

Knowing, Growing and Grazing Grass

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Are you a beef producer or a
grass farmer? Or both? Why?

- Rancher's primary crop is forage –
marketed through livestock.



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What grasses do I have?

- What are 5 key grass or forb species in your pastures?
- What do you want more of?
- What are conditions and management practices that will encourage more of what you want?



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Web Soil Survey – Native Grasses

USDA Natural Resources Conservation Service

Web Soil Survey

Home About Soils Help Contact Us

You are here: Web Soil Survey Home

Search
Enter Keyword Go
All NRCS Sites

Browse by Subject

- Soils Home
- National Cooperative Soil Survey (NCSS)
- Archived Soil Surveys
- Status Maps
- Official Soil Series Descriptions (OSD)
- Series Extent Explorer
- Geospatial Data Gateway
- eFOTG
- National Soil Characterization Data
- Soil Health
- Soil Geography

The simple yet powerful way to access and use soil data.

START WSS

Welcome to Web Soil Survey (WSS)

Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 95 percent of the nation's counties and anticipates having 100 percent in the near future. The site is updated and maintained online as the single authoritative source of soil survey information.

Soil surveys can be used for general farm, local, and wider area planning. Onsite investigation is needed in some cases, such as soil quality assessments and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center at the following link: [USDA Service Center](#) or your NRCS State Soil Scientist at the

I Want To...

- Start Web Soil Survey (WSS)
- Know Web Soil Survey Requirements
- Know Web Soil Survey operation hours
- Find what areas of the U.S. have soil data
- Find information by topic
- Know how to hyperlink from other documents to Web Soil Survey
- Know the SSURGO data structure
- Use Web Soil Survey on a mobile device

Announcements/Events

- Web Soil Survey 3.4.0 has been

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Species Diversity Range and Pasture

- Opportunity to take full advantage of available moisture and sunlight
- Greater resiliency and vigor
- Greater levels of total productivity



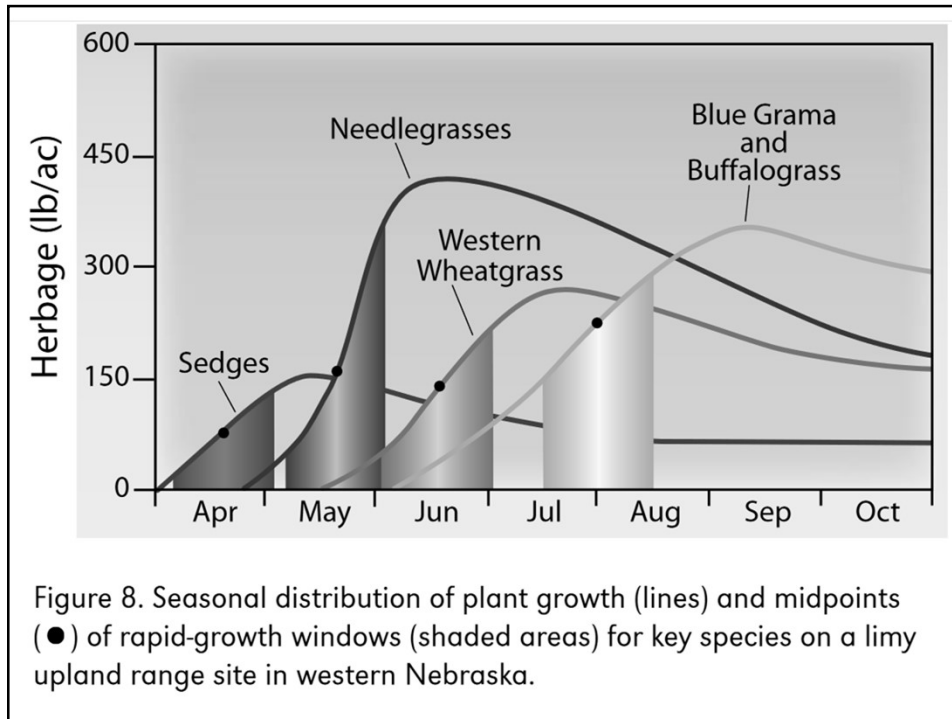
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Grasses, Sedges, Forbs, Shrubs

