vs non grazing areas



Prof Rodrigo Jacques – UFSM – preliminary data (2016)

Questions?



Beef.unl.edu/cropland

