

Management of Forages For Grazing



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Grazing Management

■ Why?

- Stored feed can account for 25% or more of production costs.
- Grazed pasture is often the cheapest feed.
- By increasing the role of forage and specifically the efficiency of use of grazed pasture, feed costs can be reduced significantly.

Outline

- Grazing Management Concepts
- Choices in Grazing Management
- Examples Using Live Plants

Outline

■ Grazing Management Concepts

- Plant and Animal Requirements in Grazing Systems
- Grazing Management Defined

Plant Requirements

■ Energy source

Leaf area



Reserves



Plant Requirements

■ Growing points

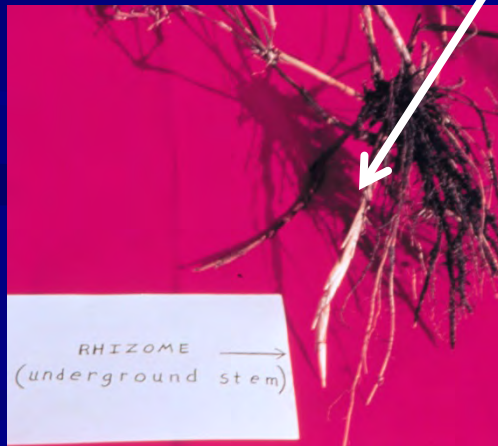


Stolons



Stem bases

Rhizomes



Animal Requirements

■ Forage quantity



Stocking rate – 2 head/acre



Stocking rate – 3 head/acre

Animal Requirements

■ Forage quality



Crimson clover



Perennial peanut

Grazing Management Defined

- The art and science of compromising between plant and animal requirements to attain desired pasture and animal production objectives

Importance of Grazing Management

- Grazing management determines whether a potentially good forage will actually be a good forage.

Outline

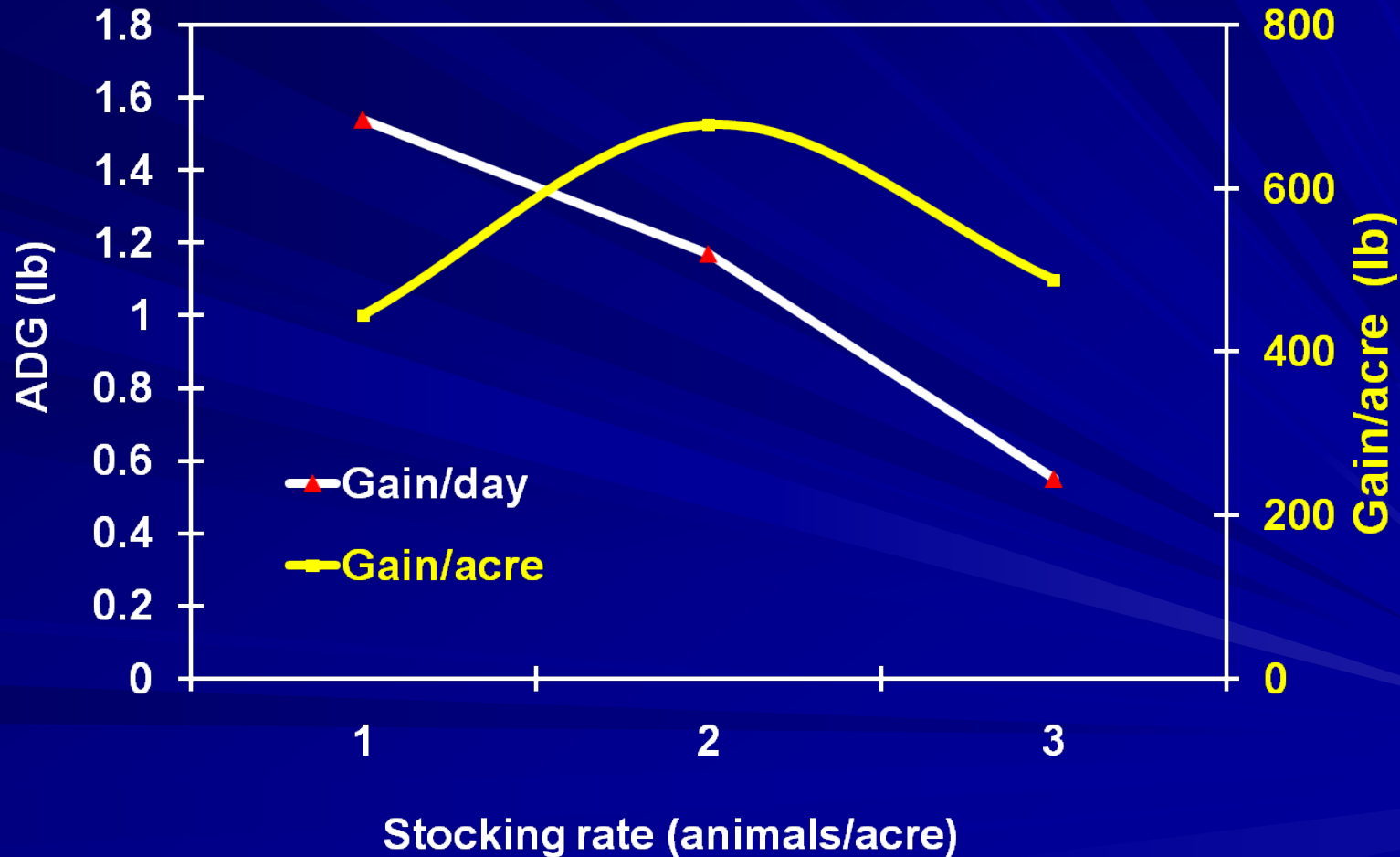
- Grazing Management Concepts
- Choices in Grazing Management
 - Grazing Intensity
 - Grazing Method
- Examples Using Live Plants

