

# *Growing Annual Forages*

## **Daren Redfearn**

University of Nebraska

Department of Agronomy and Horticulture



# ***Management Options***

## **Needs**

- Immediate
- Short-term
- Medium-term
- Long-term

## **Possibilities**

- Nothing
- Hay/Supplemental feeding
- Wheat
- Soybean
- Alfalfa
- Perennial grass pastures
- Corn



# *Alfalfa*

Stems (sq ft.)	Production potential
55	100
50	90
45	81
→ 40	72 ←
35	62
30	53
25	44

Univ. Wisconsin Coop. Ext. (2011)



# Forage Options

## Cool-season species

- Small grains
  - Oats
  - Cereal rye
  - Triticale
  - Wheat
  - Barley
- Brassicas
  - Turnips
  - Radishes
  - Rapeseed
  - Hybrids



## Warm-season species

- Summer annuals
  - Sudangrass
  - Sorghum x sudangrass
  - Forage sorghum
  - Pearl millet
  - German (foxtail) millet
- Others
  - Sunflower
  - Cowpea, Mungbean
  - Sunn hemp



# Annual Forage Systems

**Figure 1. Cattle can potentially have grazing forage from mid-spring through the fall using a well-planned annual forage system.**

Field	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov
1	Plant cool season →			Graze		← Plant cool season		Graze	
2		Plant warm season →				Graze	Graze		

Field	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov
1	Winter annual from fall →	Graze		← Plant warm season		Graze	Graze	← Plant winter annual	
2	Plant cool season →			Graze		← Plant cool season		Graze	

# Annual Forage Systems

**Figure 1. Cattle can potentially have grazing forage from mid-spring through the fall using a well-planned annual forage system.**

Field	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov
1	Plant cool season →			Graze		← Plant cool season		Graze	
2		Plant warm season →			Graze	Graze	Graze		

Field	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov
1	Winter annual from fall →	Graze	← Plant warm season		Graze	Graze		← Plant winter annual	
2	← Plant cool season			Graze		← Plant cool season		Graze	Graze



# ***Important planting dates***

- **Before August 1**
  - Summer annuals are best choice.
  - Cool-season annuals are risky (maybe oats, other spring species).
- **August 1 to September 1**
  - Cool-season annuals are best choice.
- **After September 1**
  - Cool-season annuals are best; some risk with spring species.
  - Summer annuals not recommended.
- **After October 1**
  - Cool-season winter annuals are best choice.
  - Summer annuals not recommended.
  - Cool-season spring annuals are too risky.



# ***Take-home Messages***

- **Planting date is most important.**
  - Delayed planting reduces fall growth potential.
  - Effects of late fall planting carry over into the spring.
- **Data on mixtures is not clear.**
  - One or two dominate, three or four contribute.
  - Grasses are the biomass producers.
  - Legumes and other broadleaves do not compete well with the grasses.
- **Yield and quality of annual forages can be high (and stay high).**





# Questions

*Email*           dredfearn2@unl.edu

*Websites*       **Range Pasture Forages**  
agronomy.unl.edu/range-pasture-forages

**Beef Forage Crop Systems**  
beef.unl.edu/beef-cattle-production/beef-forage-crop-systems

*Twitter*         @UNLRangeForage



