

Feeding Sheep

AG 240

Winter 2005



www.corbis.com

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 .1 ppm is deficient
 - More than 2 ppm is toxic



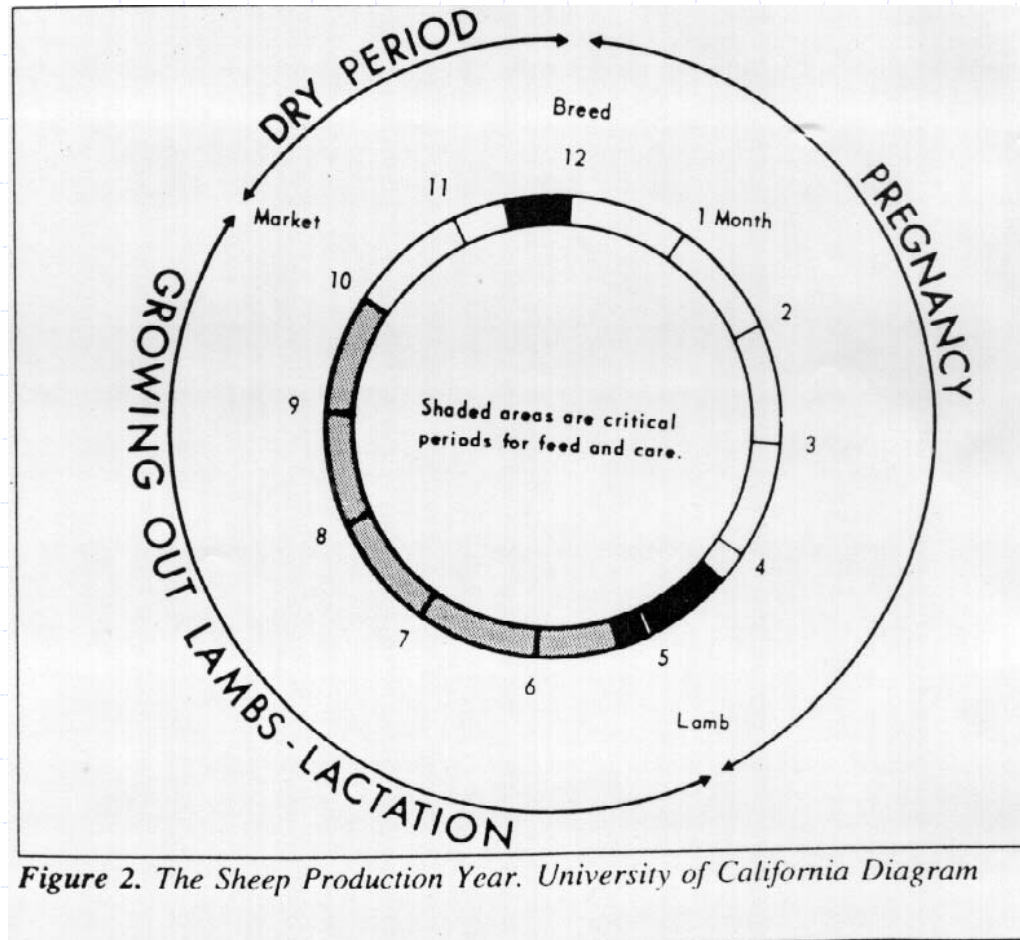
Ewe and lamb requires:



- ◆ 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



Source: SID Sheep Production Handbook - 1997

Flushing 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 Ew



◆ Pregnancy disease

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

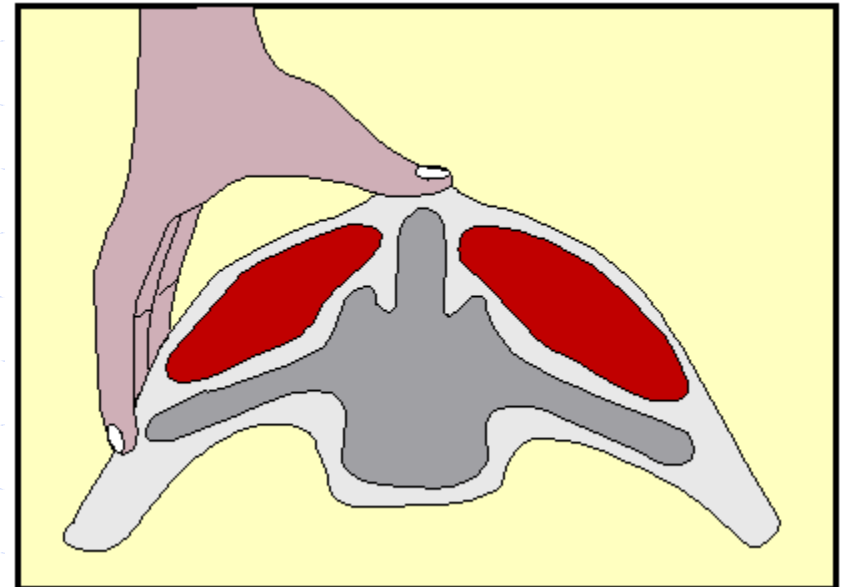
Feeding Lactating Ewes

- ◆ Ewes with twins produce 20-40% more milk



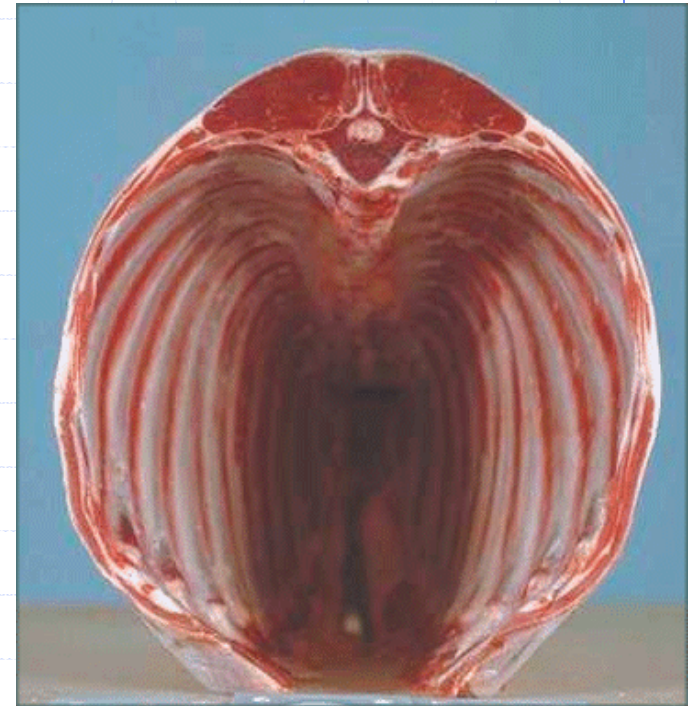
