





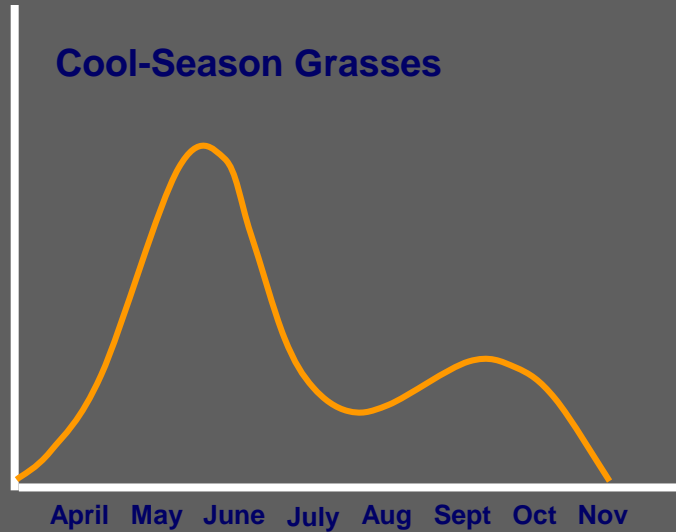
Production Options

- Multiple plant species
- Legumes
- Weed control



COOL-SEASON GRASSES

Forage Supply



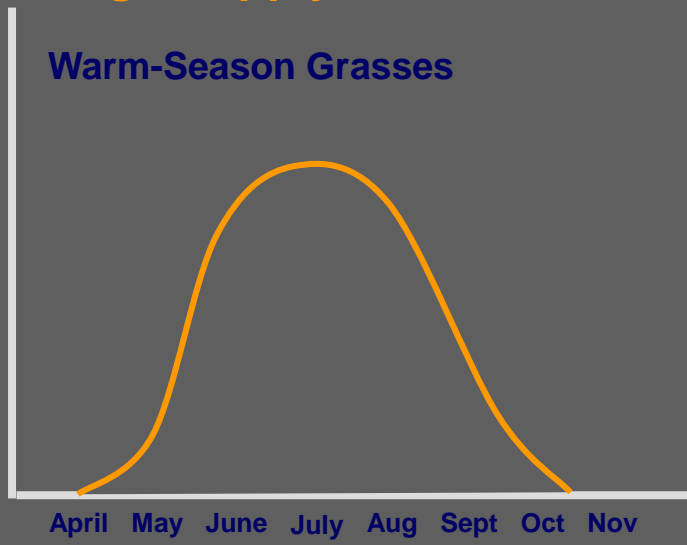
LIMITATIONS: COOL-SEASON GRASSES

- ✓ low summer production
- ✓ low summer forage quality
- ✓ excessive (?) spring growth
- ✓ less reliable fall production