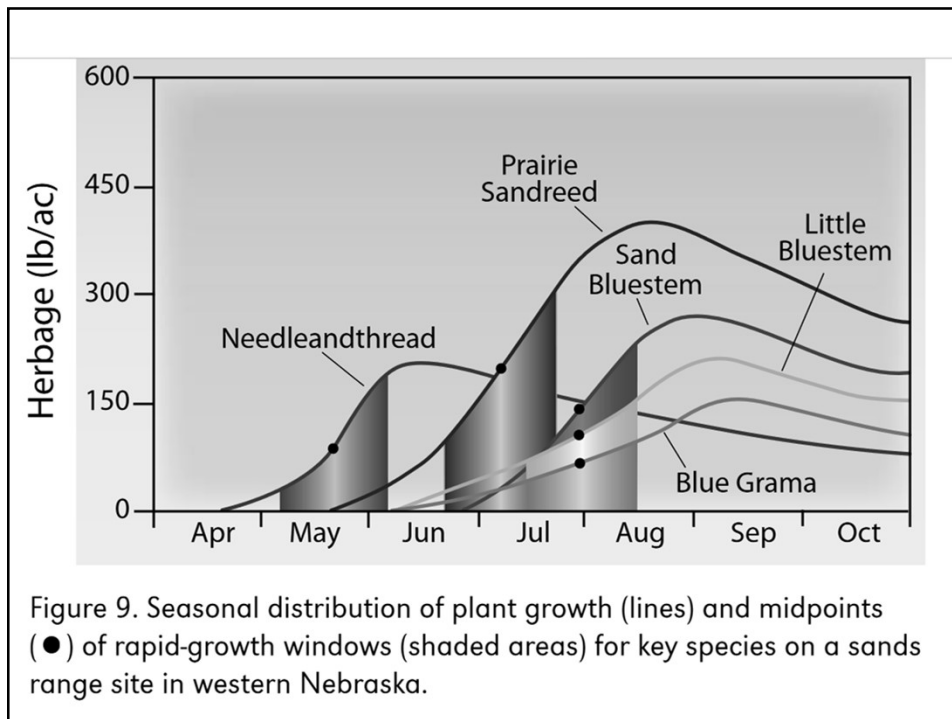
- Cool-Season Perennial Grasses
- Warm-Season Perennial Grasses
- Grass-like (sedges, rushes)
- Forbs (wild flowers and weeds)
- Shrubs (persistent woody stems)
- Annual Grasses – Invasives and Natives
- Pick 5 you want to learn



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Resources – Plant Identification Books

- Grassland Plants of South Dakota and the Northern Great Plains
- Common Grass of Nebraska (UNL)
- Common Forbs & Shrubs of Nebraska: Rangeland, Prairie, and Pasture (UNL)
- Field Guide to the Common Grasses of Oklahoma, Kansas, and Nebraska
- Weeds of the Great Plains



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Nebraska Extension NebGuides

- Skillful Grazing Management on Semiarid Rangelands
- Integrating Management Objectives and Grazing Strategies on Semi-arid Rangelands
- Grazing Systems for Nebraska Sandhills Rangeland



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How many cows can I graze?

- “It Depends!”
- What’s Forage Production?
- Range and Pasture Condition
- Pasture Species Composition
- Precipitation
- Growing Season vs. Dormant Season
- Cattle Size (Big Cows Eat More!)
- How Long



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Measurement of Forage Harvest

- Harvesting Hay – Tons per Acre
- Grazing Forage – Animal Unit Months
- An AUM is the amount of a air-dried forage a 1000 lbs. cow will consume.
- 26 lbs. of air-dried forage per head per day or 780 lbs. per month
- 1 AUM = 780 lbs. air dried forage
- 1 Ton = 2000 lbs.



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Big Cows Eat More (generally)

- 1000 lbs. cow Animal Unit Equivalent (AUE)
- 1500 lbs. cow – 1.5 AUE
- 1500 lbs. cow + calf 3 months of age wt.
 - 1500 lbs. cow + 300 lbs. calf = 1.8 AUE
- 600 lbs. heifer – 0.6 AUE



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How much should be grazed?

