



# The Skills & Principles of Managed Grazing on Improved Pastures

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# How Do We Manage Forages?

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Standard Recommendation:



Animals in: 8"

Animals out: 3"

*Example:*

Ewe raising twins in  
early lactation

How many inches of grass  
does she need to meet her  
nutritional requirements?

# Managing Forages

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Can We Answer These Basic Questions:



How long can 50 ewes graze a 15-acre paddock?

How many acres are needed to support 50 ewes for 4 days?

Is there a better way?

# Yes

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## How Do We Balance an Animal's Diet?



By Weight

Pounds of feed

Therefore —

Manage Forages  
by **Weight**

# By Weight (Mass of DM)

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Total Mass (DM)                      3,000 lb

**How do we measure  
forage mass?**





= 138 square inches

12'' x 11.5''  $\longrightarrow$  26 grams dry forage

*microwave or fruit drier*

= 26 g DM / 138 square inches

x 100  $\longrightarrow$  2,600 lb DM / acre





# By Weight (Mass)

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Total Mass 3,000 lb

Residual Mass ~~—1,000 lb~~

Available Mass 2,000 lb

This is the forage  
available for grazing

# Example #1

flock size = 125 ewes

1 acre = 2,000 lb Available Forage

1 ewe @ 160 lb @ 5% body weight = 8 lb/day

125 ewes will graze 1,000 lb forage DM/day

1 acre = 2 days of grazing for 125 ewes

3-acre field = ewes are OK for 6 days

## Example #2

flock size = 30 ewes

1 acre = 2,000 lb Available Forage

1 ewe @ 185 lb @ 5% body weight = 9.25 lb/day

30 ewes will graze 278 lb forage DM/day

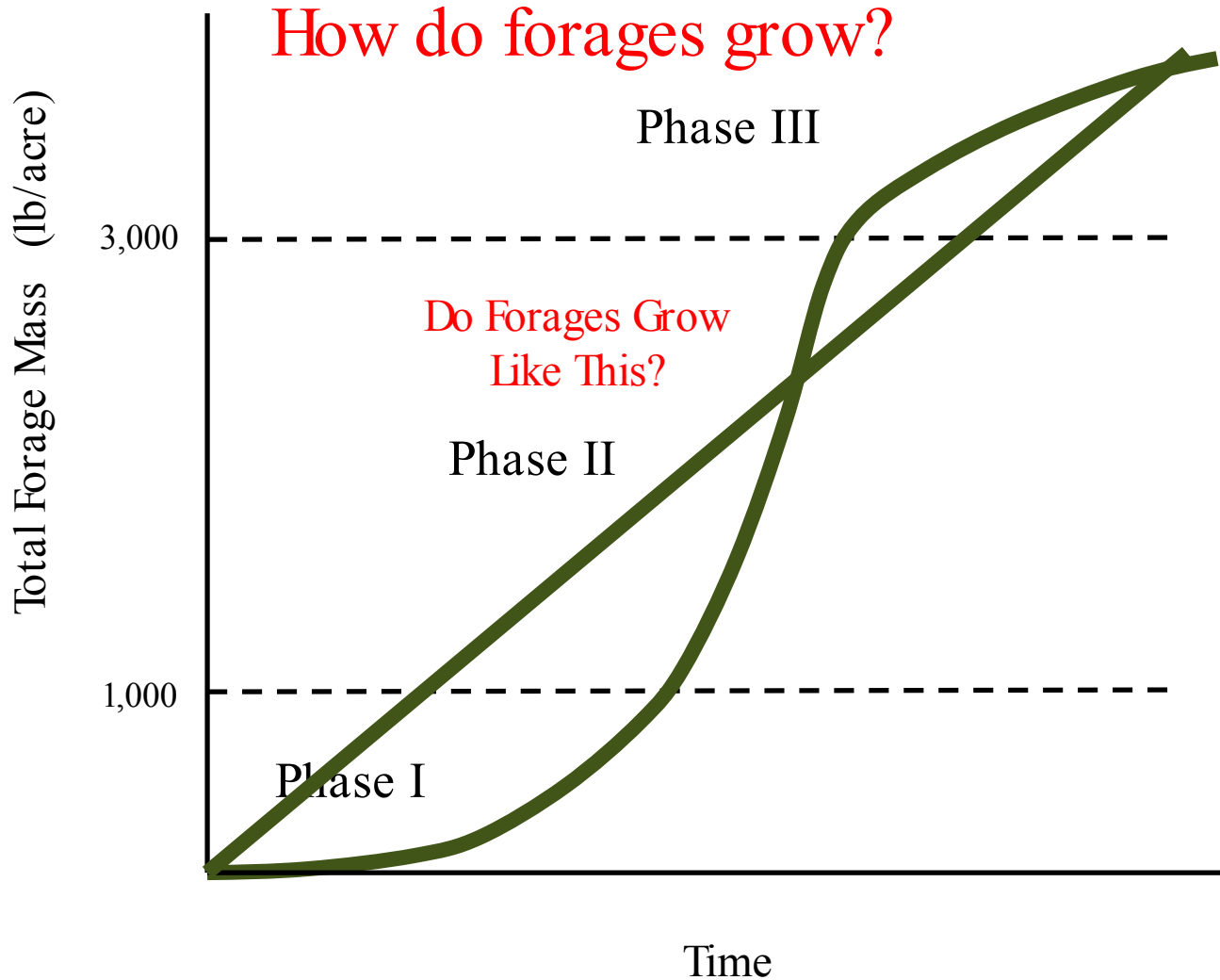
1 acre = 7 days of grazing for 30 ewes

2-acre field = ewes are OK for 14 days

(14 days, 9 hours, 22 min)



