

Selection: The First Step

Ways to Start Your Project

There are several ways to start your market lamb and/or sheep breeding project. One is to select a lamb or lambs from your parents' or your own ewe flock. Another is to purchase a lamb from an established sheep producer in your county or area. Sheep producers provide many outstanding sheep each year for sale on the farm or through sheep sales.

Selecting Your Lamb

Selection of a project animal should be done carefully, with consideration given to breed, size, and quality. Size and quality are especially important, and while management and nutrition have great influence on both, it is a big help to begin with a good animal.

At the same time, however, while you want to select the best lambs you can possibly afford, be sure that the price you pay is consistent with your objectives. For the beginner, who is learning about feeding, management, etc., good quality lambs bought at a modest price may be the wisest investment. Purchasing livestock at high prices does not guarantee success nor mean easier management.

A successful project outcome requires the lamb to have a desirable genetic background and an excellent environment while in your care.

This handbook will give you the information you need to select good quality sheep. But before discussing the characteristics of size and conformation that indicate good quality, it will be helpful (1) to review the parts of a lamb and (2) identify some of the breeds commonly available.

Sheep selection and evaluation consists of making a careful analysis of animals and measuring them against a commonly accepted ideal. Training in livestock or sheep selection is important because it gives you practical experience in making individual decisions and supporting those decisions verbally. Most importantly, skills in sheep selection will help you identify the individual animal that will add the desired traits to a breeding sheep flock.

How to be a good judge:

- Study animals and pictures of ideal animals.
- Review judging terminology.
- Learn the different parts of the live animal and carcass.
- Have a clearly defined "mental picture" of the ideal animal.
- Make a quick and accurate observation or decision.
- Be able to evaluate what you see.
- Be confident and honest.
- Be able to defend the decisions you made—think on your feet.

Glossary

Balance—A smooth and harmonious blending of body parts.

Breed character (breed type)—Combination of features that identify an animal with a breed such as conformation, color and head shape.

Buck-kneed—With knees bent slightly forward.

Calf-kneed—With knees bent slightly backward.

Capacity (internal volume)—Internal body dimensions.

Carcass—The dressed body of a slaughtered meat animal.

Condition—The degree of fatness in breeding animals.

Conventional—Early maturing.

Cow-hocked—Hocks closer together than feet, hocks bent in as viewed from the rear.

Dock—Region where the tail was removed.

Early maturing—Reaches high proportion of mature size quickly; opposite of late maturing.

Extended—Longer and taller.

Femininity—Possession of well-developed secondary female sex characteristics.

Finish—Degree of fatness in meat animals.

Hindsaddle—The area of the lamb or carcass from the last rib back, includes loin, leg and rump.

Loin—The part between the last rib and the hip bones.

Low-set—Having short legs.

Masculinity—Possession of well-developed secondary male sex characteristics in the head, neck and shoulders.

Open shoulders—Shoulder blades too far apart at the top.

Rangy—A very long body, opposite of compact.

Rugged—Big, strong.

Rump—The area between the hip bones and the tail head.

Scale—Size.

Sickle-hocked—A hock that has too small of an angle made by the leg above and below the hock, as viewed from the side.

Soundness—a.) If there are no weak spots in the wool; b.) When an animal is free from disease and lacks structural defects that affect its usefulness.

Structural correctness—Free from any conformational abnormalities.

Stylish—Attractive, possessing a pleasing conformation or way of movement.

Substance—Amount of bone.

Wasty—a.) Too much fat on a carcass; b.) An animal that has a paunchy middle.

Judging Market Lambs

The main points to consider in judging market lambs are muscling, finish and expected carcass merit. (See Figures 3 and 4.)

Parts of the Lamb

To be successful in raising and selecting sheep, you should know the names of the various parts of the animal and their locations on the animal's body. This will help you know what to look for and accurately describe what you have seen (Figure 1).