WARM-SEASON GRASSES

Forage Supply

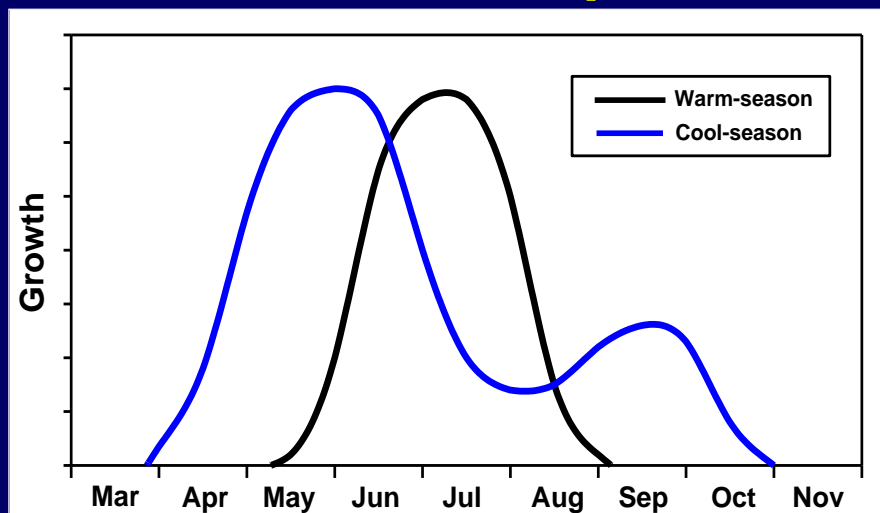
Warm-Season Grasses

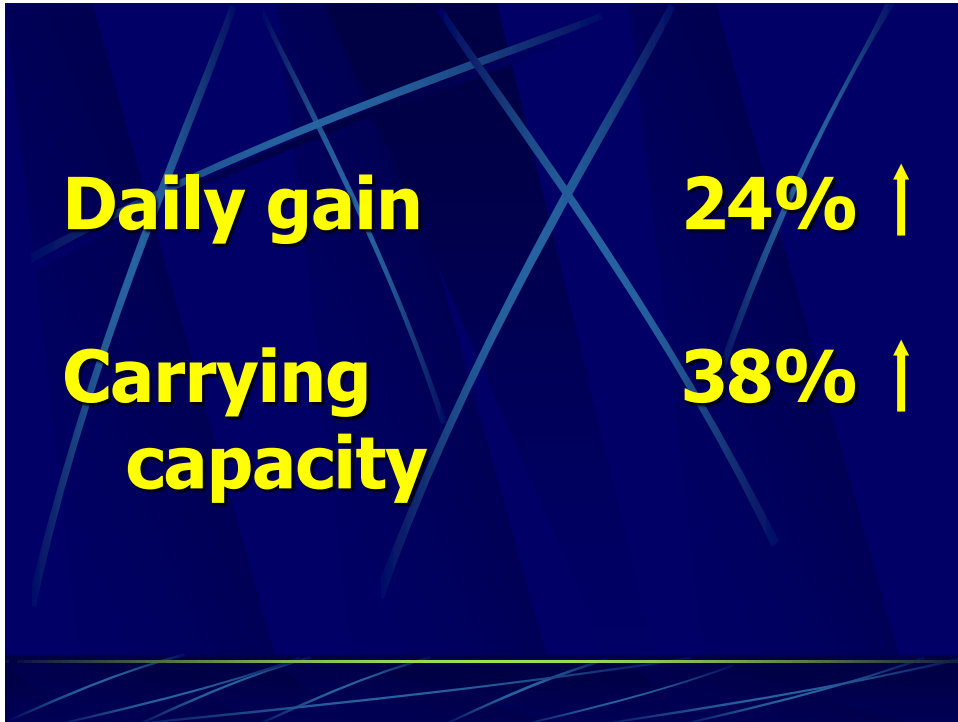


LIMITATIONS: WARM-SEASON GRASSES

- ✓ short growing season
- ✓ grazing management more challenging
- ✓ vigor requirements

Growth periods of cool- and warm-season plants





Legumes

- No N needed
- Improve animal performance
- Challenge to establish



Mead Grazing Study

Brome pastures

Sod-seeded in 1995

Brome + 50 lbs N

Brome + legume

Grazed 1997 – 2001

Mead Grazing Study

ADG	Brome + N	Brome + legume
First half	1.64	1.69

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Mead Grazing Study

ADG	Brome + N	Brome + legume
First half	1.64	1.69
Second half	1.20	1.93
Full season	1.42	1.81

Profits?

- **0.39 lbs/day for 144 days**
- **56 lbs/head**
- **1.1 acres/head**
- **51 lbs/acre**
- **\$25 more/acre @ 50 cents/lb**
- **50 lbs N/acre @ 60 cents/lb**
- **\$30/acre saved**
- **TOTAL = \$55 per acre**