# Forage Growth Curve

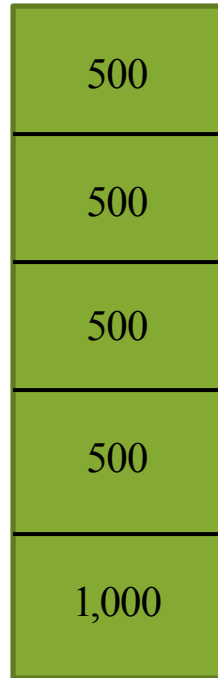


# 5" Grass—Mass vs Height

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**Density  
is Critical**

3,000



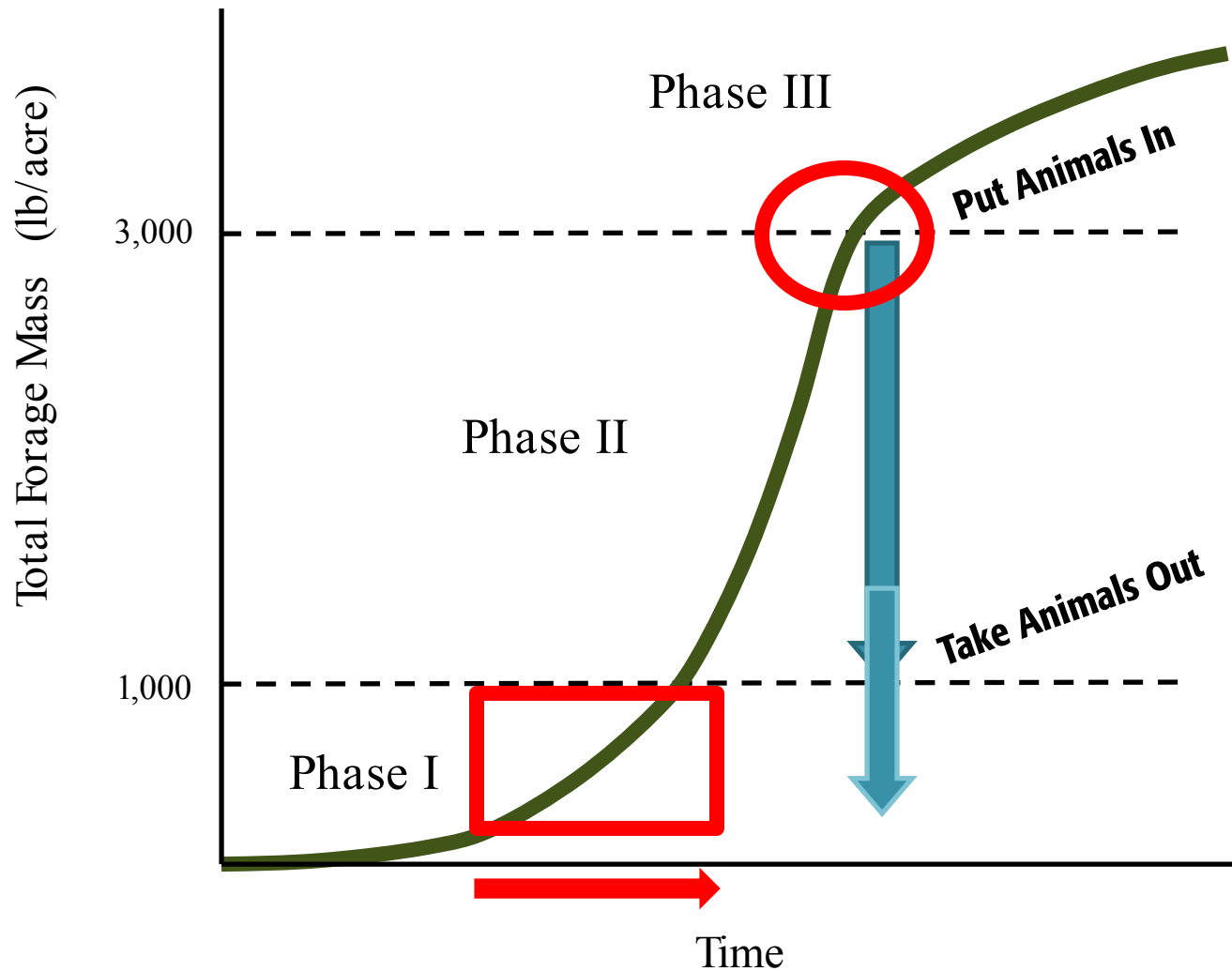
2,000



1,300



# Intensive Grazing — What to Do







# Intensive Grazing

Management Intensive Grazing

# Specifics of MIG

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- Introduce sheep at the top of Phase II
- Remove sheep at the bottom of Phase II
- Residual —Don't graze into Phase I
  - Adds 7–14 days to reach bottom of Phase II
  - Stresses some plants
  - Open areas for weeds
- Avoid Phase III
- Grazing in Phase II
  - Efficiency —most efficient
  - Nutrition —excellent
  - Forages —healthy, sustainable, growing fast

# 4 Rules of MIG

## Stay in Phase II growth

## Leave enough Residual

- 800–1,000 lb DM/acre

## Protect Regrowth

- 5-Day Rule

## Water & minerals move with sheep

- each cell contains H<sub>2</sub>O & TM mixture

# 5-Day Rule

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- Animals in a cell for a **Maximum of 5 days!**
- NO grazing of regrowth
- Selection pressure against your best plants
- “Jargon” of grazing
  - Creep Grazing
  - Multi-species Grazing
  - Forward Grazing, High-Low Grazing, First-and-Second Grazing