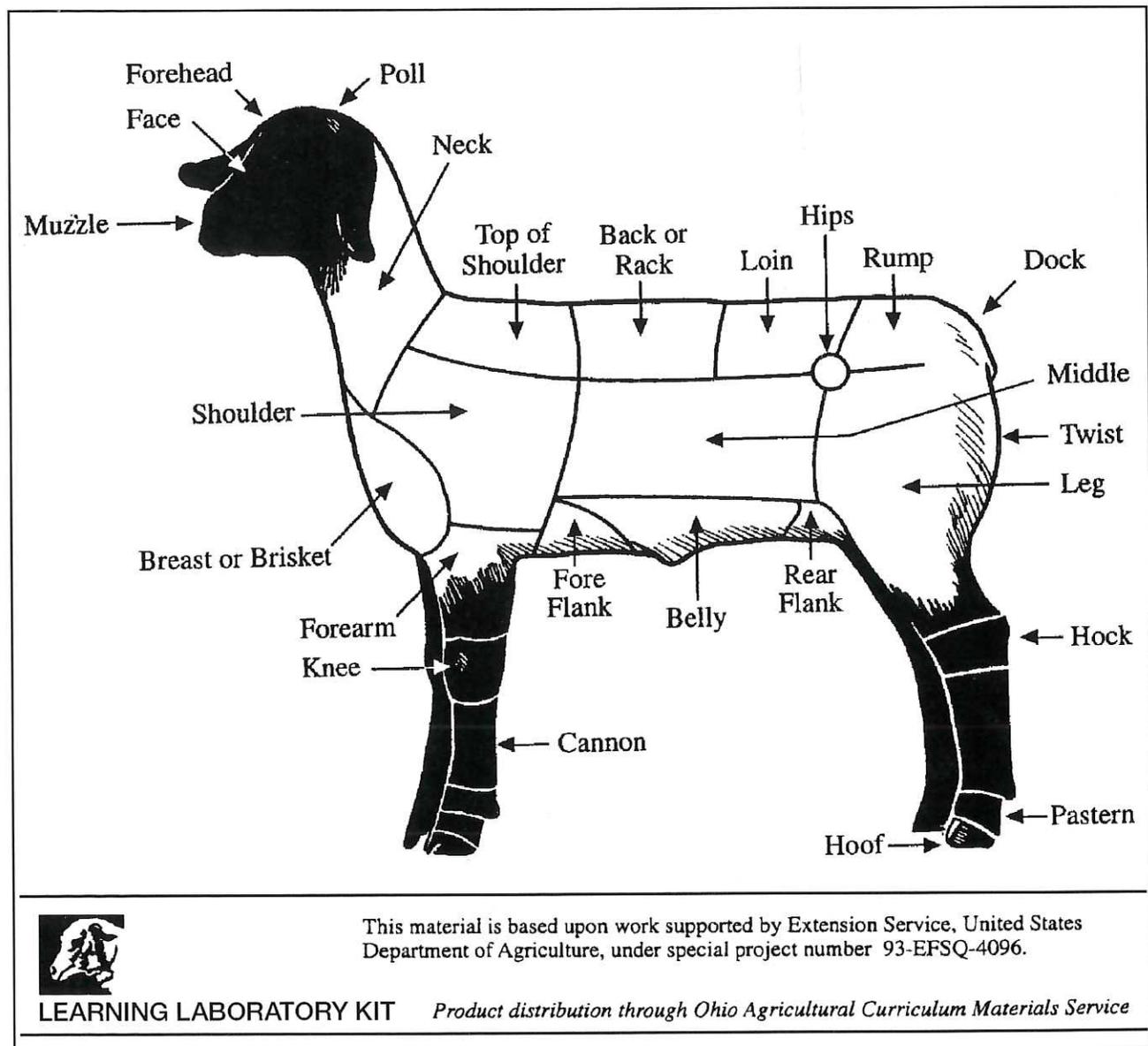


Figure 1
Parts of a Sheep

This knowledge should be permanent, at least for as long as you are involved in raising and showing sheep. When talking to fellow 4-H members, a breeder, or a judge, you will want to sound knowledgeable about your 4-H project. So take some time now to study the following diagram and become thoroughly familiar with all the indicated parts of a lamb.

Size Considerations

Regardless of breed, it is important when selecting your project lambs to select ones at the right size. Select a size that is appropriate to the amount of time you have from project start until fair time. Know the dates of your fair and figure the number of days you will be feeding your lamb. Lambs will generally be purchased at 8–10 weeks of age and will weigh 50–60 pounds.