Establishment into Existing Grass Sod

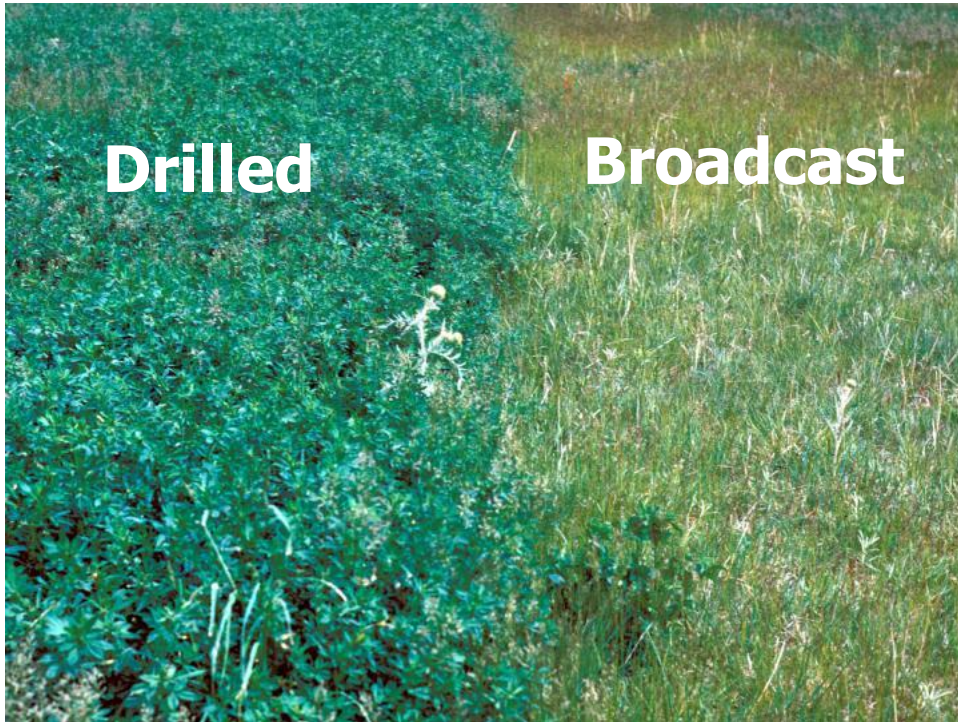
HOW ?

Sod – seeding “Basics”

- **Fertilize for the legume**

Sod – seeding “Basics”

- **Fertilize for the legume**
- **Seed into soil**



Sod – seeding “Basics”

- Fertilize for the legume
- Seed into soil
- Control sod competition



Overgraze !!!



Suppress sod



Flash grazing
Control canopy



What is a 'weed'?

- not eaten by animal
- contains anti-quality components

Limited problem

- Annual grasses
foxtails, crabgrass, barnyardgrass

Limited problem

- Annual grasses
foxtails, crabgrass, barnyardgrass
- Annual broadleaves
velvetleaf, sunflower, pigweed, kochia

Management Strategy

- Young plants often grazed
- Minimize grazing stress to desired plants
- Spray or clip to limit seed production only if needed

Major problem

- **Noxious**
Leafy spurge, thistles
- **Poorly grazed perennials**
Western ragweed, ironweed, vervain
- **Brush and trees**
Cedar, locust, osage orange, buck brush

Tools for control

- **Burning**



Tools for control

- **Burning**
- **Grazing**



Tools for control

- **Burning**
- **Grazing**
- **Herbicides**

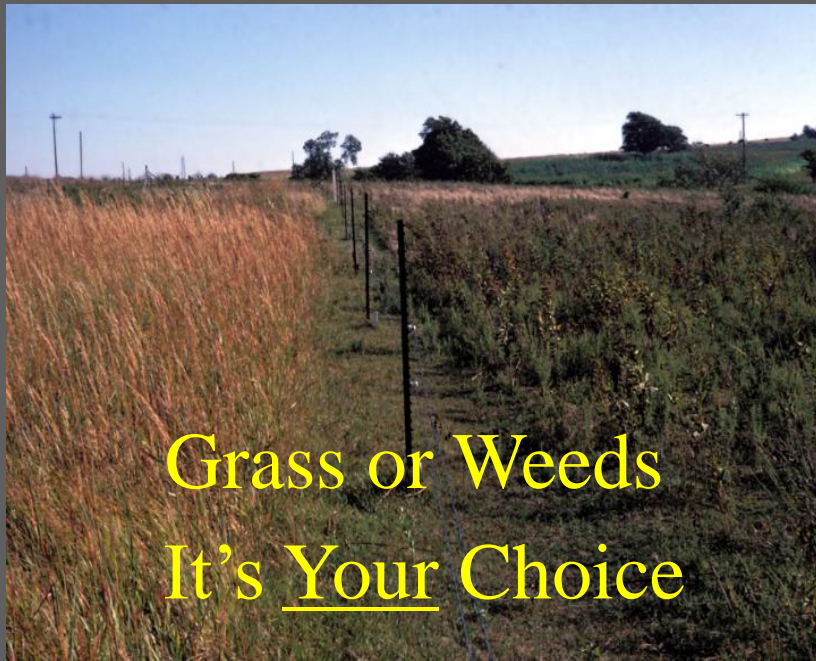


Tools for control

- Burning
- Grazing
- Herbicides
- Mechanical



The *best* method of long-term grassland weed control is good grassland management, which includes maintaining healthy, vigorous, competitive grasses.