**No Livestock in the grazing cell after 5 days!**

# Not with MIG

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- Some species don't persist in MIG system
  - Timothy
  - Smooth Brome

















12" Latch



# NZ-Style Gate Latches

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- **Jeffers Pet Veterinary Supply**

<https://www.jefferspet.com/products/gate-latch-12-chain-length>

12" Chain Gate Latch, 1 staple

- **Valley Vet**

[https://www.valleyvet.com/ct\\_detail.html?pgguid=30E07347-7B6A-11D5-A192-00B0D0204AE5](https://www.valleyvet.com/ct_detail.html?pgguid=30E07347-7B6A-11D5-A192-00B0D0204AE5)

Deluxe Gate Latch

8" chain, 1 staple

- **Gallagher (North American website)**

<https://am.gallagher.com/us/product/20099/standard-latch->

Price listed on the website

14" chain, 2 staples







# Grazier's Tools



# Graziers' Tools

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- Stocking Rate, Stocking Density
- Water / Minerals
- Dry Matter Intake: Rule-of-Thumb
- Grazing Wedge
- New Terminology

# Definitions

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- **Stocking Rate**

- # Animal Units (AU) in an area over time
- AU
  - = 1 cow (1,000 lb) with calf
  - = 5 ewes
- AUM for public lands grazing