- It depends!
- Annual or perennial?
- Growing season or dormant season?
- Previous and current stressors
- Range site health and vigor
- Goals and objectives



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Target levels of perennial plant growing season forage harvest

- Typically recommend leaving 50% of growth for plant growth and recovery.
- 25-30% into the belly of the cow
- 20-25% for fouling, wildlife, insects etc.
- Deferred dormant season grazing higher levels of utilization.



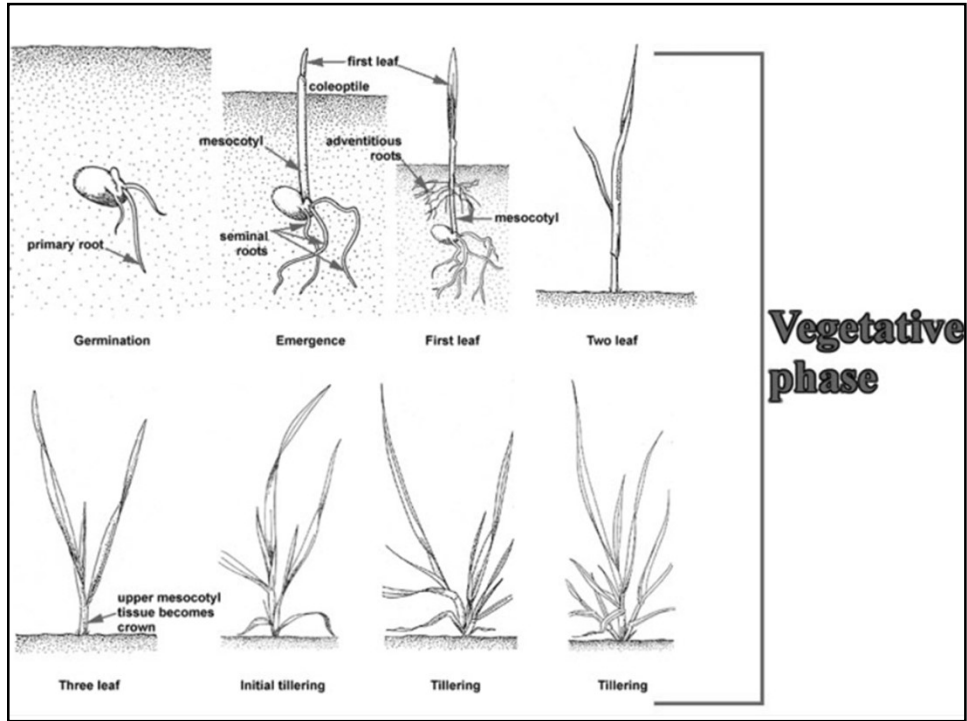
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Time and Timing of Grazing

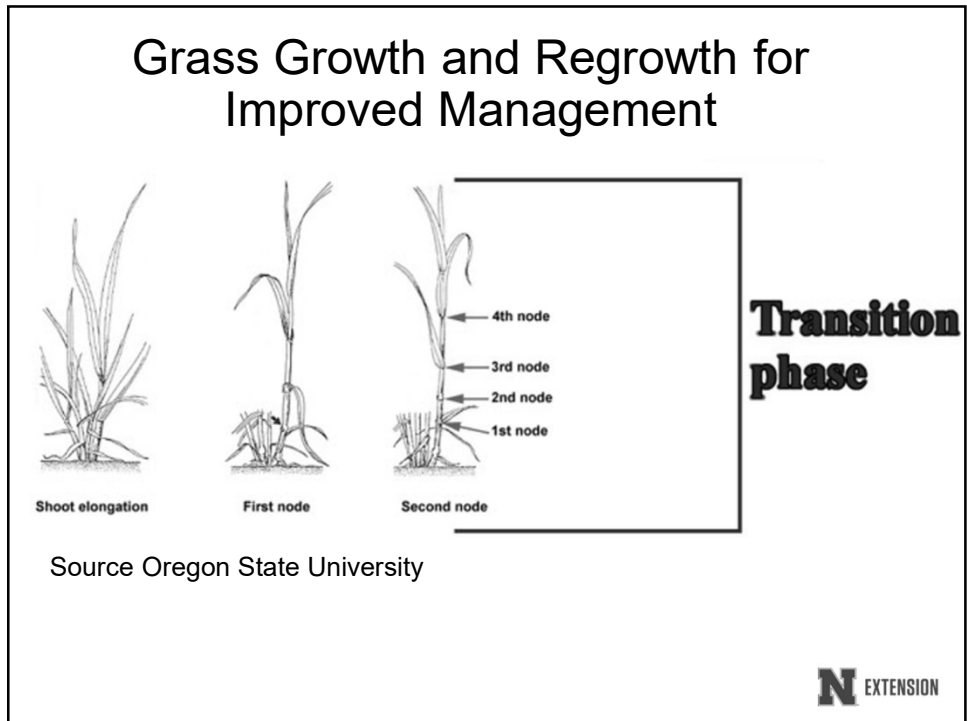
- Understanding the physiology and growth of the grass plants.
- How defoliation (grazing) impacts the perennial plant.
- When a plant has recovered and can be grazed again.



