Feeding Sheep

AG 240
Winter 2005
General Recommendations

- Require 1 gallon of water for every 4 lb of feed
- Wheat should be less than 50% of ration and requires a longer adaptation period
General Recommendations

Feeding NPN

- Should not contribute more than 1/3 of total nitrogen
- Should not be more than 1% of total diet
- Do not use in young lambs or creep rations
General Recommendations

- More susceptible for Cu toxicity than other livestock species
  - Cu deficiency can be caused by high Mo
  - Recommended that you select a TM mix that contains no Cu
    - Grazing forages contains adequate amounts
    - Unless high Mo content
General Recommendations

- Fine line between Se toxicity and deficiency
  - Less than 0.1 ppm is deficient
  - More than 2 ppm is toxic
Ewe and lamb requires:

- 4 bushels of grain + 800 lbs of hay
- Plus 5-6 months of pasture
- Plus 2 months of crop residue
- Or 800 lbs of hay if no pasture
Ewe Calendar

Flush Ewes

Why?
- To increase ovulation rate which increases lambing percentage

Method
- Take ewes off legume pasture because of estrogen content
- Feed .5 to 1 pound of grain
  - Begin 2 weeks before and continue 2-3 weeks after breeding season starts
Feeding Pregnant Ewes

Pregnancy disease
- Last 1.5 months of pregnancy critical
- Especially those carrying twins or triplets
- Lack of usable CHO
- 70% of fetal growth occurs
Feeding Lactating Ewes

Ewes with twins produce 20-40% more milk
Body Condition Scoring

- Range from 1 - 5
  - Extremely emaciated to Extremely fat
BCS 1

- Backbone is prominent and sharp
- Shortrib ends are sharp and easy to press between, over and around

Source: Agriculture Western Australia web site

www.agric.gov.wa.au
BCS 2

- Backbone is prominent but smooth
- Shortribs are smooth well-rounded ends - can feel between, over and around each smoothly

Source: Agriculture Western Australia web site
www.agric.gov.wa.au
BCS 3

- Backbone can be felt but smooth and rounded
- Shortrib ends are smooth and well covered - firm pressure necessary to feel under and between short ribs

Source: Agriculture Western Australia web site
www.agric.gov.wa.au
BCS 4

- Backbone is detectable with pressure on the thumb
- Individual short ribs can only be felt with firm pressure

Source: Agriculture Western Australia web site
www.agric.gov.wa.au
BCS 5

- Backbone can be felt with firm pressure
- Shortribs cannot be felt even with firm pressure

Source: Agriculture Western Australia web site
www.agric.gov.wa.au
Body Condition Scoring

Can also monitor weight

- Ewe should lose 5-7% of her body weight during lactation
- Recover it after weaning and then gain weight during gestation
Feeding lambs

Milk replacer
- 25-30% fat
- 20-25% milk protein
- 30-35% lactose
- Resulting liquid should be 17-20% DM
Creep Feeding Lambs

- Lambs that are to be weaned at less than 60 days must be on creep feed.

- Twin or late lambs grow better.
  - Will gain .25 lb/d more if creep fed.
Creep Feeding Lambs

- Lambs should be started on creep feed about 10d after birth
- Lambs don’t consume significant amounts until 21-28 days of age
Creep Feeding Lambs

- Small amounts consumed at early age establishes rumen function

- Lambs must consume .5 lb/d from 20-60 days for it to make a difference

Charollais lambs
Characteristics of Creep Feed

- At least 15% CP
- Start with higher roughage ration and increase concentrates slowly
- Needs to be very palatable
  - Pellets or rolled grains with molasses
  - SBM
Feedlot/Finishing lambs

- Lightweight lambs (50-70 lbs) can use more roughage
- Heavy weight lambs (70-80 lbs) require more concentrates
- Gain .5 to .9 lbs per day
## Feeding Guide for Finishing Lambs

**TABLE 17-11**

Feeding guide for hand feeding growing–finishing lambs, simplified ration

<table>
<thead>
<tr>
<th>Lamb Weight (lb)</th>
<th>Daily Intake (lb/day)</th>
<th>Alfalfa Hay (lb/day)</th>
<th>Protein Supplement (lb/day)</th>
<th>Grain (lb/day)</th>
<th>Calculated Nutrient Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CP</td>
</tr>
<tr>
<td>50</td>
<td>2.0</td>
<td>0.4</td>
<td>0.5</td>
<td>1.1</td>
<td>18.4</td>
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<td>70</td>
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<td>0.5</td>
<td>1.5</td>
<td>16.7</td>
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<tr>
<td>80</td>
<td>3.0</td>
<td>0.6</td>
<td>0.5</td>
<td>1.9</td>
<td>15.6</td>
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<tr>
<td>90</td>
<td>3.5</td>
<td>0.7</td>
<td>0.5</td>
<td>2.3</td>
<td>14.8</td>
</tr>
<tr>
<td>100</td>
<td>4.0</td>
<td>0.8</td>
<td>0.5</td>
<td>2.7</td>
<td>14.2</td>
</tr>
<tr>
<td>105</td>
<td>4.5</td>
<td>0.9</td>
<td>0.5</td>
<td>3.1</td>
<td>13.8</td>
</tr>
</tbody>
</table>