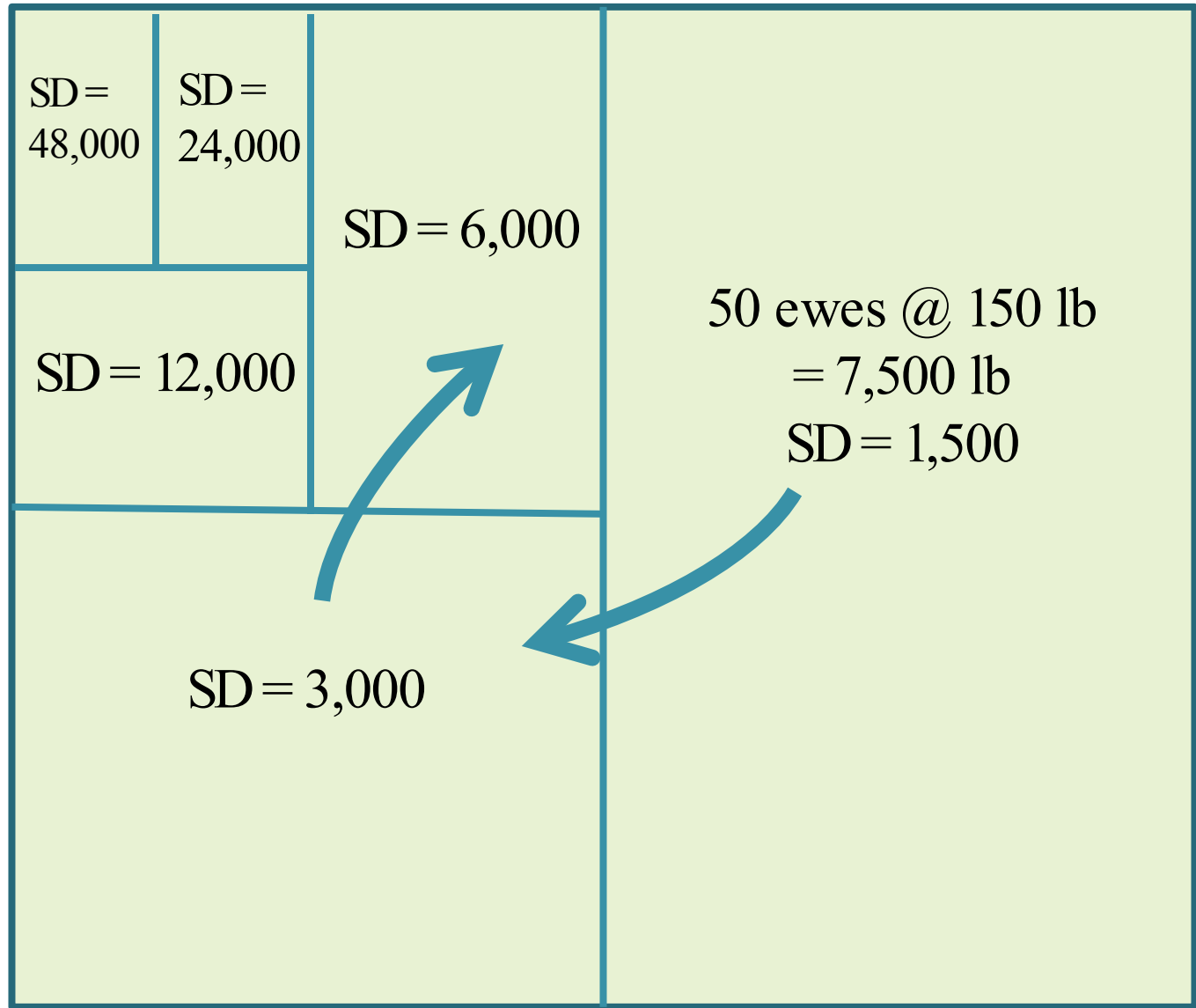
- **Stocking Density**

- # lb of livestock per acre at a single point in time
  - e.g. SD = 5,000 lb (= 25 x 200 lb ewe/acre)

# Stocking Density

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- 50 ewes @ 150 lb
- = 7,500 lb livestock
- Grazing on 5 acres
- = 7,500 lb / 5 acres
  - = 1,500 lb / acre
  - = SD 1,500 lb



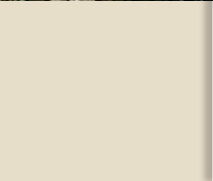
5 acres

# Practical Guidelines – SD

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- Grazing Tall Fescue
  - 15,000
- Other Weeds?
- Planting Seed (Tread-in Method)
  - “Hoof & Tooth Method”
  - 25,000 – 30,000
- MIG
  - 60,000 +
  - Often 100,000 – 140,000
- Mob Grazing
  - 200,000 +