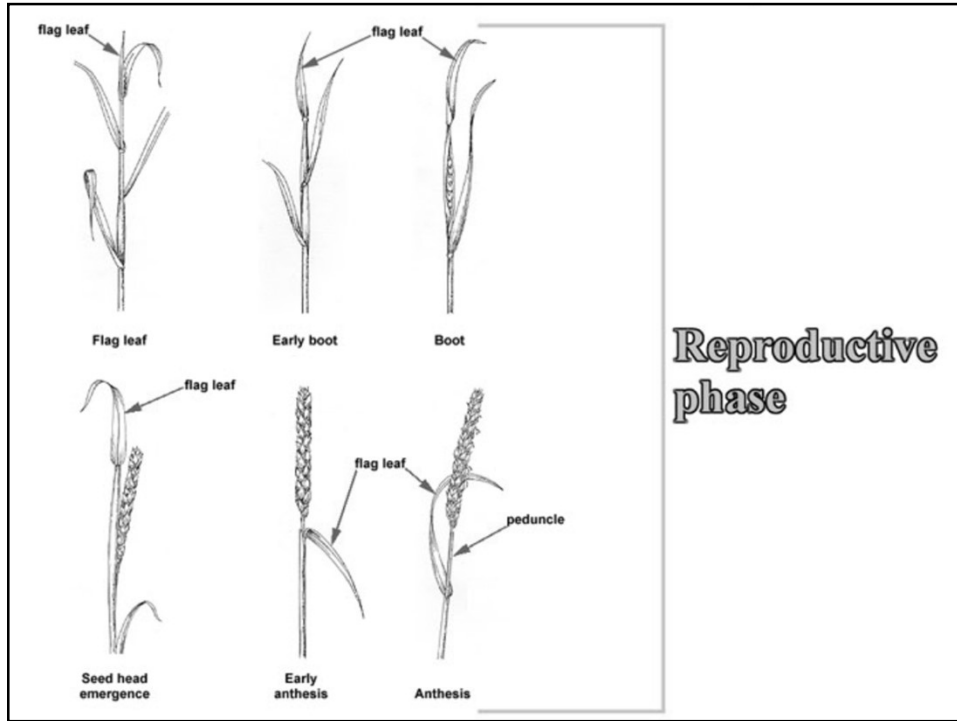
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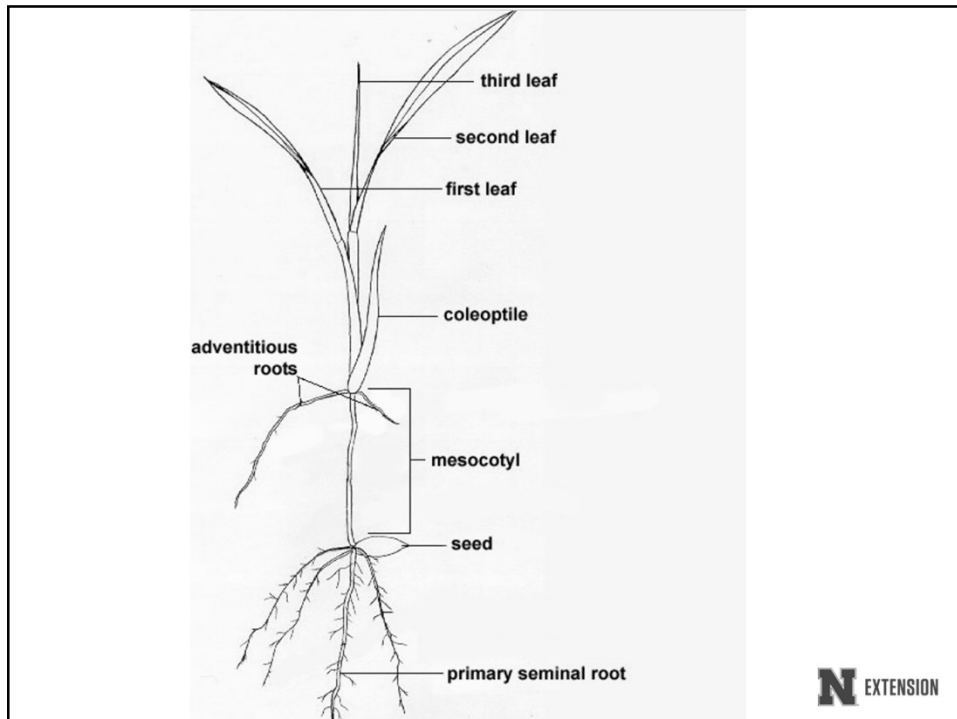
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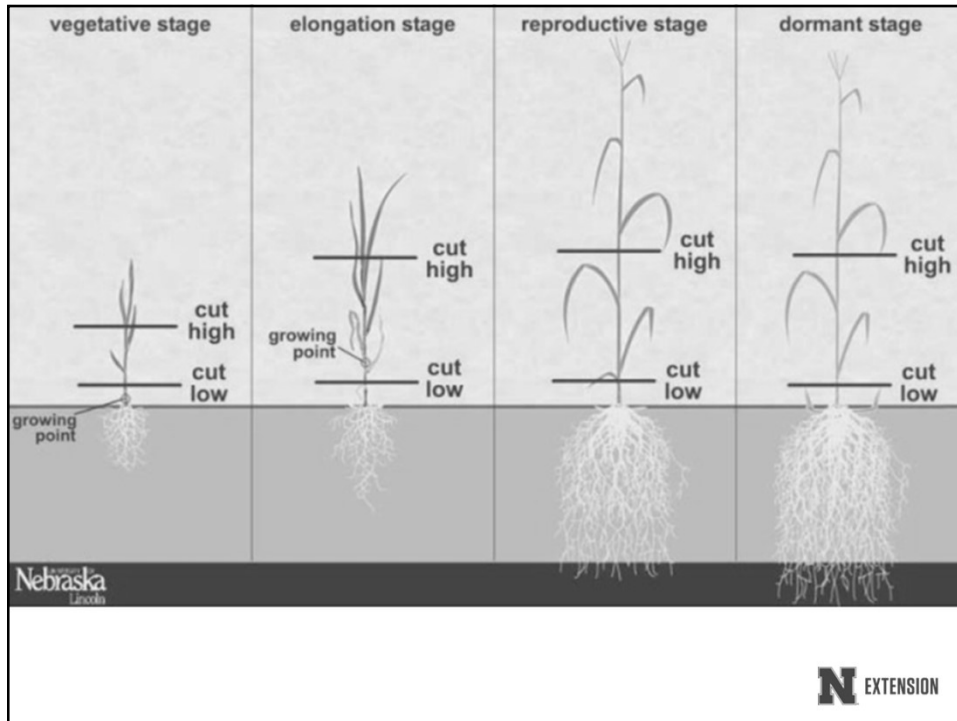