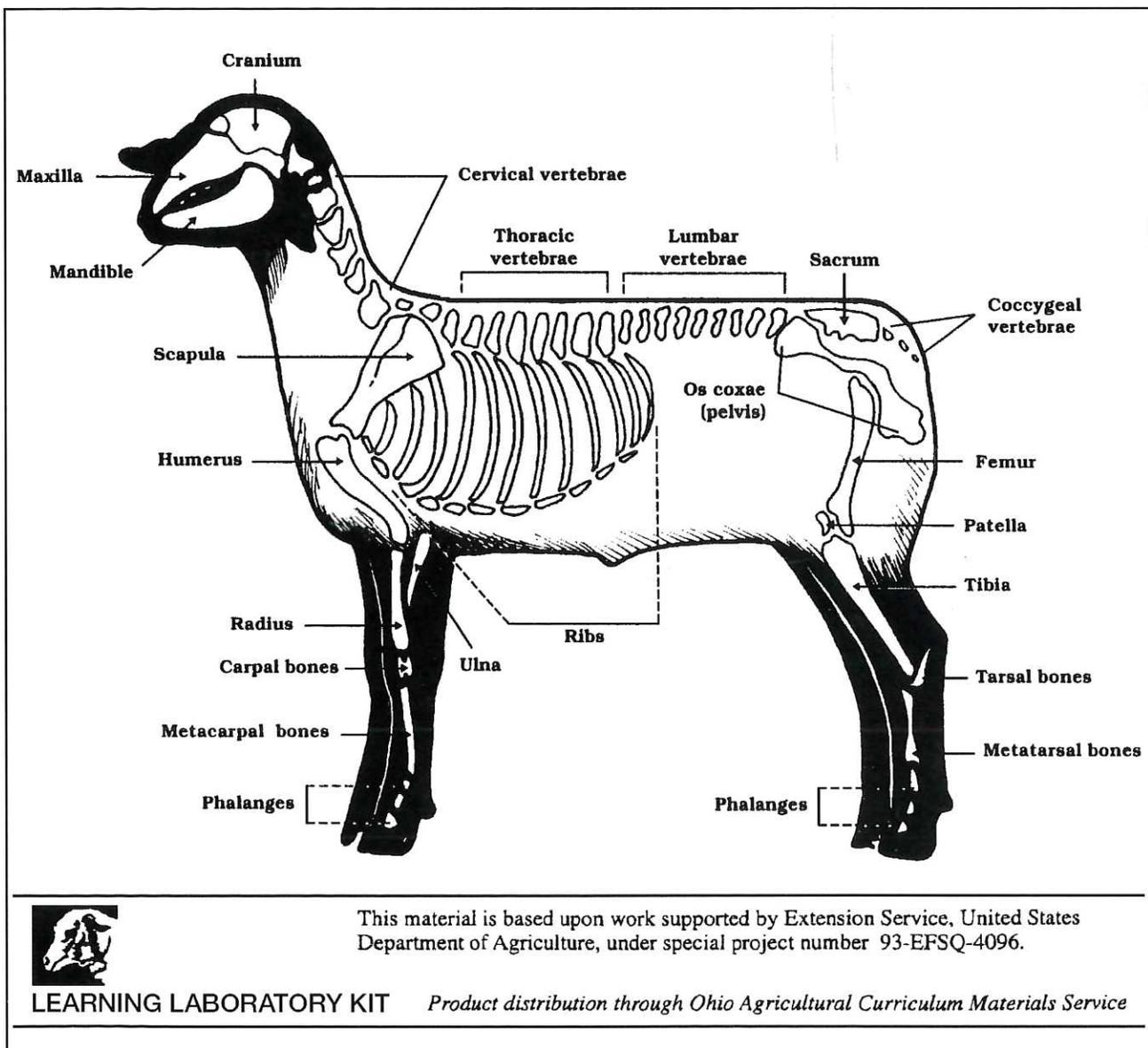


Figure 2
Sheep Skeletal System

Most lamb projects are started in April or early May. Market lambs at fair time should weigh 100 pounds or more, with ideal being 115–140 pounds. An average lamb on a good ration will gain 0.50 to 0.75 pounds per day. Feed your lamb with a weight goal in mind, leaving margins for extreme hot weather, sickness, and other unforeseen problems.

The following chart may help you in selection:

Anticipated weights for lambs gaining ½ pound per day:

Days Until Showing	Purchase Weight	Final Weight
100	50	100
100	65	115
100	80	130
80	50	90
80	65	105
80	80	120
60	50	80
60	65	95
60	80	110

When selecting size, don't forget to consider frame size as well. Frame size plays an important part in the weight of your lamb. If you have a large-framed lamb, it can carry 130 pounds much easier and better than a smaller framed animal. The smaller framed lamb will appear to be fatter. Also, if you are buying two or more lambs, choose animals that are similar in frame size and weight.

Selecting the Right Type of Lamb

A good lamb should catch your eye when you first see it. Select lambs with enough length of body and leg to denote growthiness but with good muscle development over the hindsaddle and in the rear legs. Avoid short, fat, and early-maturing lambs or rangy, narrow types that lack muscle development or ruggedness.