## Rule #4: Water & minerals move with sheep

- each cell contains H<sub>2</sub>O & TM mixture



**"Hudson Valve"**



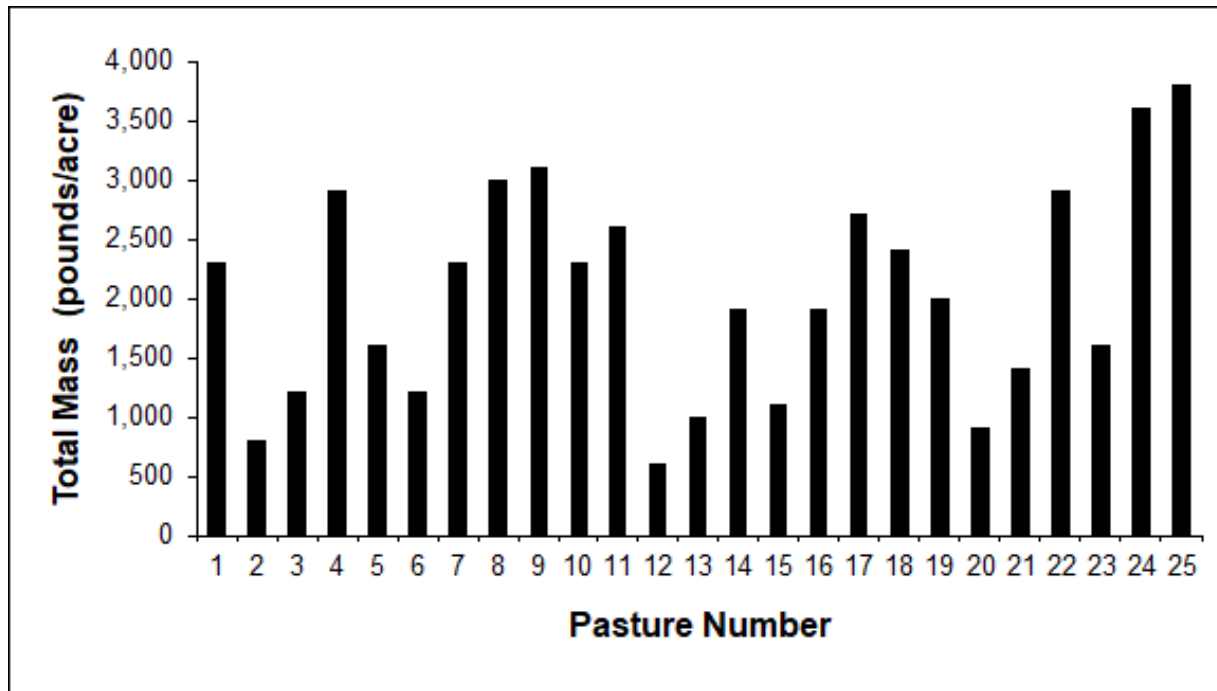


# Estimating DMI

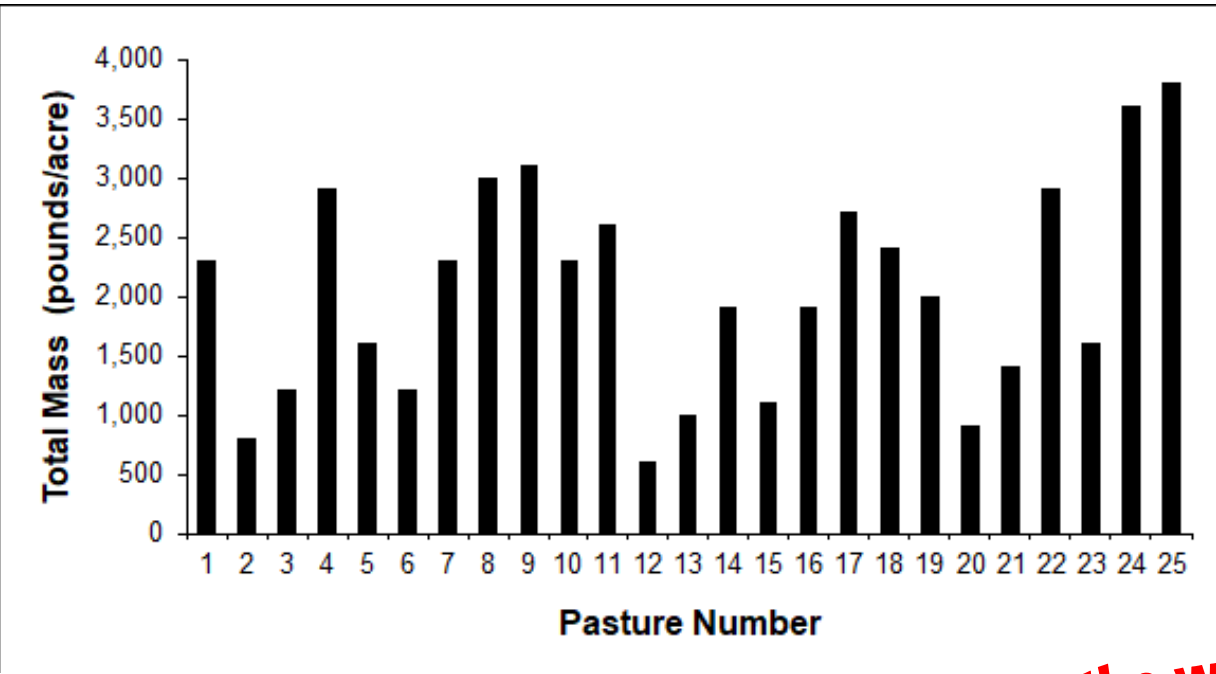
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- How much do sheep eat on pasture?
- Start with DMI at 5% body weight
  - Example: 200 ewes @ 160 lb = 32,000
  - @5% = 1,600 lb/day
- Maybe 4%
  - @4% = 1,280 lb/day