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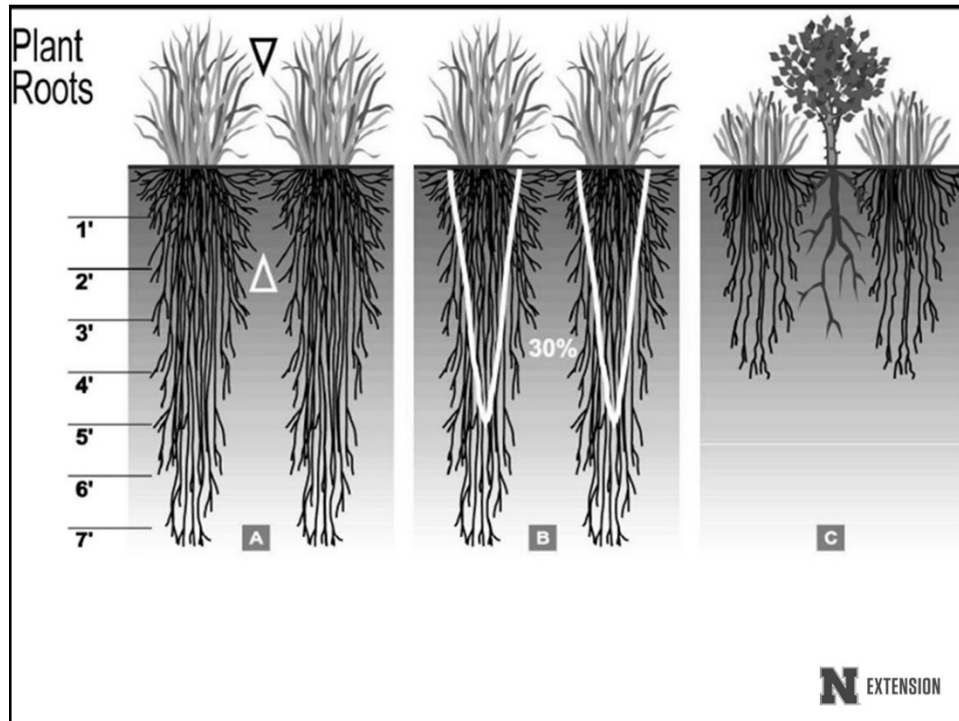
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Percent of leaf volume removed	Percent root growth stoppage
10-40%	0%
50%	2-4%
60%	50%
70%	78%
80-90%	100%

