Pasture Management

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Points about Pastures

- Pastures can provide a natural, healthy environment and are the least expensive feed source.
- Well-managed pastures can provide most of the feed requirements.
- Livestock will consume 2 to 3 percent of their body weight per day.

- Daily Forage Intake Rate (% of body weight):

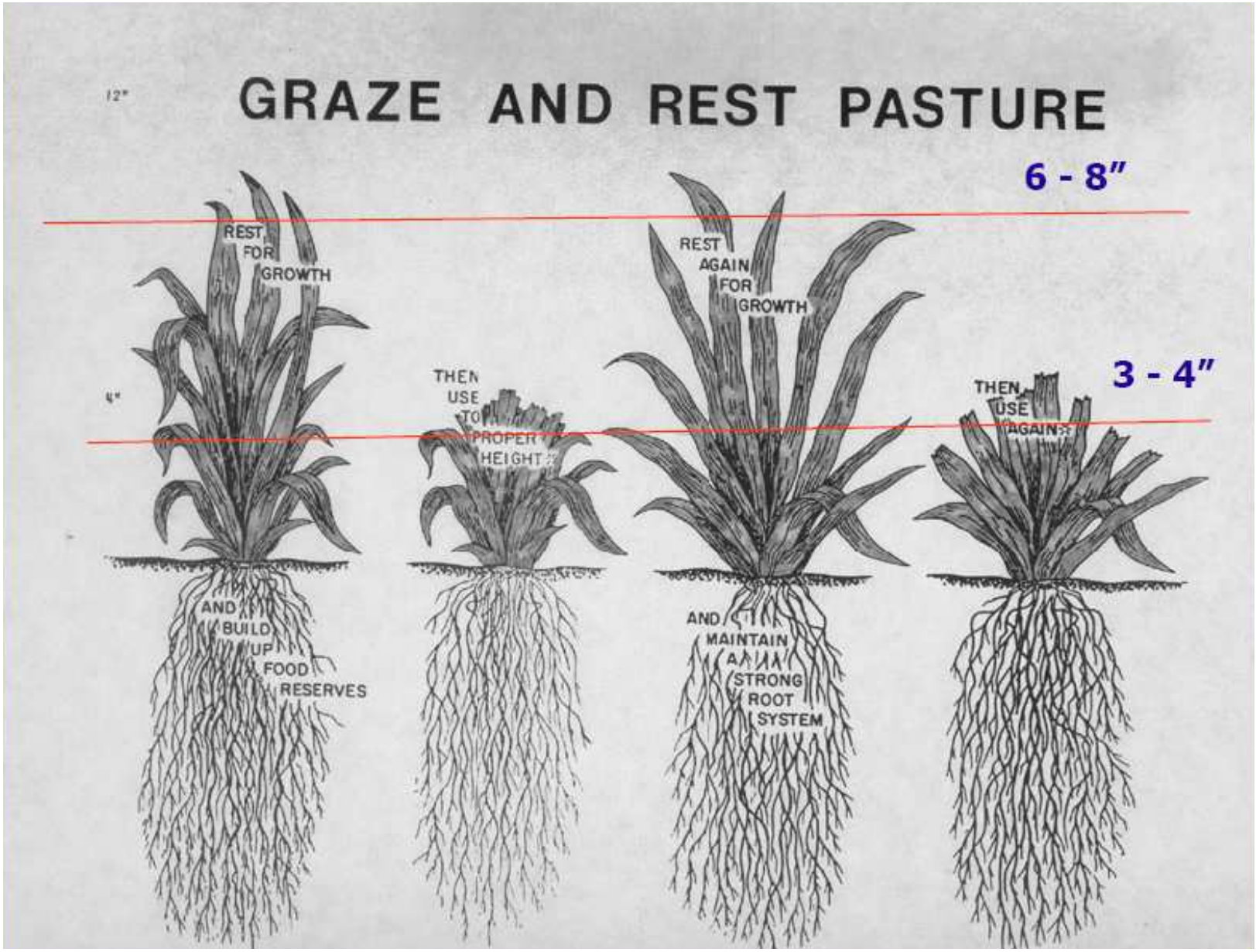
Dry Cow	2 - 2.5%
Lactating Cow	3 - 4%
Dairy Cow	2.5 - 3.5% + grain
Stockers	2.5 - 3.5%
Sheep	3.5 - 4%
Horse	2.5 - 4%

Pasture Management

The goal is to grow and use green leaves, leaving the forage plants in a condition to regrow rapidly during the rest period.