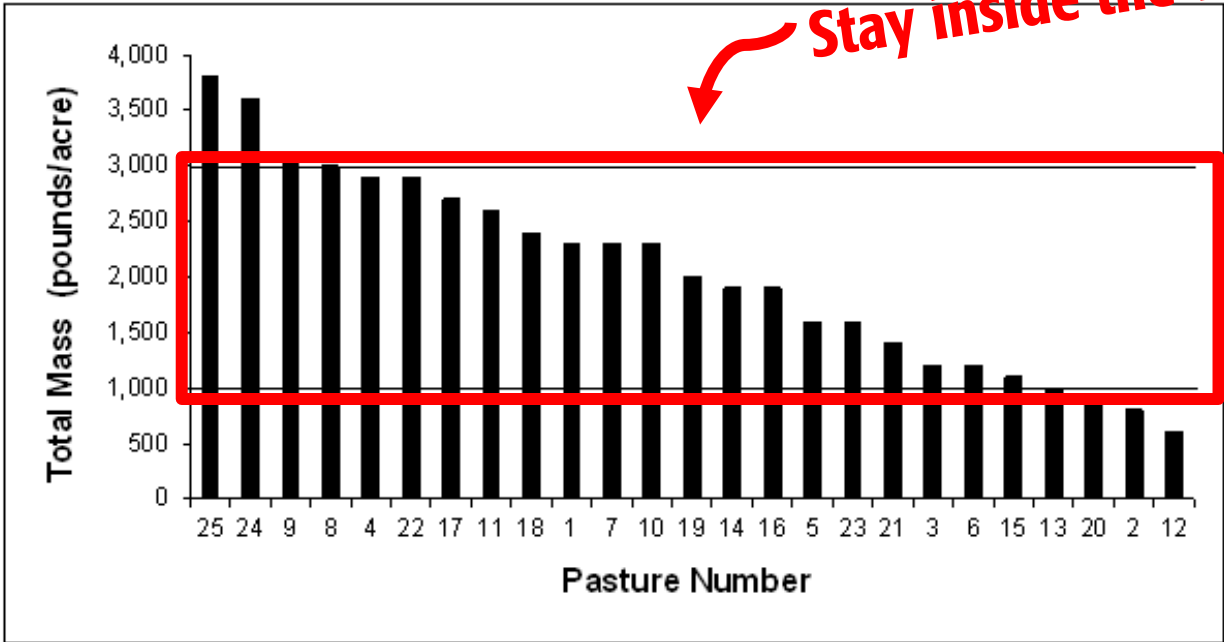
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- NRC: ewes: 1.4%–3.9%
    - Growing lambs & yearlings: 1.4%–7.8%