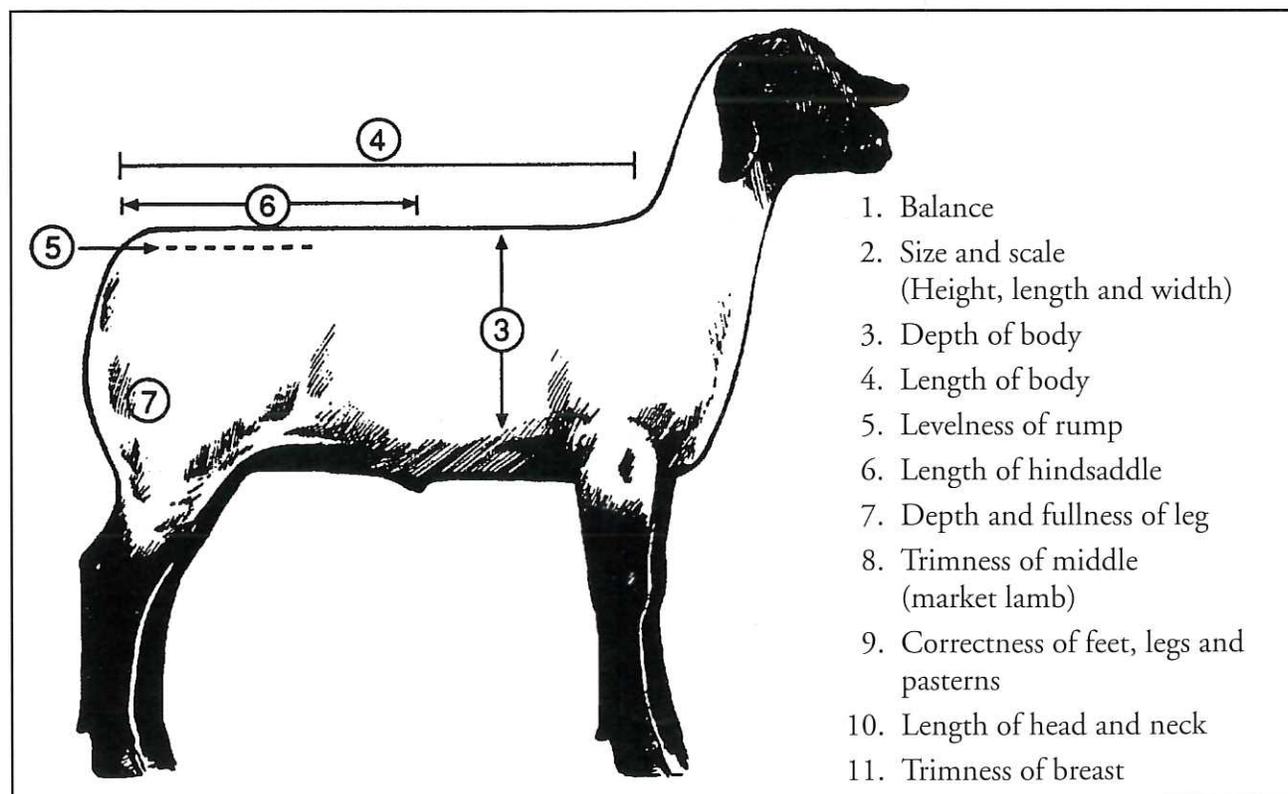


Figure 3

Conformation

An ideal market lamb is one that combines weight and frame, straightness of lines, natural muscling, and trimness. The ideal market lamb has adequate frame, is long-bodied and is clean and trim throughout the front end and middle. Look for a strong, level topline. Your lamb should be especially long through the loin and rump (hindsaddle). Lambs should be level in the rump and stand on a sound, structurally correct set of feet and legs (Figure 3).

Balance

This is the proportion of body parts. The lamb should be strong-topped and level-rumped, with a long neck and head. It should also be clean and trim (Figure 3).

Capacity

The body capacity should be moderately deep and square, with the ribs sprung wide throughout

the chest cavity. The depth should continue the length of the animal's body in a uniform manner from the fore flank to the rear flank (Figure 3). Body capacity is important for maintaining health, intake of feed, and adequate reproductive volume.

Muscle

The ideal market lamb should exhibit extra muscling through its top, hindsaddle, and leg. These are the areas from which the high-priced cuts of meat come from. An indication of muscling is thickness through the center of the leg. When viewed from the rear, the lamb should stand naturally with its legs wide apart. A natural thickness over the top will be visible with a slightly rounded appearance and good width, length, and depth of loin. There should also be good width and length of rump (Figure 4) and muscle expression in the forearm.