Grazing Intensity

- Measured in terms of stocking rate or some pasture characteristic (e.g., forage height or mass)
- Importance - management decision that has greatest effect on pasture characteristics and animal performance

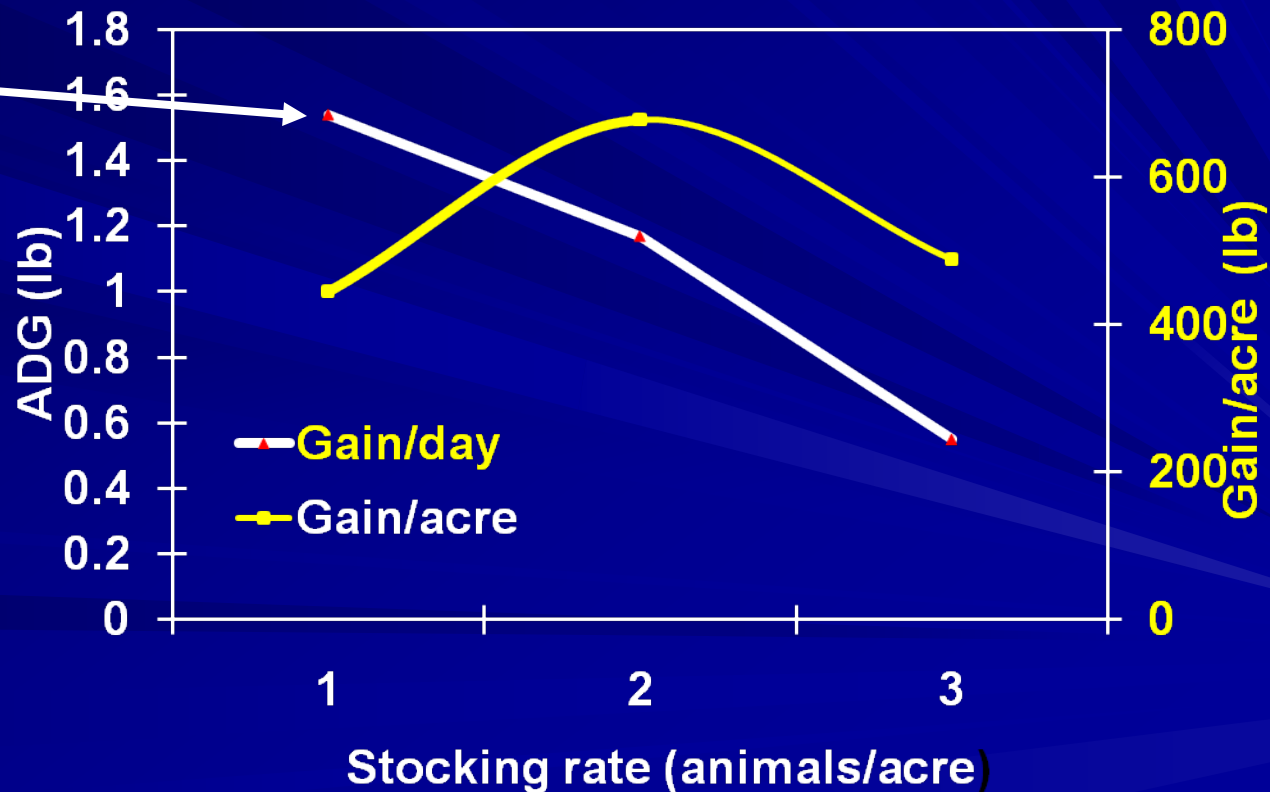
Choice of Stocking Rate

■ What SR is best?



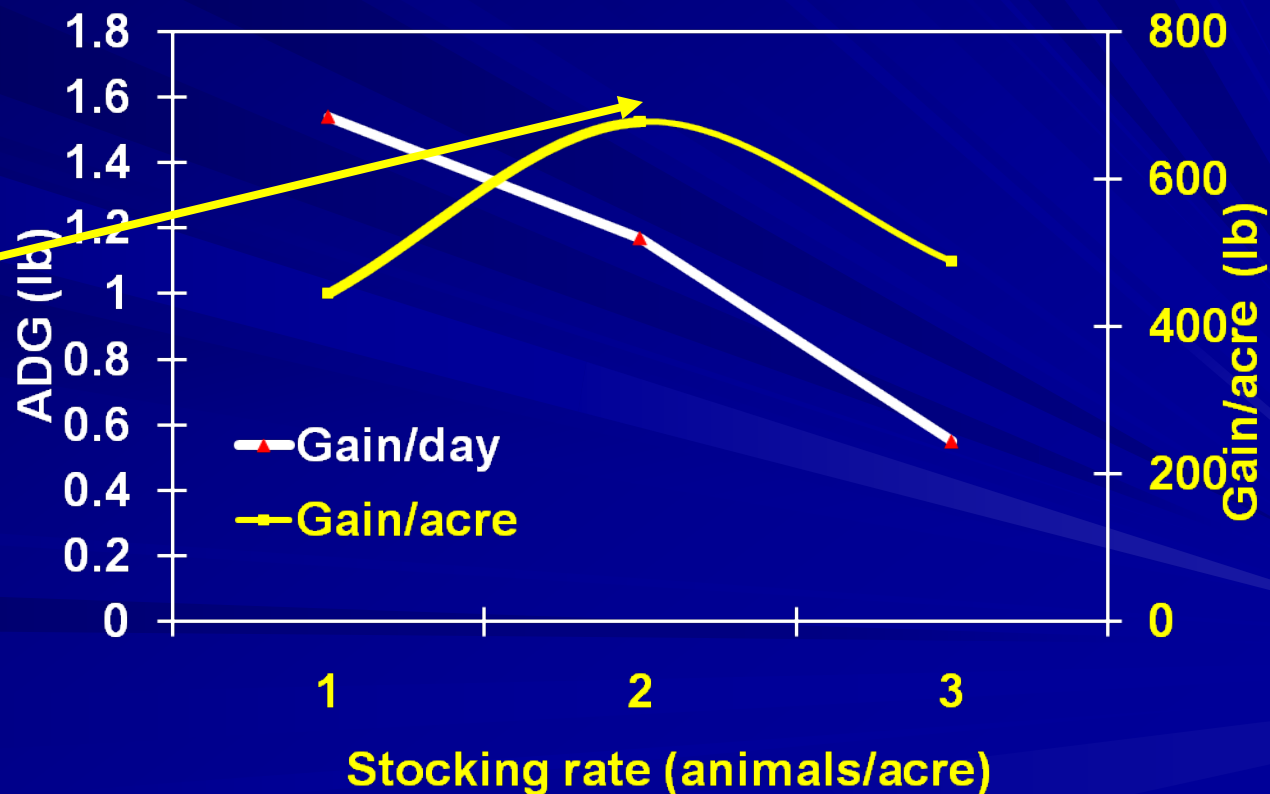
Choice of Stocking Rate

- What SR is best?
- What are your goals?
 - Maximize gain/animal?