HOW GRASS GROWS

- 95% of plant food is taken from the Air
  - Leaves are Food Factories
- 5% of plant food is taken from the soil
  - Roots gather raw materials (water, nitrates, minerals) which are converted into plant food by the leaves
- OVERGRAZING WILL DESTROY BOTH THE LEAVES AND THE ROOTS!



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Grazing Management

◆ Bluegrass	begin 4-6 inches	leave 2-3 inches
◆ Tall grasses	begin 6-8 inches	leave 3-4 inches
◆ Bermudagrass	begin 6-8 inches	leave 2-3 inches
◆ Legumes	graze 3-4 days	rest 21 days

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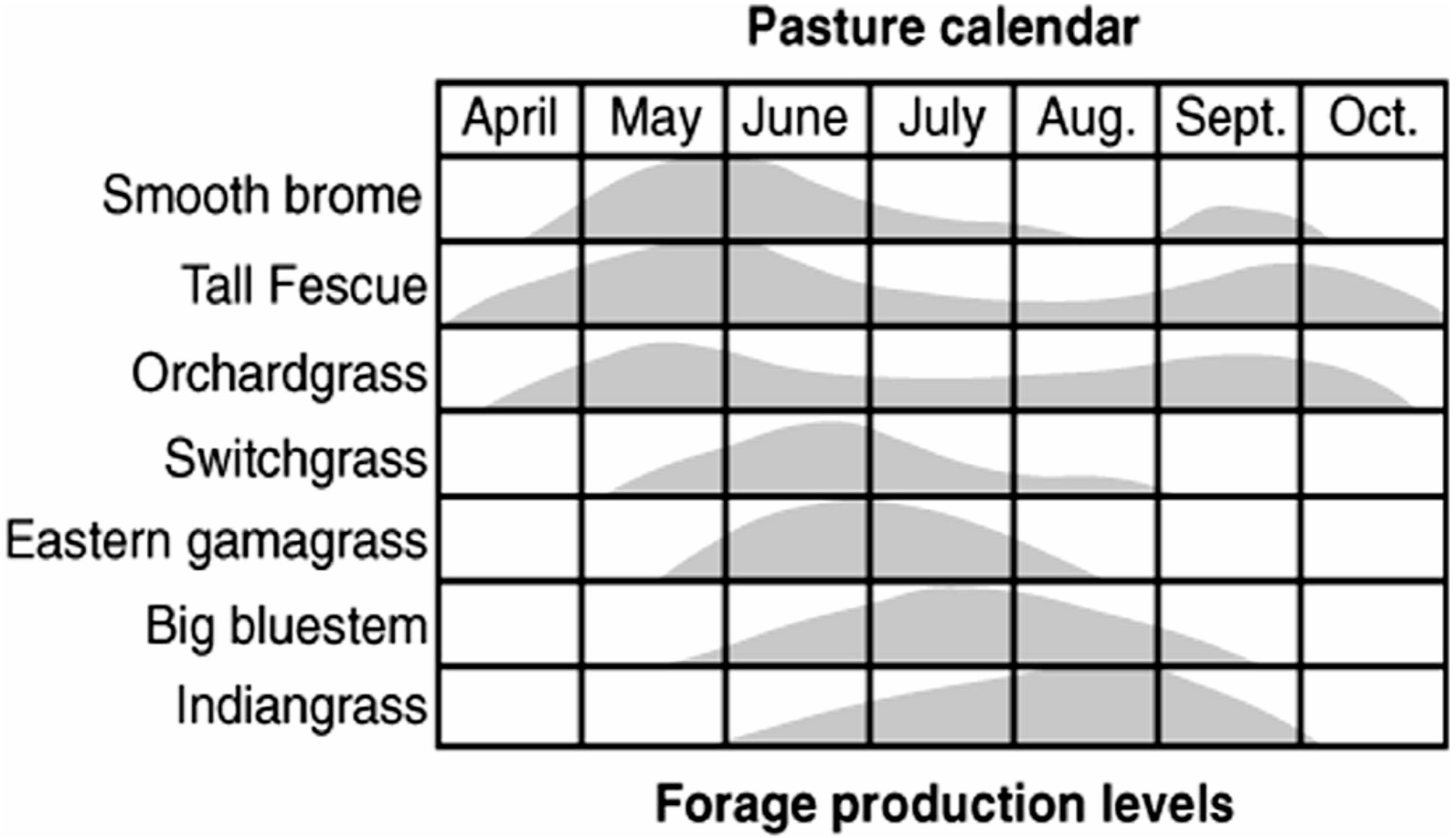
Match grazing to forage production.