Body Condition Scoring

- ◆ 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

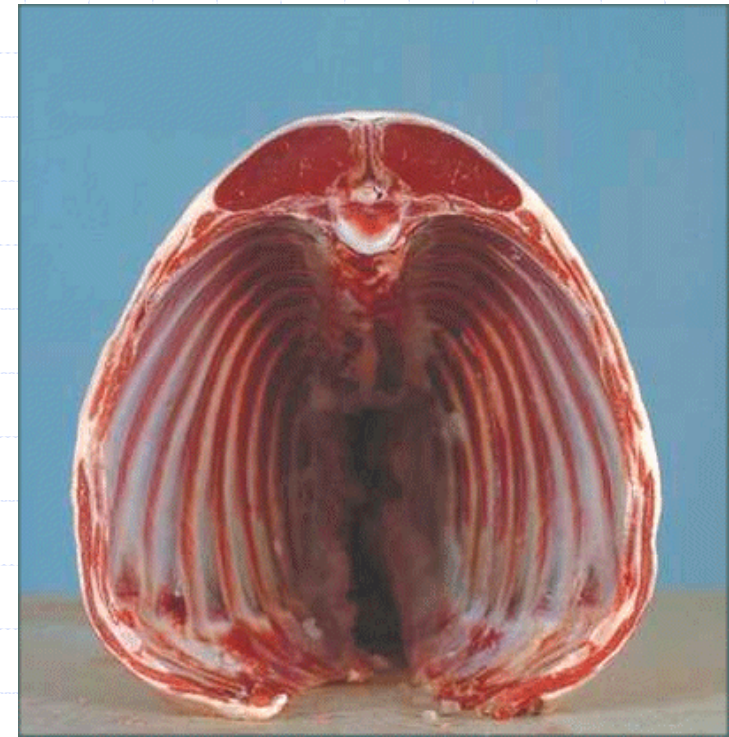


Source: Agriculture Western Australia web site

www.agric.gov.wa.au

BCS 2

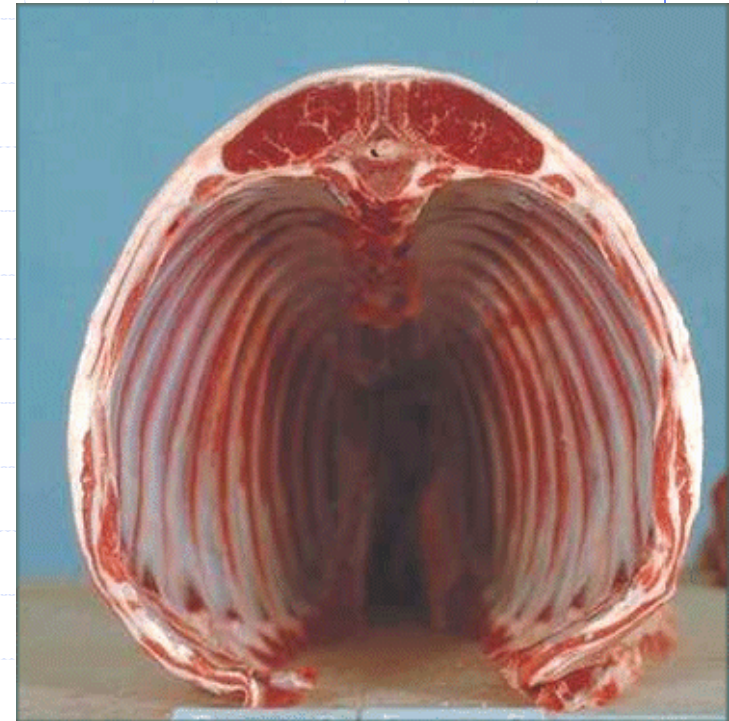
- ◆ Backbone is prominent but smooth
- ◆
- ◆ Shortribs are smooth well-rounded ends -can feel between, over and around each smoothly