Choice of Stocking Rate

- What SR is best?
- What are your goals?
 - Maximize gain/animal?
 - Maximize gain/acre?



Stocking Method

- Defined - a defined procedure or technique to manipulate animals in space and time to achieve a specific objective
- Most common methods are various forms of continuous and rotational grazing.



Rotational Grazing and Reserves

■ After a heavy grazing:

- Plants use reserves to provide energy for regrowth



Rotational Grazing and Reserves

■ After a heavy grazing:

- Plants use reserves to provide energy for regrowth
- A rest period between grazings allows the plant to restore the reserves that it used to regrow.



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Plant Types

■ General categories of plant growth habit

– Bunch



– Sod formers



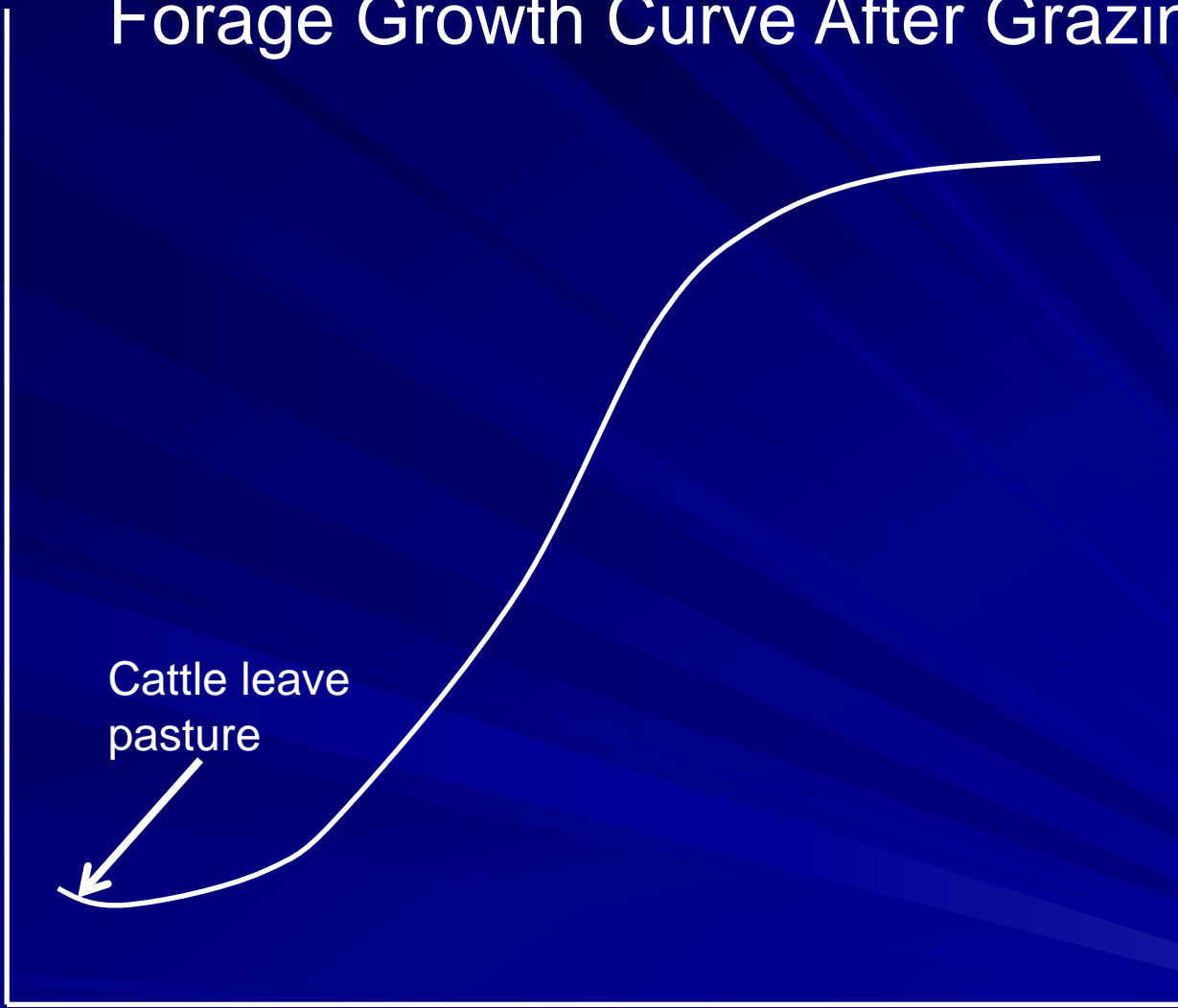
Forage Growth Curve After Grazing

Forage yield

Cattle leave
pasture

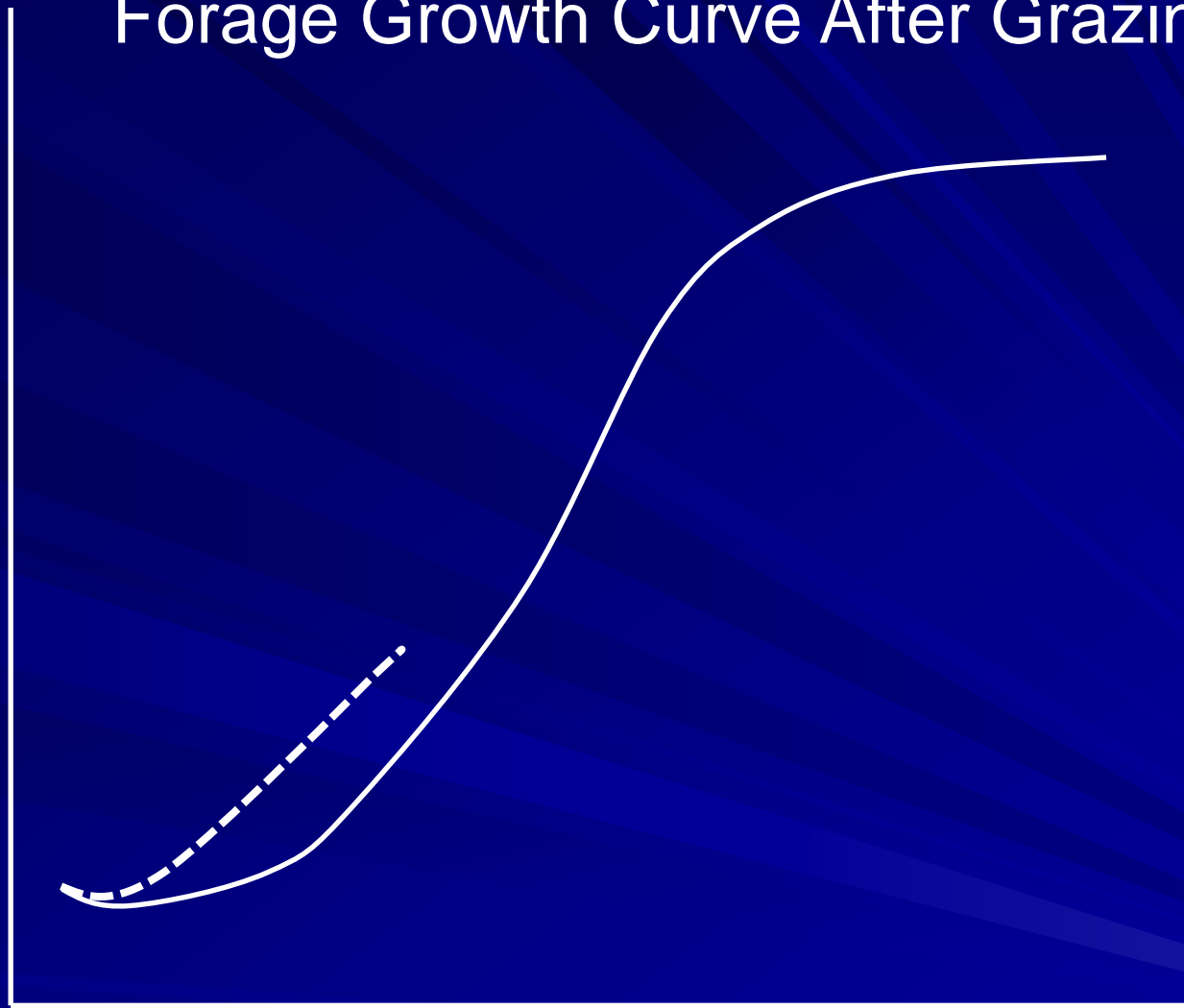