Production Options

- **Multiple plant species**
- **Legumes**
- **Weed control**

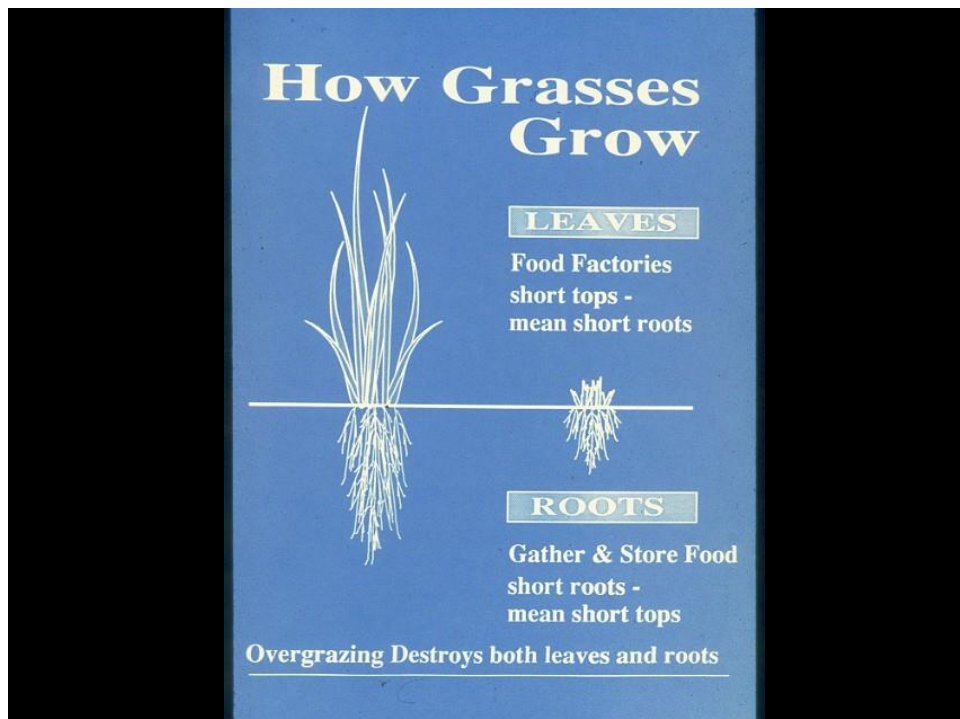


Without good **grazing management**, all production improvements will be wasted.

Grazing Management

Control of:

- harvest efficiency
- plant vigor
- forage quality



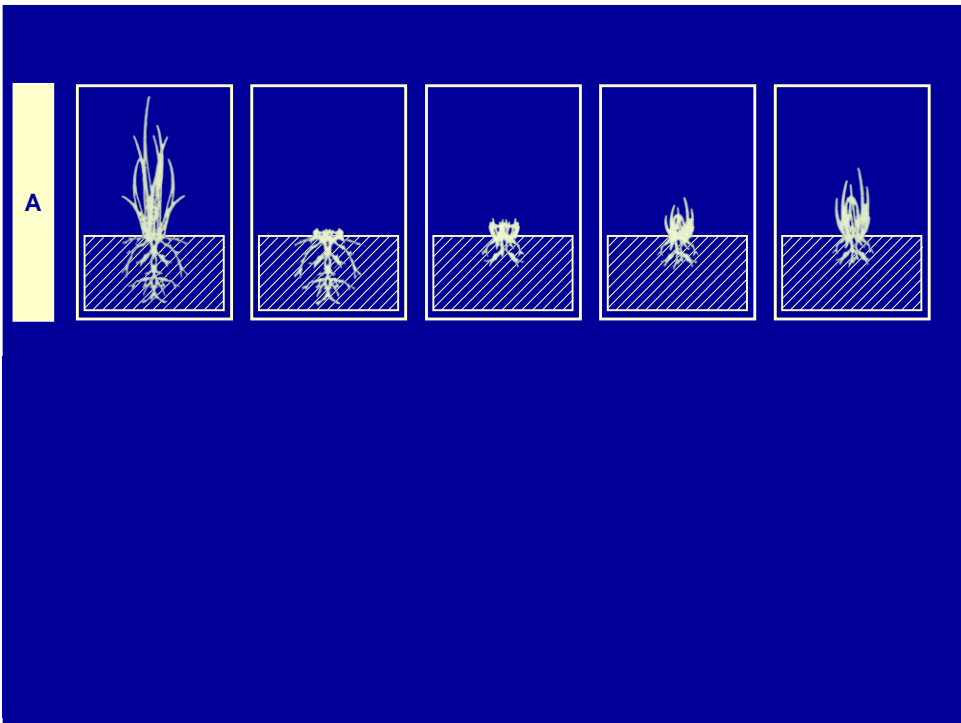
**Leaves must first
feed the plant
before the plant
feeds the animal**