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Corresponding Root Growth

% Leaf Removed	% Root Growth Stopped
10	0
20	0
30	0
40	0
50	2 to 4
60	50
70	78
80	100
90	100

Pasture Rest Periods

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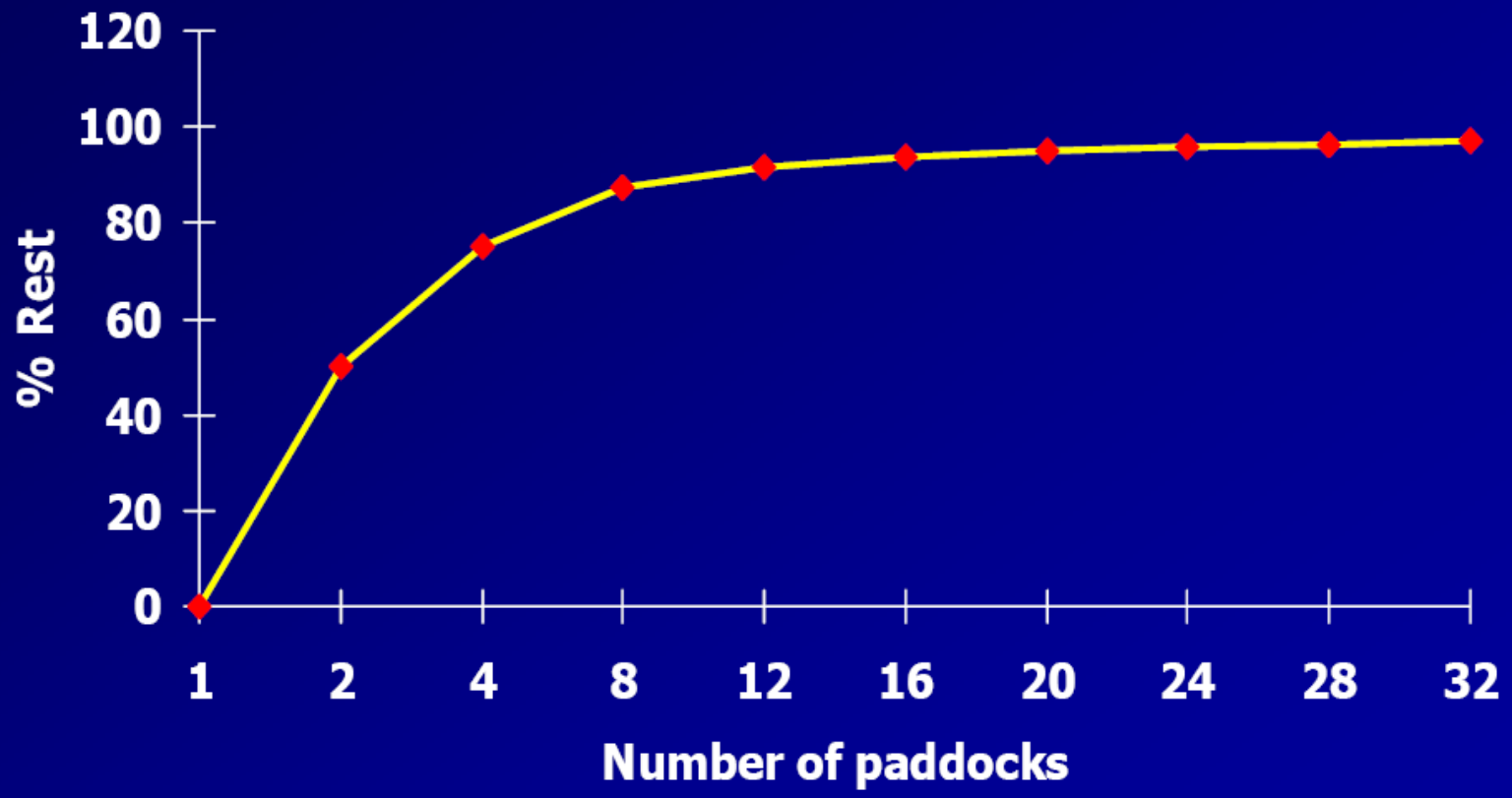
Grazing Efficiency for the Total Season