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Grazing Response Index

- Frequency
- Intensity
- Opportunity to Grow or Regrow

Source: Grazing Response Index:
A Simple, Effective Method to Evaluate Plant Responses to Grazing

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Summary

- Know what you have
- Understand what you could have
- Develop a plan
- Put it into action
- Evaluate and adjust
- Find people and resources to help you



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Knowing Growing Grazing Grass Course Fall 2025



Photo Credit Troy Walz



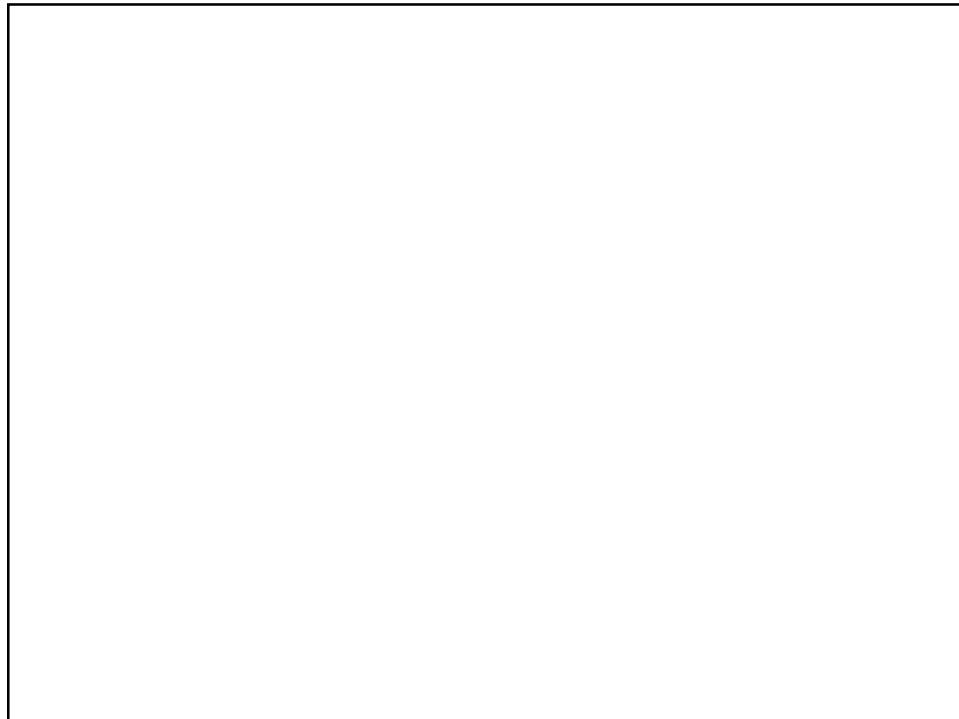
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