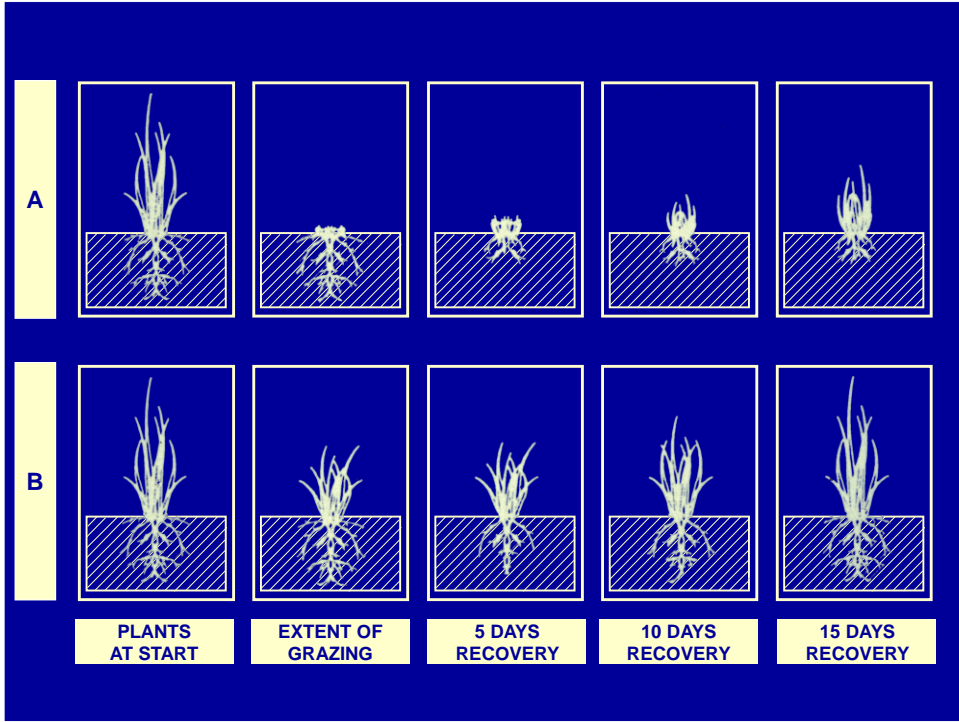
Abundant leaves

rapid growth
strengthen roots
increase forage

Few leaves

slow growth
weaken roots
less forage





TIME CONTROL IS THE



**TO EFFECTIVE PASTURE
MANAGEMENT**



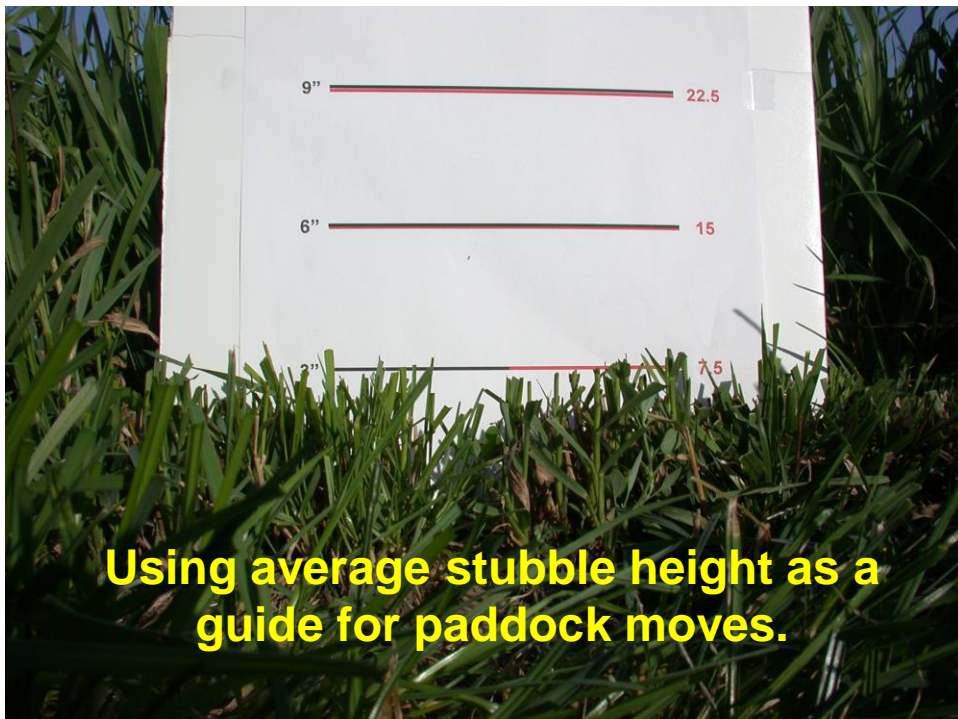