Continuous	30%
4 paddocks	35%
8 paddocks	50%
12 paddocks	65%
24 paddocks	75%

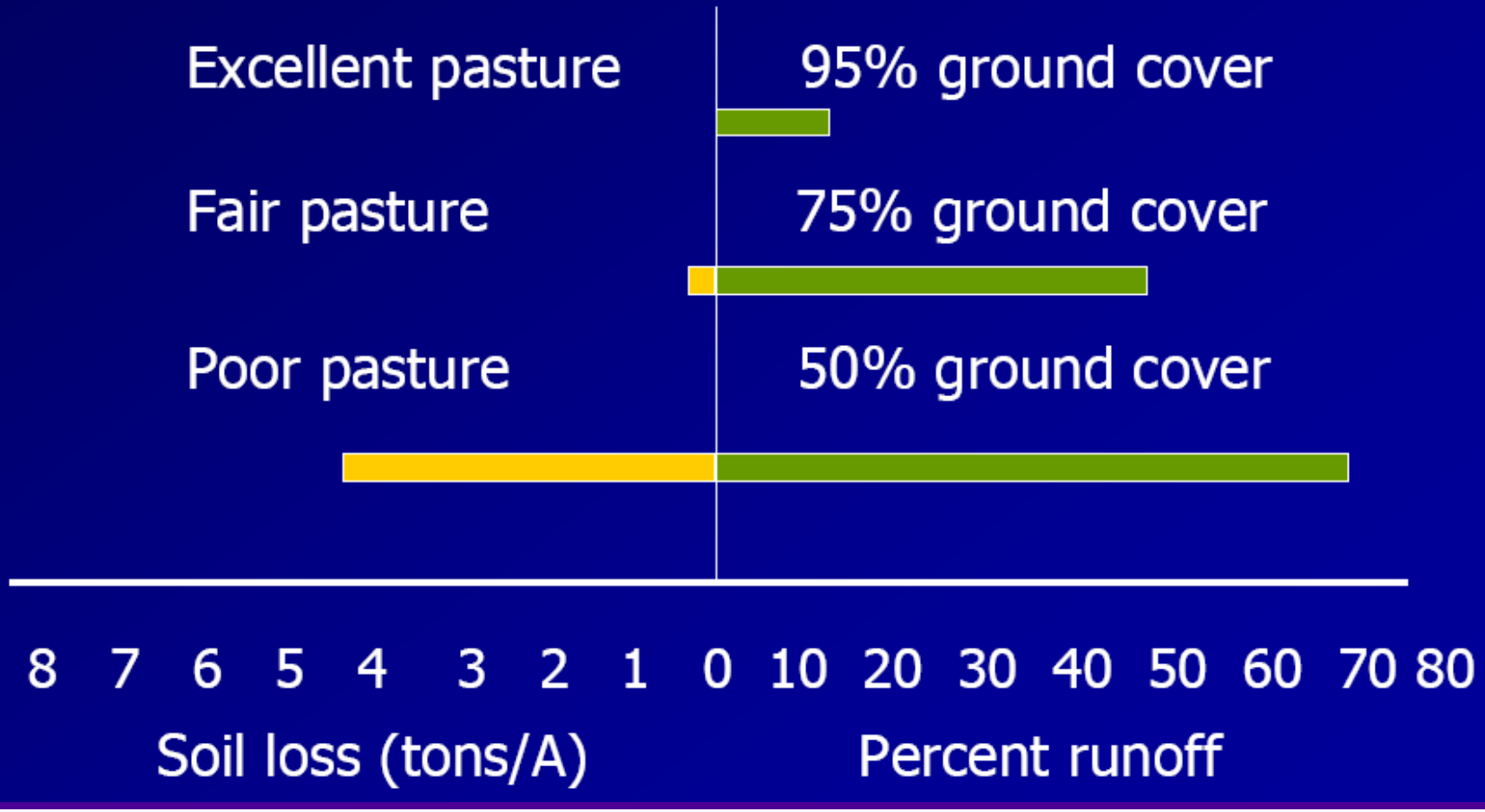
How much rest do additional paddocks provide?



Infiltration and Runoff

3 inches of rainfall in 90 minutes, 10% slope, silt loam soil

(University of Nebraska & USDA-SCS, 1937)



Pasture Management

- Avoid over or under grazing
- Use rotational grazing
- Develop grazing paddocks, 8 plus if possible
- Rotate and rest paddocks to help keep grasses and legumes growing

Pasture for Grazing

- Amount of land available may dictate whether this is the primary or supplemental source of feed
- Determine animal units/amount of forage needed; determine species of grasses and legumes; size pastures and paddocks accordingly
- Develop sacrifice area
- Be prepared with additional areas or to feed hay in mid-late summer

Pasture Management

- Soil test
- Lime
- Fertilize
- Weed control

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Useful Web Sites

www.oznet.ksu.edu Kansas State University

www.extension.org/horses National Extension

www.betterhorsesnetwork.com Ernie Rodina's

www.douglas.ksu.edu Douglas County Extension

www.asi.ksu.edu KSU Animal Science Department