Time of Regrowth



Forage Growth Curve After Grazing

Forage yield

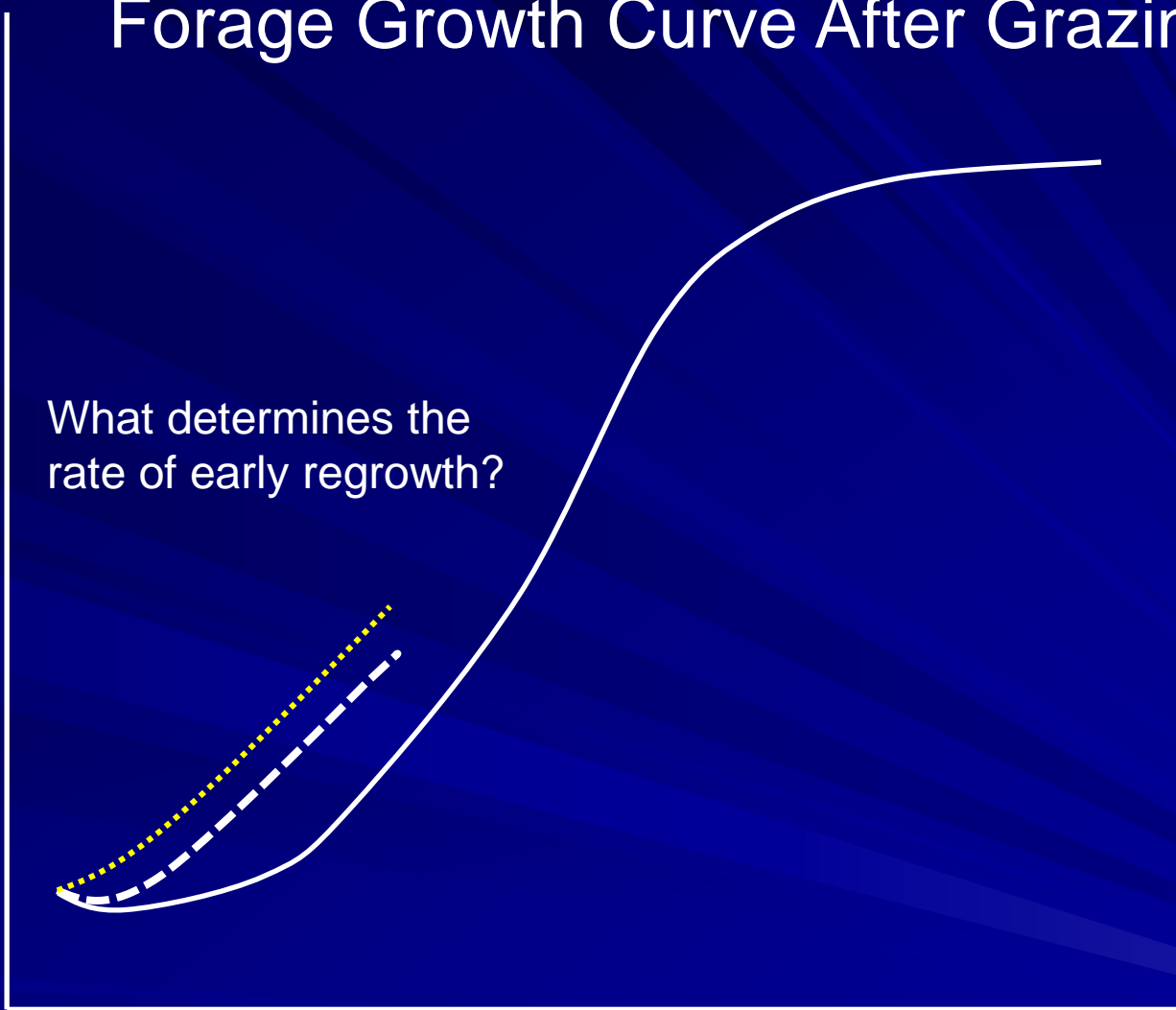


Time of Regrowth

Forage Growth Curve After Grazing

Forage yield

What determines the rate of early regrowth?



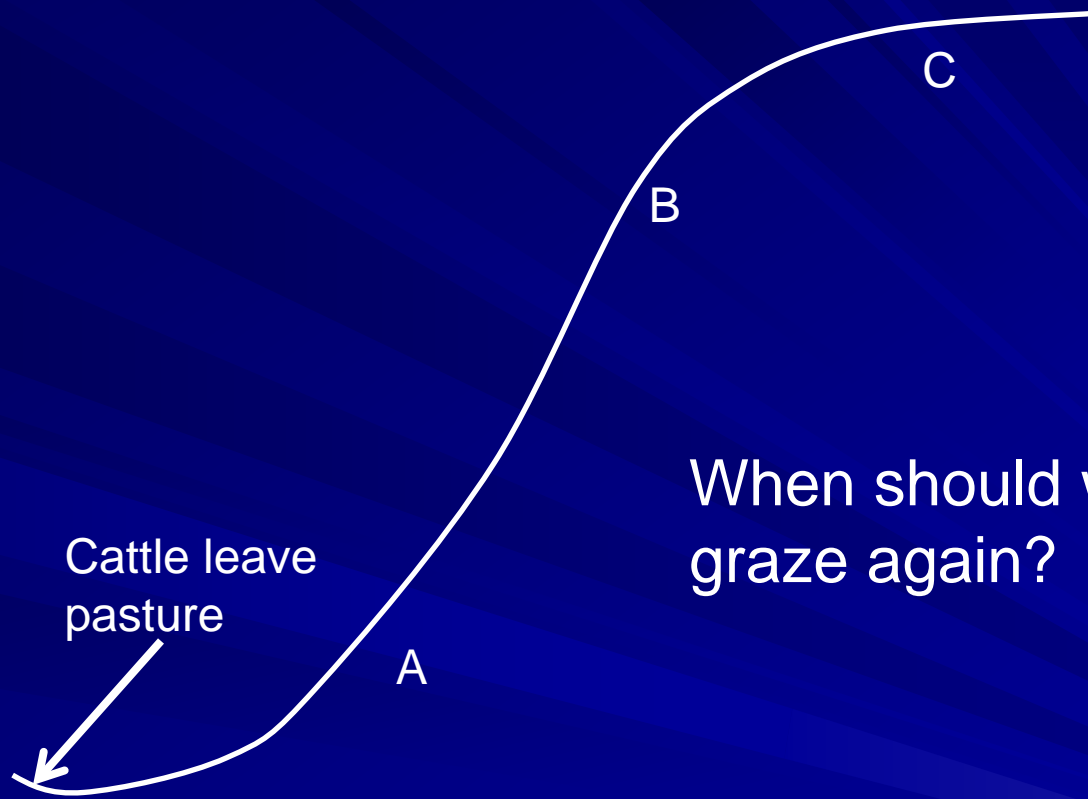
Time of Regrowth

What Determines _____ ?

