GOOD Pasture Management!

Horse Grazing Behavior

- Bite very close to ground

- Tend to group together
  - Overgrazing/undergrazing
    (These can occur in the same pasture!)
  - Trampling bare soil

- Very selective
  - Prefer immature, leafy forages
  - Continually graze fresh growth, leave more mature forages

- May defecate in one area
  - Don’t graze around that area
  - Weeds from feed?
Horse pastures can be challenge to manage!

Rotational Grazing Principles

• Duration: how long the animals are there
  – Goal is 5 days or less per paddock
  – Longer durations lead to a grazed plant regrowing to point it can be regrazed

• Timing: season of year
  – Rate of growth varies with temperature and moisture
    • Cool season
    • Warm season
  – Timing of grazing should vary from year to year

Rotational Grazing Principles

• Intensity: how “hard” the pastures are grazed. The effect grazing animals have on the land during a particular period of time
  – A function of number and class of animals
  – Older, more experienced animals know where to graze and consume more
  – Higher animals numbers = less selectivity

• Frequency/Rest: how soon the animals return
  – Rest required varies with time of year, species of grass, and intensity of prior grazing
Remember the Growth Curve!

Determining Animal Units
- Definition varies by agency
- Equivalent of one mature calf (1000 lbs) and a calf, consuming 20 lbs dry matter forage per day (600#/mo, 7300 #/yr)
- Standardizes all animals according to predicted impact / forage use
- Horses are generally considered 1.2 AU, BUT should be adjusted for size/weight

Carrying Capacity
- Average number of animals that may be sustained on a parcel of land without negative effects
- The stocking rate that achieves a targeted level of animal performance for a set period of time without causing harm to the pasture ecosystem
- A function of management intensity, production goals and site characteristics
Stocking Rate
- Relationship between the number of animals and the amount of land for a specific amount of time
  - AUD, AUM, AUY
- Ambiguous term
  - 1 animal on 1 acre for 100 days = 100 animal days
  - 100 animals on 1 acre for 1 day = 100 animal days

Stock Density
- The number of animals in a specified area at a moment in time
  = number head/number acres
- Low stock densities leads to uneven utilization
  - Shifts towards increasers
  - Poor animal performance
  - High supplemental feed costs
  - Some overgrazing, some undergrazing

Fertilization
- BEFORE you fertilize
  - Work on your pasture management
    - Properly managed pastures will need little, if any, fertilizer
    - Always fix management before fertilizing
    - Save $ on fertilizer costs, management time, etc
  - Get a soil test from a certified lab.
    - Be careful of season and timing.
    - Follow directions for obtaining sample
  - Test results should specify:
    - Test methodology used
    - Actual numbers (not just a range)
- Match fertilizer to need / Follow recommendations
### Types of Fertilizers

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compost</td>
<td>*Source of OM</td>
</tr>
<tr>
<td>Commercial</td>
<td>*Can be applied according to soil needs</td>
</tr>
<tr>
<td>Manure</td>
<td>*Source of OM *Readily Available</td>
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</tbody>
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### Weed Control

- Weeds are generally a symptom of bigger problem
  - Fix management first
- Properly managed pastures have fewer weeds
  - Less bare soil for weed infestation
  - Rest allows desirable species to compete
  - Even utilization increases competition for space, water, nutrients and light – “levels the playing ground”

- The battle against a weed will last as long as the weed has been on your property
  - Seed bank in the soil
- Consider source of weeds
  - Work with your neighbors
  - Control roadside weeds
  - Buy weed free feed
Weed Control - Methods

- Hand-pulling
  - Time consuming, labor intensive, but effective on smaller acreages
- Mowing
  - Can prevent weeds from going to seed (when timed correctly)
  - Increases competition from desirable species
  - Can keep forages in vegetative state
- Chemical control
  - Most rapid method of gaining control
  - Especially useful when establishing new pasture

Weed Control - Methods

- Multi-specie grazing
  - Very effective method of long-term weed control
  - Different animal species prefer different plant species → more even utilization
- Become an ecologist
  - Learn what the weed needs to thrive, and do the opposite!
  - Learn what your pasture plants need to thrive, and provide it!
- BE PERSISTANT!