Source: Agriculture Western Australia web site

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

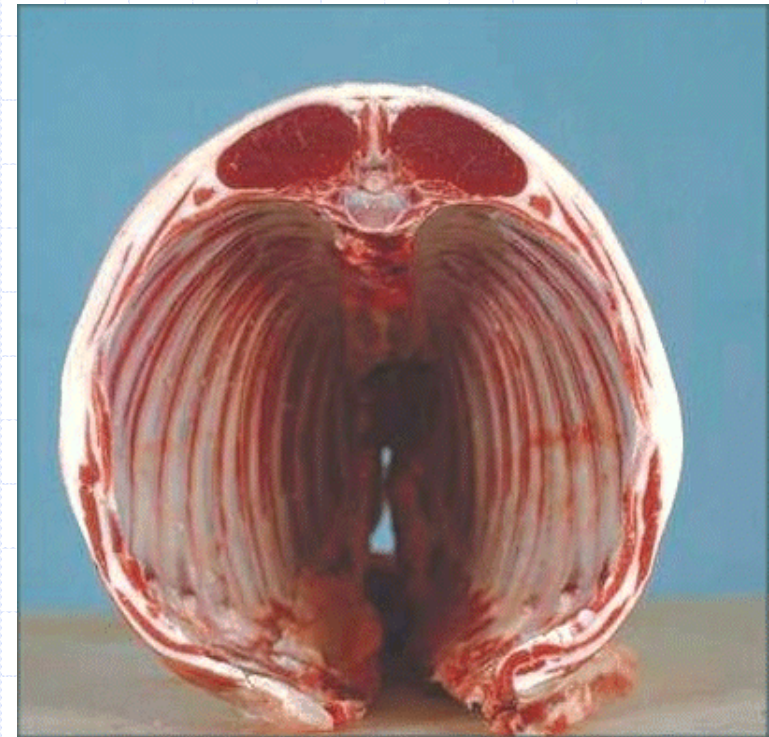


Source: Agriculture Western
Australia web site

www.agric.gov.wa.au

BCS 4

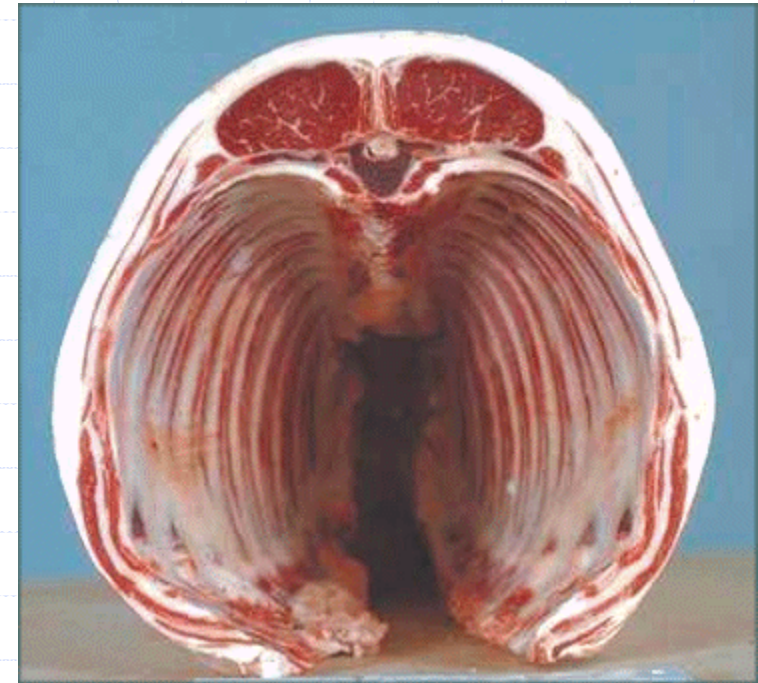
- ◆ Backbone is detectable with pressure on the thumb
- ◆
- ◆ Individual short ribs can only be felt with firm pressure



Source: Agriculture Western Australia web site

BCS 5

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



Source: Agriculture Western Australia web site

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

<i>Lamb Weight (lb)</i>	<i>Daily Intake (lb/day)</i>	<i>Alfalfa Hay (lb/day)</i>	<i>Protein Supplement (lb/day)</i>	<i>Grain (lb/day)</i>	<i>Calculated Nutrient Composition</i>			
					<i>CP</i>	<i>TDN</i>	<i>Ca</i>	<i>P</i>
50	2.0	0.4	0.5	1.1	18.4	73.4	0.85	0.46
70	2.5	0.5	0.5	1.5	16.7	75.4	0.73	0.43
80	3.0	0.6	0.5	1.9	15.6	76.1	0.65	0.40
90	3.5	0.7	0.5	2.3	14.8	76.6	0.60	0.39
100	4.0	0.8	0.5	2.7	14.2	77.0	0.55	0.37
105	4.5	0.9	0.5	3.1	13.8	77.3	0.52	0.36

Source: Thomas, 1990 (30).

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

Feeding Horses

AG 240

Winter 2003



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



Feedstuff Notes

◆ 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.

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.

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.

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

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