Source: Livestock Feeds and Feeding (Kellems and Church)
Finishing Lambs

- Feed pelleted feeds
  - Reduces dust
    - Decreased rectal prolapse
  - Increases palatability
Finishing Lambs

- Subject to urinary calculi from being on diets high in grain
  - Can be reduced by raising the Ca:P ratio to 3 or 4 to 1
Finishing Lambs

- **Enterotoxemia type D**
  - Overeating disease
  - Can be prevented with vaccination prior to weaning (especially if early weaned) and within 2 weeks of arrival in feedlot
Generalities

- Mature, idle horses can be fed on roughage alone
- Horses being ridden need some concentrate added
- Growing foals also require concentrate
Pasture requirements

- One acre for exercise
- 2 acres for grazing needs if pasture is well managed and has enough moisture
- Native ranges in the west require 2-10 acres per month
Grains

- Oats is considered the best grain
- Corn-oats mixture is excellent mix
- Corn alone tends to cause colic
- Sorghum and barley may not be as palatable
- Wheat is too expensive and should make up less than 50%
Nutrient Notes

Proteins

- If at least half of the ration is a legume, very little supplement needed
- Usually added to improve the hair coat
  - SBM is excellent source
  - Linseed meal can be a laxative if feed with legume hay
  - Linoleic is good for coat
- Do not use urea
Nutrient Notes

Minerals

- Salt, Ca and P
  - Ca and P should be fed free choice separate from salt
  - Mares in early lactation need twice as much Ca and P in their diets
  - Young horses should have a 1:1 ratio
  - Older horses can tolerate up to 6:1
  - Never feed more P than Ca in a horse’s diet
Nutrient Notes

Vitamins

- Horses outside on good pasture seldom need supplements
- Horses confined in barns receiving poor quality hay need ADE
- B vitamins if horse is under stress
Nutrient Notes

Water

- Give working horses small amounts of water at a time to keep them cool

- Don’t give hard working horses cold water
Preventing Nutritional Colic

- Ensure teeth are in good order so that the horse can chew and grind food for maximum digestion and nutrient absorption.

- Employ a suitable anti-parasitic (worming) program to prevent parasite damage to intestinal walls and blockage of the gut lumen.

- Feed a high (digestible) fiber diet complimented by small meals of a quality, nutrient balanced, concentrate feed.

http://www.sepeonline.net/_content/Education.php?language=english
Preventing Nutritional Colic

- Feed a minimum of 1.5%/bodyweight/kg of forage. For example; a 500kg horse in medium work should consume min 7kgs forage/daily.

- Ensure that all feed is dust and mould free. Store in a cool, clean, dry environment. Beware! Bacteria and mycotoxins are commonly found in cereal feedstuff.

http://www.sepeonline.net/_content/Education.php?language=english
Preventing Nutritional Colic

◆ Keep starch & sugar intake to a minimum to prevent digestive disorders of the large intestine and gastric ulceration.

◆ Do not feed on sand floor to prevent ingestion of sand, which are a common cause of sand colic.
  - Can be prevented by feeding psyllium
  - Testing for sand colic:
    - Take a fresh piece of manure, put it in the jar with water, put on the lid, and shake up the jar. Shake it until the clod dissolves in the water. Let it sit.

    Once everything has settled, look at the bottom of the jar to see if there is a noticeable amount of sand. If there is sand, then it's probably a good idea to take precautionary measures.

http://www.sepeonline.net/_content/Education.php?language=english
Preventing Nutritional Colic

- Do not feed immediately before or after exercise to allow for maximum digestion.

- Maintain a stress-free environment as close to the horse's natural habitat to prevent spasmodic colic - often seen in stressed horses. Turn out for a period if possible.

- SUPPLY FRESH, CLEAN WATER AT ALL TIMES

http://www.sepeonline.net/_content/Education.php?language=english
Rules of Thumb for Feeding Horses

- Water the horse before feeding if not available free choice
- Hay should be fed before grain
Rules of Thumb for Feeding Horses

- Tired horses should be fed half their grain and then the rest 1 hour later.
- Do not work a horse right after a full feed of grain.