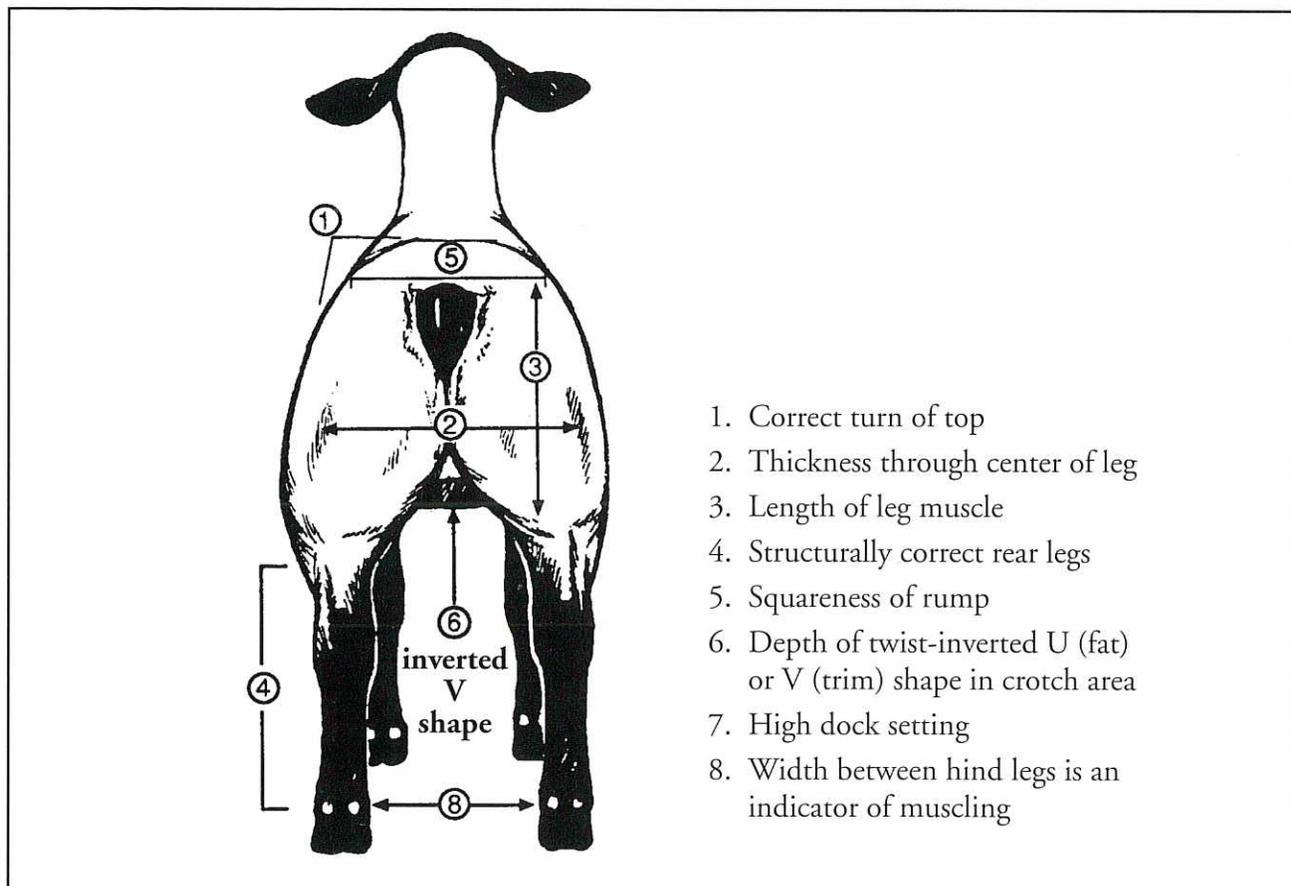


Figure 4

Structural Soundness

Skeletal correctness in feet, legs, and mouth should be evaluated when selecting a lamb for your project. The lamb should be evaluated on the move as well as being held by someone and being braced if possible. This gives you an idea of how the lamb will look to the judge at the fair whether the lamb is being held or on the move. Evaluate the structural soundness from the ground up.

Forelegs

The correct placement of the foreleg (Figure 5) has a vertical line from the point of the shoulder to the ground and divides the leg into two equal halves. The line splits the knee, fetlock, and foot.

Calf-kneed (Figure 5) is when the knee is bent slightly backward. A lamb can also have weak pasterns (Figure 5). Buck-kneed (Figure 5) is when the knee is bent slightly forward.

A splayfooted (Figure 5) lamb has toes that point outward. As the lamb walks, the foot will “dish in” toward the other limb. A pigeon-toed animal (Figure 5) is the reverse of one that is splayfooted. The toes point inward and the animal will paddle or “wing-out” as it walks. A knock-kneed lamb (Figure 5) has knees that are set too close together. Often, an animal will be both knock-kneed and splayfooted.

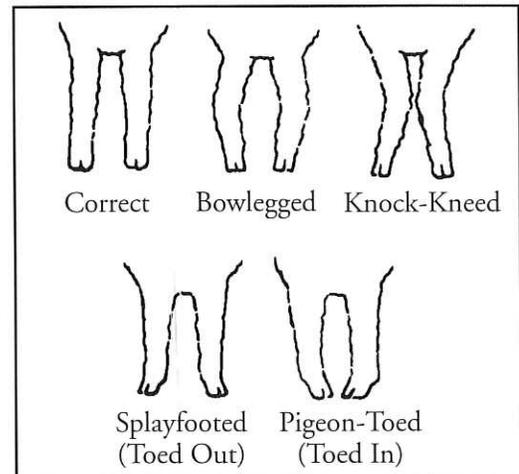
A bowlegged animal (Figure 5) has the opposite condition of a knock-kneed lamb.

Hind Legs

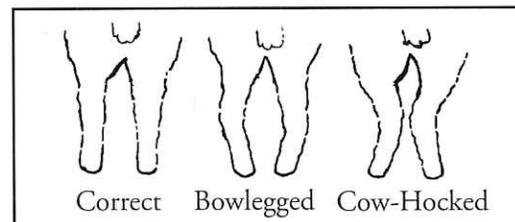
A correctly set hind leg depends on the angle at the hock joint that is formed by the gaskin and cannon bone. Try to visualize a straight edge that touches the pin bones, as illustrated in Figure 5. If the straight line appears to touch the rear edge of the cannon bone, the lamb will have the proper set to the hind leg. This will be true even if the feet are placed more forward or behind the “line.”

Leg Descriptions and Illustrations

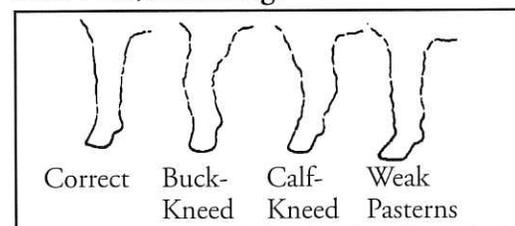
Front View



Rear View



Side View, Front Legs



Side View, Rear Legs

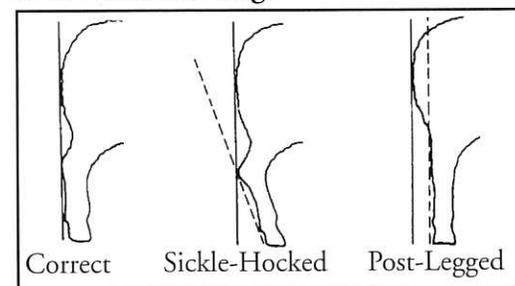


Figure 5

After viewing several lambs, you will soon realize that the angle at the hocks varies. The greater the degree to which this angle varies, the more incorrect the animal is and the more serious the fault (Figure 5).