- Grazing intensity (how close)
- Grazing frequency (how long since last grazing)
- Plant growth habit (where leaves are located on the plant)

Forage Growth Curve After Grazing

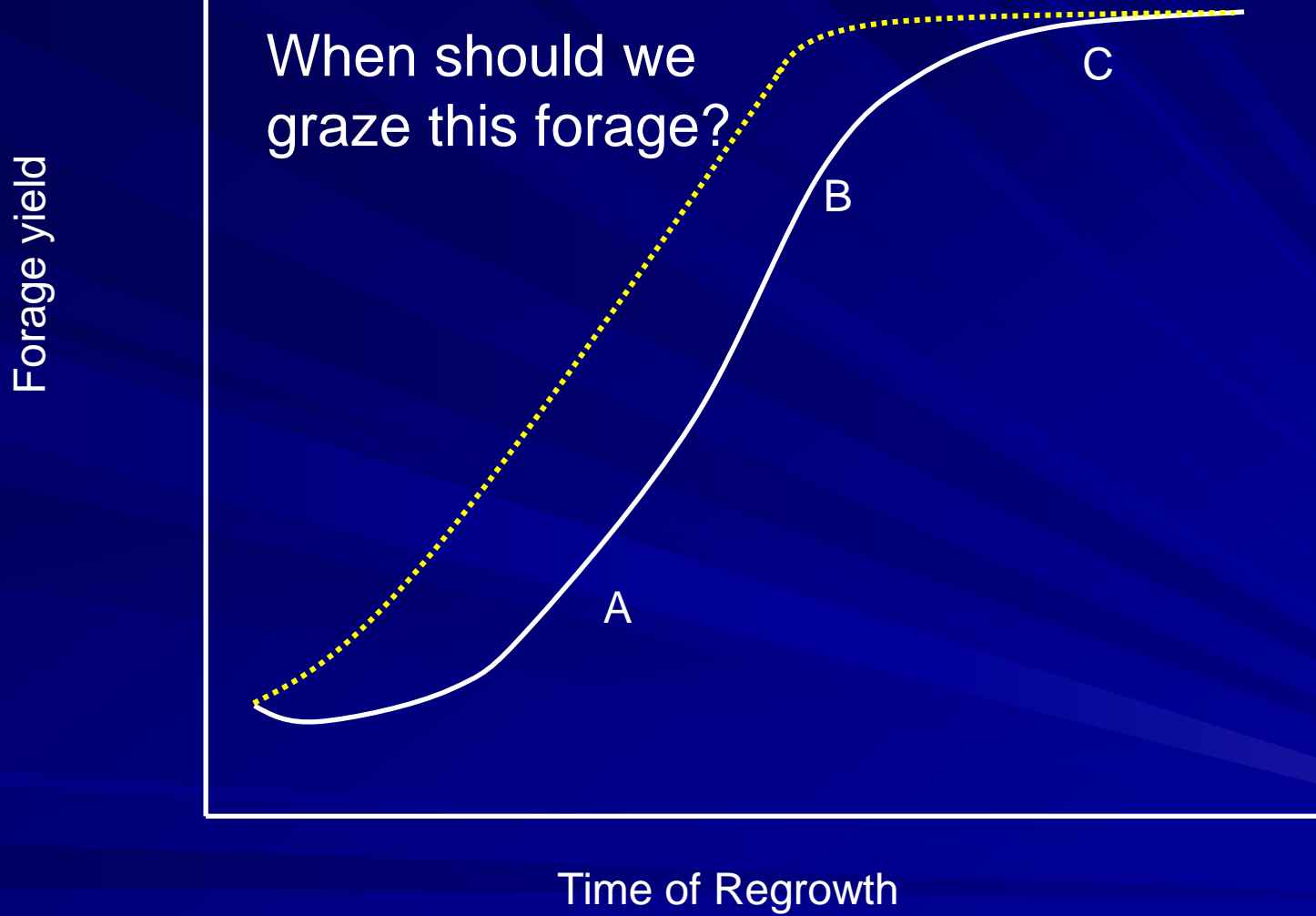
Forage yield



When should we graze again?

Time of Regrowth

Forage Growth Curve After Grazing



What Determines Length of Regrowth Period?

- Grazing intensity (how close at the previous grazing)
- Plant growth habit (where leaves are located on the plant; more leaves, faster early regrowth, shorter regrowth period)
- Importance of quantity and quality (longer regrowth favors yield, reduces quality)

Thank you!

