What Hay Is Right For Your Livestock

Tom Gallagher
Capital Area Agriculture Horticulture Program
Livestock Specialist
What Have We Learned So Far?

• Renovate fields
• Establish new stands
• Maintain existing stands
Harvesting

• Haying equipment needed
• Dry hay making large round & square bales
• Making balage
Storage

• Round bales wrapped or stacked dry
• Round bales wrapped or ensiled balage
• Square bales in a barn
• Knowing what you have
Determining Forage Quality

• Forage testing
• Reading forage test results
• Feed value terms
Forage Quality

• Determines feeding value and price
• Determines Dry matter Intake (DMI)
• Determines what livestock you will feed it to and when
• Determines who you will sell it to or who will buy it
Feeding Hay To Livestock

- Horses
- Cattle
- Goats
- Sheep
- Alpacas
Factors To Consider When Choosing A Hay To Feed

• Clean hay
• Nutrient value
• Type of animal being fed
• Maturity
Clean Hay Free Of Mold And Dust

Causes of Moldy or Dusty Hay

- Rained on after it was cut
- Baled too green (over 15% moisture)
- Baled to dry
- Improper storage
- Weeds
- Feeding on the ground
- Floods
How To Determine If Hay Is Moldy Or Dusty

- See the mold on the outside of the bale
- Smell the mold
- See the mold or dust when feeding
- The bale feels wet or hot
- Heavy bales
Nutrient Value Of Hay

Legumes-
- High in protein 15-20%
- High in energy (ton) 48-55%
- High in calcium 0.9-1.5%

Grasses-
- Protein 7-11%
- Energy 42-50%
- Calcium .3-.5%

Why the wide ranges legume to legume or grass to grass.
Matching Hay Type To The Horse
Not all horses have the same nutrient needs

• High nutrient requirements
  – Growing horses
  – Lactating mares
  – Working draft breeds
  – Racing horses

Early-maturity alfalfa, alfalfa grass or grass hay are more palatable and higher in nutrients. A grain supplement may also be needed.
Matching Hay Type To The Horse

• Low nutrient requirements
  – Pleasure horses only ridden weekly
  – Draft horses not used for work
  – Barren mares

Mid to late maturity hay is all that is needed

*Note- Clovers and Fescue are a problem with horses
*Be on the alert for dust and mold
Feeding Hay To Beef Cattle

• Moldy hay
  – Nutrient value can be reduced by 15-20%
  – Moldy hay should not make up more than 30% of the ration
  – Animal will eat less
  – Mycotoxins not a problem in cattle
What Can A Beef Cow Eat

- 2%-2.5% of their body weight in dry matter
- 1000lb cow x .025=25lb dm/day
- 25lb dm=about 30lb dry hay
High Nutrient Requirement From Hay

- cows nursing calves
- Growing heifers
- Pregnant heifers and cows last 60 days of pregnancy
- Bulls after breeding season
- Steers under 850lbs
Low Nutrient Requirements From Hay

- Dry Cows
- Bulls maintenance
- Feedlot cattle over 850lbs
Other Factors That Affect Nutrient Requirement

- Breed
- Sex
- Age
- Hide
- Weather conditions
- Physical activities

*Note- Selenium deficiency is a problem*
<table>
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<tr>
<th>Body Weight (lb)</th>
<th>Daily Gain (lb)</th>
<th>Dry Matter Intake (lb)</th>
<th>Crude Protein lb/day</th>
<th>% of DM</th>
<th>TDN lb/day</th>
<th>% of DM</th>
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Vitamin A requirement for (1) pregnant heifers and cows = 1270 IU per lb dry feed; (2) lactating cows and breeding bulls = 1770 IU per lb dry feed.

Feeding The Right Hay To Sheep At The Right Time

• Feed a medium quality grass hay to ewes during maintenance and early gestation
• A mixed grass-legume hay should be fed to ewes in late gestation (limit feed). Be aware of vaginal collapse
• Lactating ewes should be fed a pure alfalfa or mixed grass mostly alfalfa hay to meet protein and calcium needs, may still experience milk fever
• Lambs being raised for replacement or for sale should receive mixed mostly legume hay for growth
• Ewes 2 weeks before breeding should be fed a mixed grass mostly legume hay
Feeding Hay To Your Goats

• Goats, both dairy and meat goats, prefer hay that is highly digestible. NDF below 35%

• Feed mixed mostly legume hay to:
  – Kids
  – Pregnant does
  – Lactating does

• Feed a medium quality grass hay to:
  - Mature goats

Goats prefer browse and forbes which are highly digestible
Stretching Your Hay Supply With Corn Grain

1 pound of corn can replace 2lb of medium quality hay on a TDN basis
Corn- $4.50 bushel $0.08lb
Medium quality hay- $145-$210. ton $0.08lb

Ruminants should be fed at least 1lb of hay per 100lb body weight
Comparative value for hay ($/ton) based on TDN level of a hay sample for a range of corn prices ($/bu) assuming similar dry matter percentages and corn having 88% TDN

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Questions?
Tom Gallagher, CAAHP, Livestock Specialist
TJG3@cornell.edu
Office-518-765-3500
Cell- 518-577-0958