The sickle-hocked lamb (Figure 5) has too much set or angle at the hock. In horses, this defect causes curbing, a bony growth on the back of the hock that develops because of strain on the joint. This can occur in sheep, but rarely does, because a sheep does not strain the hock to the same extent as a horse.

A more serious fault is a hind leg that is too straight, or post-legged (Figure 5). This condition changes the angulation of the bones at the hock and the stifle joint and shortens the stride. The patella (knee cap) at the stifle joint may be displaced resulting in a stifled, lame, unsound animal.

Figure 5 illustrates the proper set to the hind leg when the animal is viewed from the rear. Figure 5 shows a cow-hocked lamb. With this condition, the hocks are too close together, the cannons are not parallel and the toes deviate extremely outward. A lamb with this defect has an unsightly, inefficient gait.

A lamb can also be bowlegged off the hind legs (Figure 5).

Sheep Jaw Structure

(See Figure 6.)

- A. Undershot (Parrot-mouth)—in this situation the lower jaw is too short.
- B. Overshot (Monkey-mouth)—the lower jaw is too long, and the teeth are in the front of the upper mouth pad.
- C. Normal mouth—the top and bottom jaws are properly aligned. Note that the incisor teeth are flush with the pad on the upper jaw.

Unsound mouth diagrams such as A and B are inherited traits that interfere with the sheep's ability to gather food.

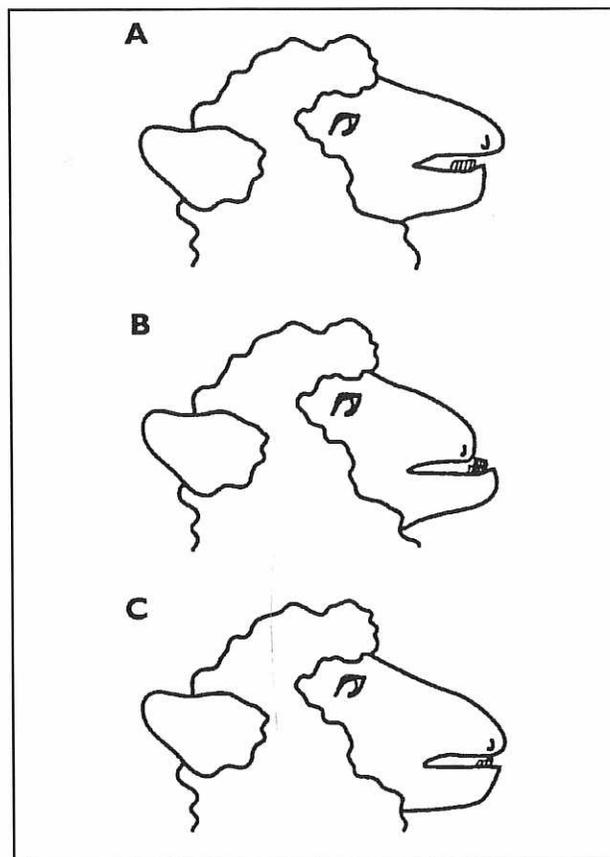


Figure 6
(North Central Region Extension
Publication #300)

Finish

Correct finish is important to determine the cutability (retail value) of a lamb. Finish is the amount of external fat on a lamb. To determine the amount of finish, handle the lamb over the backbone and ribs. Excessive prominence of the backbone and ribs shows a lack of finish. Too much finish is present when you cannot feel the backbone or ribs by normal handling methods. Correct finish is 0.10–0.20 inches of backfat. Desirable traits in regard to finish include: smooth and uniform fat cover over the ribs; no excessive fullness in breast; a uniform fat cover of 0.10–0.20 inches.

Finish or Condition is evaluated in the:

- sternum
- lower forerib
- upper rear rib
- over backbone and loin
- flank
- twist