HOW ?

“Controlled” Grazing

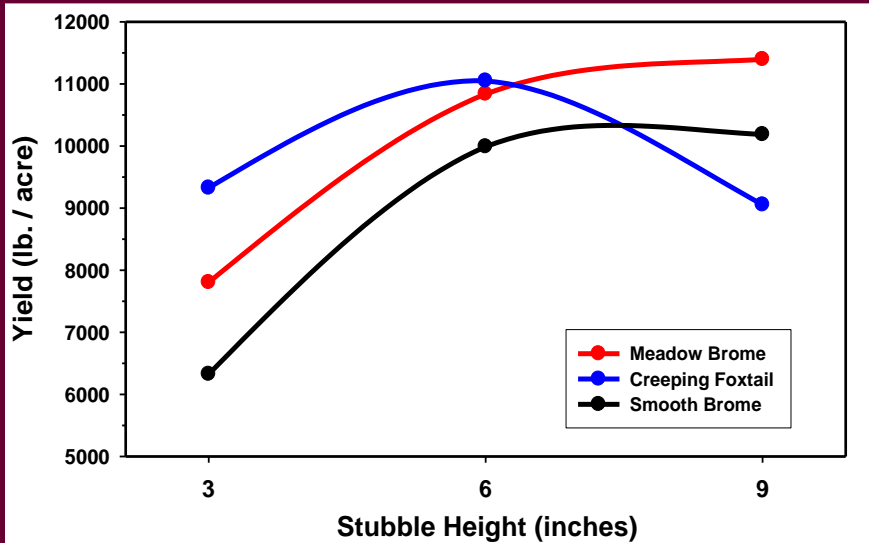
- Two or more pastures
- Periods of grazing or recovery
- Maintain grass stands
- Increase production



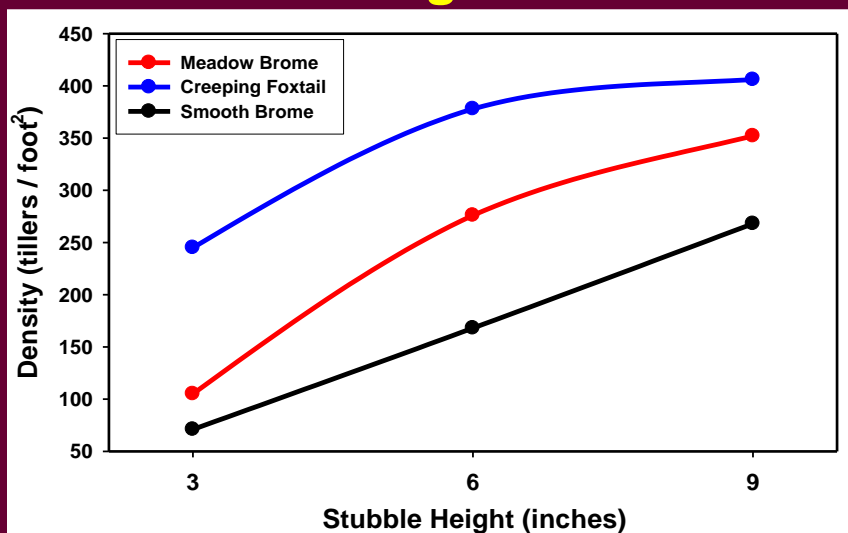
Intensive grazing does **not** mean short grazing