# The Grazing Wedge



**Stay inside the wedge!**






# A New Shorthand Code

RG, 2, 45K

Rotational  
Grazing System



Moving stock  
every 2 days

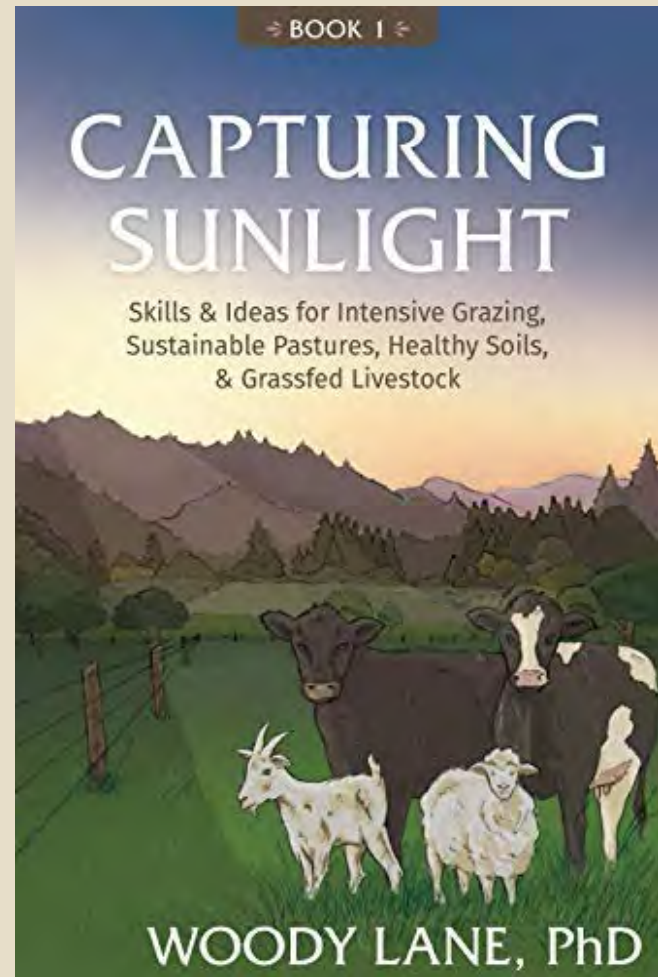
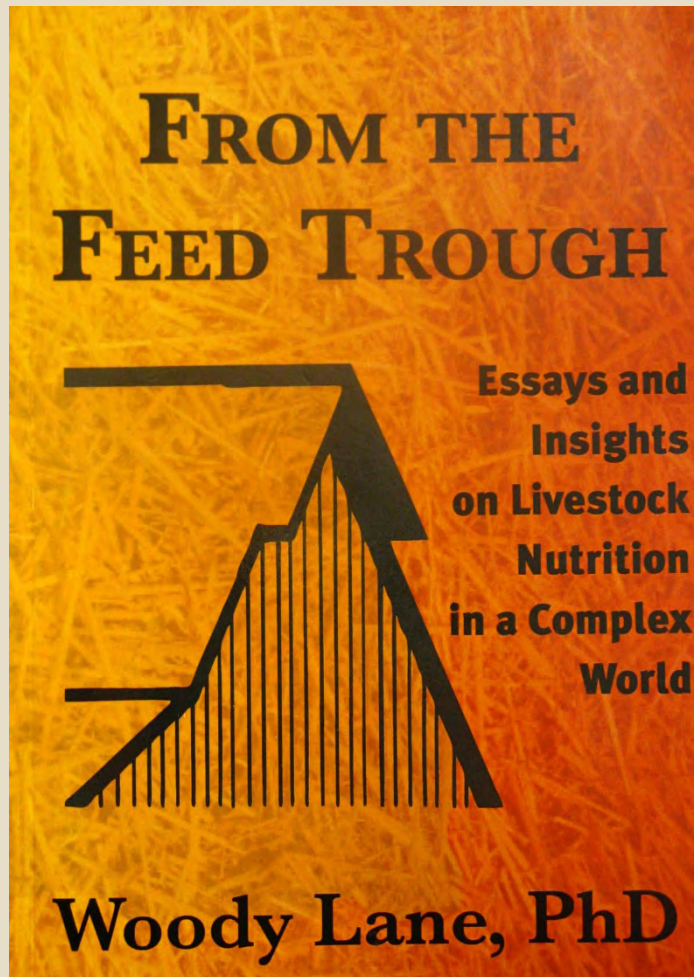


Stocking Density  
= 45,000 lb/acre









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**Amazon, Premier 1 Supplies, Mid-States Wool Growers**

# Questions?



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