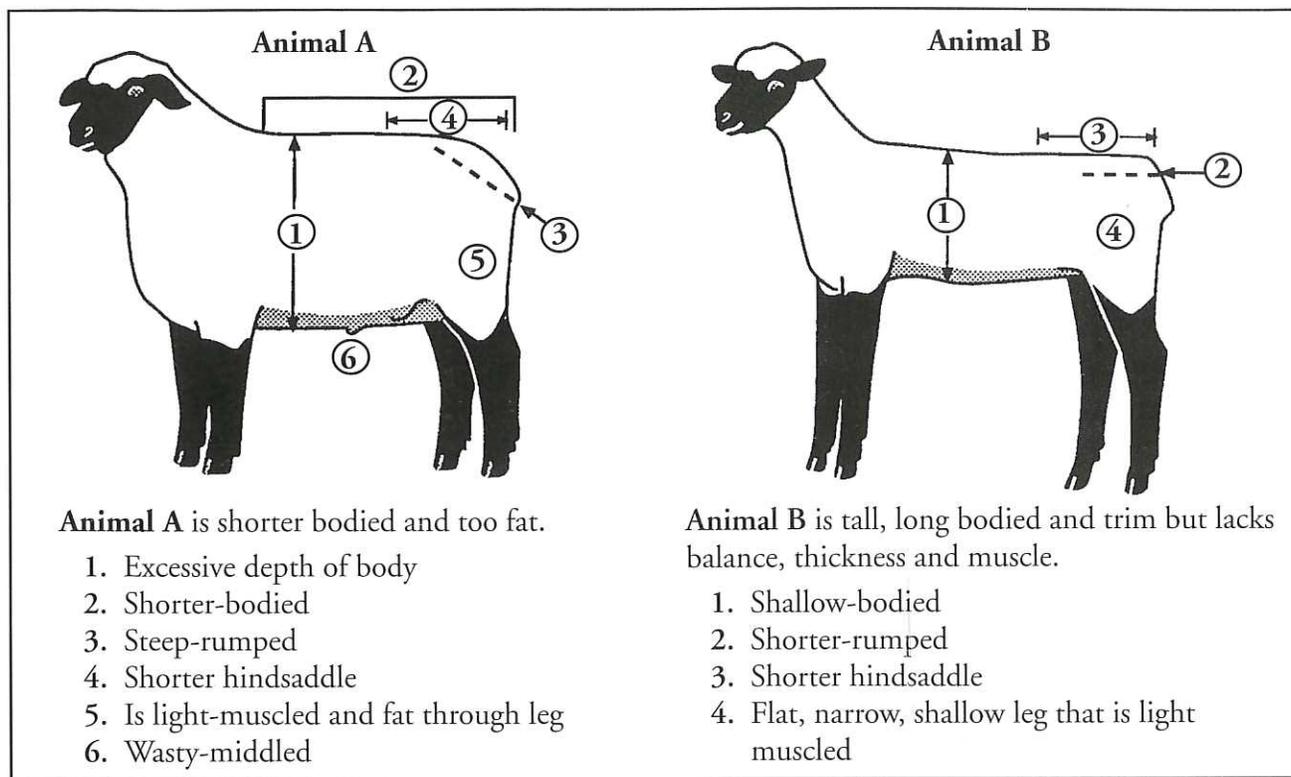


Figure 7

Judging Breeding Sheep

Breeding sheep classes are usually assumed to be purebred, and the animals are to be used for purebred breeding stock unless you are told otherwise. Breeding sheep are judged on the same major points as market lambs. In addition, condition, size, soundness, breed and sex character, and fleece are considered.

Condition

Condition refers to the amount of fat. In breeding sheep, excess condition leads to reproductive problems. Over-fat ewes have trouble breeding and lambing. Ewes that are too thin also may have trouble breeding or raising lambs.

Size

Size is how big or heavy an animal is for its age. Skeletal frame and bone and muscle development are good indicators. Size between breeds varies.

Frame and capacity are two different portions of total size. Frame is the height and length of an animal. Capacity is the depth and width of the animal's body. A larger animal is not always more desirable than a smaller one. But, the animal should be large enough to grow and produce efficiently and should meet the breed size standards.

Soundness

Soundness (skeletal correctness) in mouth, feet, legs and fleece are important in breeding sheep. The lower teeth should hit even with the upper pad. (See Figure 6.) Straight, strong legs and adequate bones are also desirable. The legs should be set squarely on the corners of the body. (See Figure 5.) The animal should be able to move freely without any evidence of unsound feet and legs. Although fleece is not a major consideration when placing meat-type breeds, it should be dense,

have a distinct crimp, be clean, bright and free of off-color fibers (black). The skin should have a healthy, pink color.

Breed and Sex Character

Rams should be rugged and strong. Their testicles should be somewhat large for their age, should be

suspended straight and evenly from the body and should be firm. Ewes should be more refined in their features. Ewes should have two evenly placed teats. Their udders should be soft and smooth, and their vulvas should be well developed and relatively flat, not tipped. Compare each animal against the others in the class.