Effect of stubble height on cumulative herbage yield of 3 irrigated, cool-season grasses.



Effect of stubble height on fall tiller density of 3 irrigated, cool-season grasses.





Meadow Brome:
Tiller density under 3" stubble height treatment.



Meadow Brome:
Tiller density under 6" stubble height treatment.

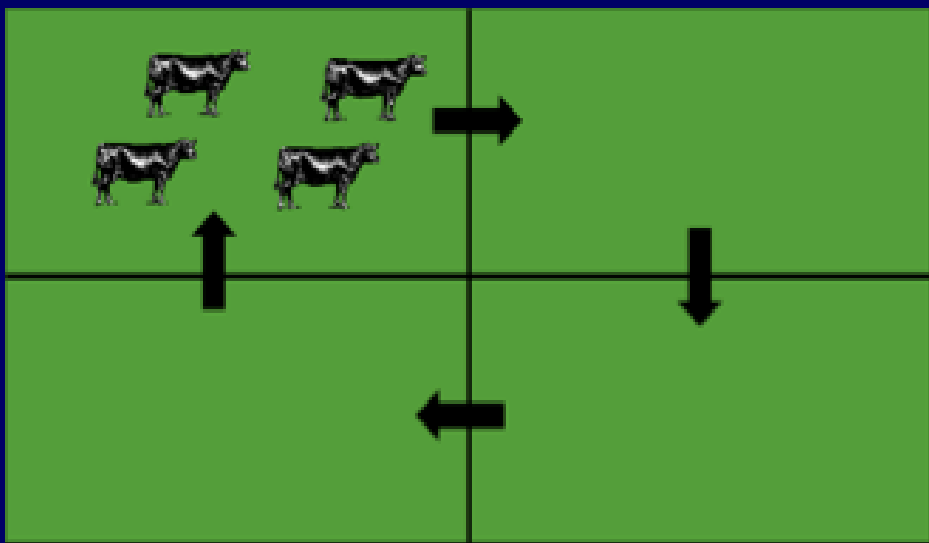
**Intensive
grazing means
intensive
management**

Grazing Strategies

Rotational Grazing

- planned sequence
- root nutrient reserves and plant vigor renewed during recovery period
- increased forage production
- improved grazing distribution
- greater animal performance

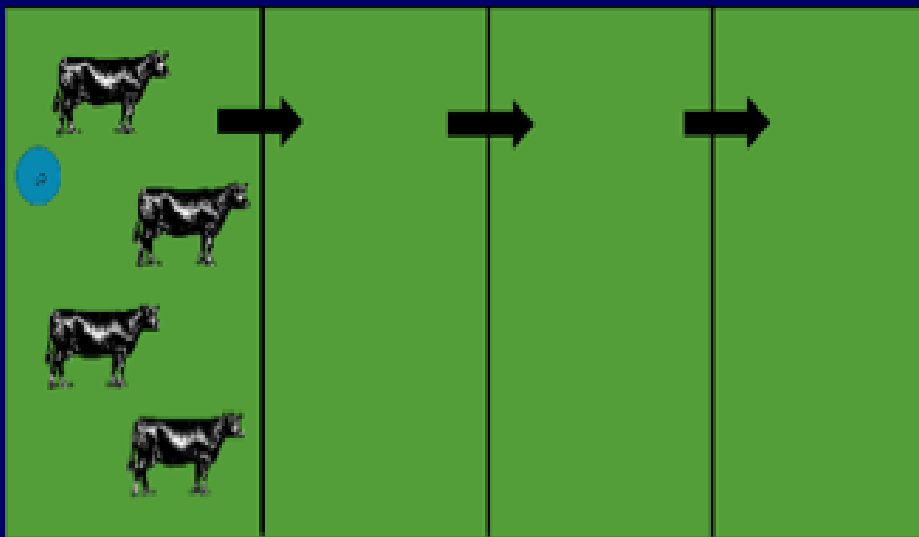
Rotational Grazing



Strip Grazing

- short-term grazing of small area
- frequent, fresh forage
- increase utilization & reduce selection
- back fence optional; depends on need for recovery after grazing
- most common when grazing stockpiled or annual forages

Strip Grazing



Mob Grazing

- large number of animals
- ultra-high stock density
- very short grazing period
- remaining vegetation trampled
- extra long recovery periods

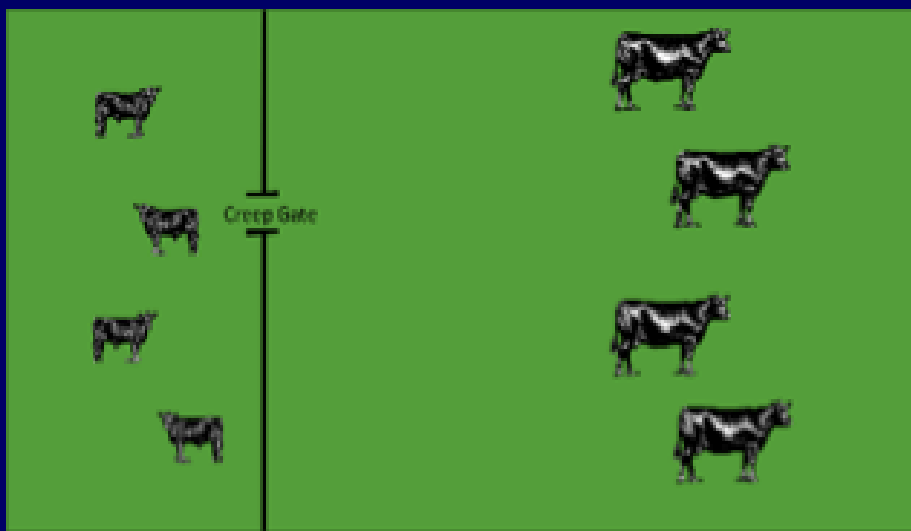
Mob Grazing



Creep Grazing

- small area of higher quality forage; often annual or legume based
- younger animal access via creep gate or fence placement
- increased calf gain
- reduced cow energy requirement

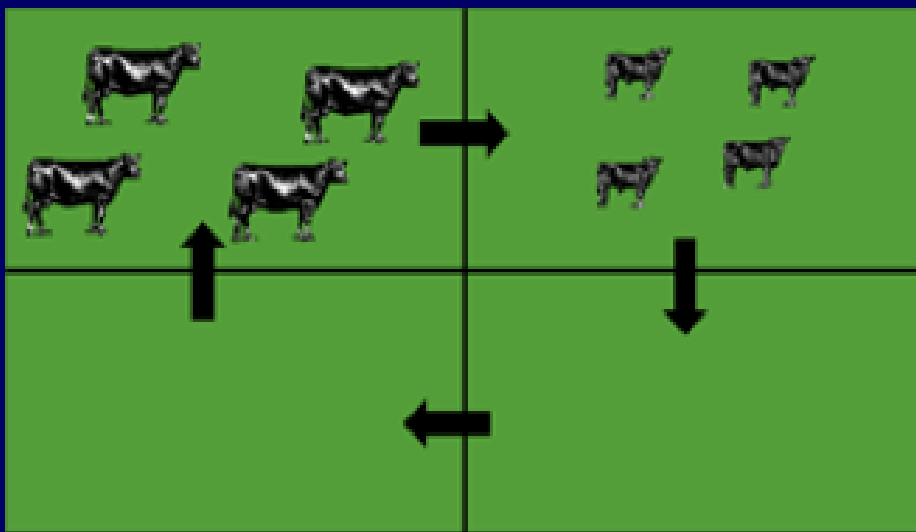
Creep Grazing



Forward Grazing

- two separate groups of livestock
- one grazes a paddock directly after the other
- first group selectively grazes the more nutritious forage
- second group grazes lower quality forage

Forward Grazing



Grazing Methods

**Which method
should you use?**

**All
of
them!**



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