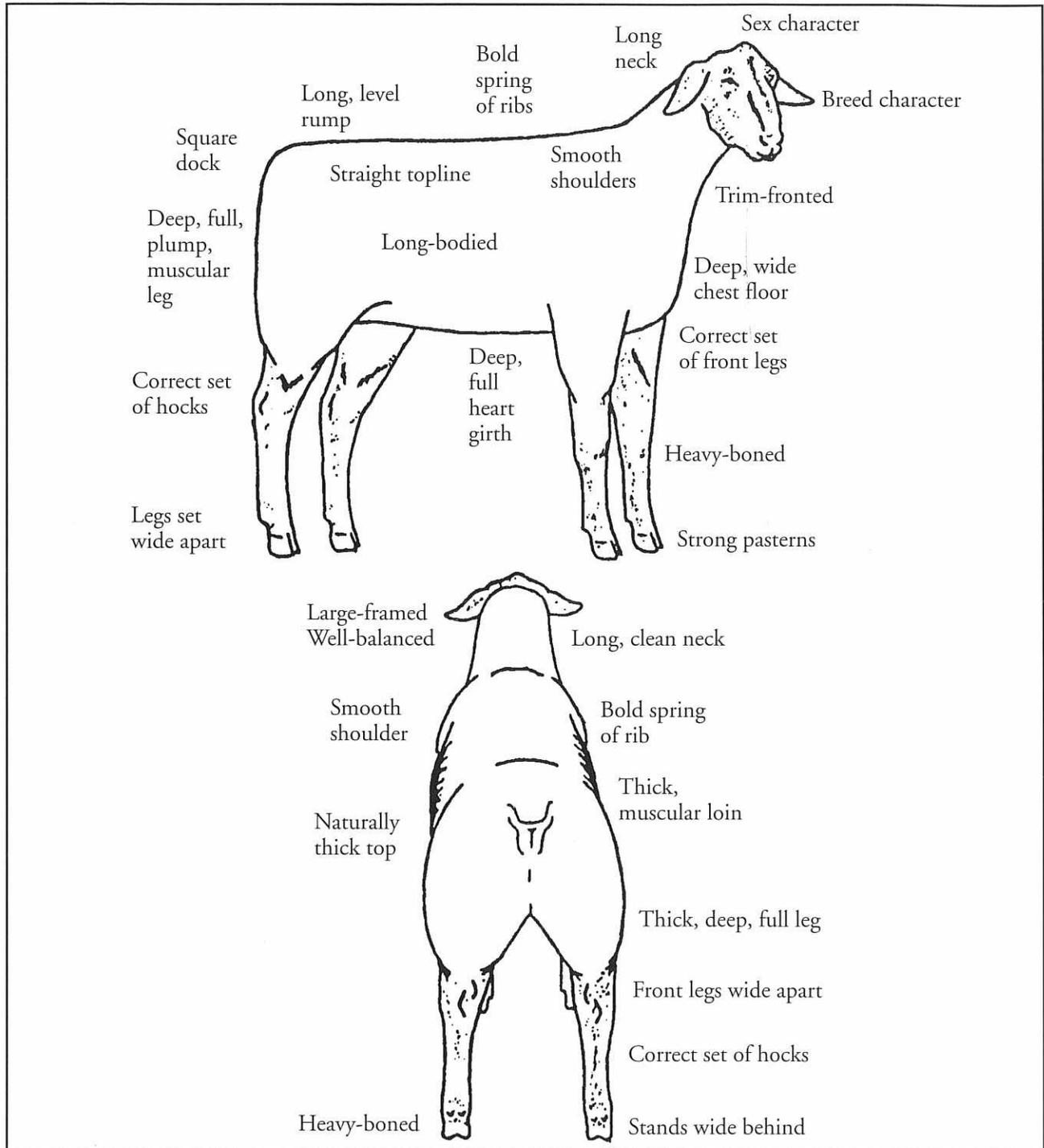


Figure 8
Ideal Breeding Sheep

Breeding Animals

In selecting breeding animals, consider the requirements to meet your needs. Are the foundation/seedstock animals to be used for production?

Heredity and environment will affect the animals' ability to meet these requirements.

When selecting breeding animals for your flock, define your objectives. Know what you want to do with your 4-H breeding sheep before you start buying animals. Ideal breeding sheep should be structurally correct (check the mouth for age and soundness, the testicles of rams to make sure they are correct in size and development), have adequate frame size and weight for their age, be in good body condition, and have correct breed and sex characteristics. (See Figure 8.)

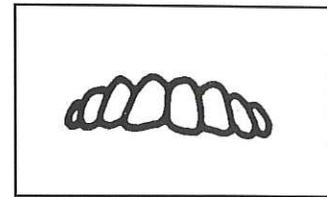
Sheep can be approximately aged by the number of permanent incisors on their lower jaw. Lambs have eight temporary incisors. (See Figure 9.) Once a lamb reaches about one year of age, the center teeth are replaced by two permanent ones. The sheep then gets two more permanent teeth each year (one on each side of the center) until they reach four years of age. At age four, the sheep have all their permanent incisors.

Things to look for:

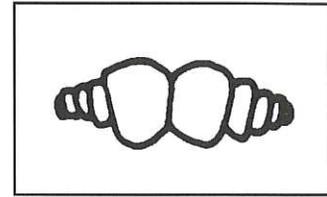
- Long life with reproductive efficiency.
- Efficient conversion of feedstuffs to meat and wool products.
- A type or pattern that will reproduce desirable carcass traits, fleece characteristics, or performance capabilities.

Determining Age

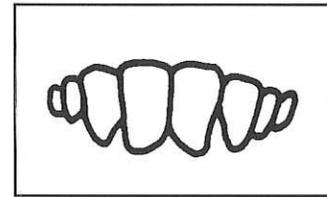
Lamb's teeth



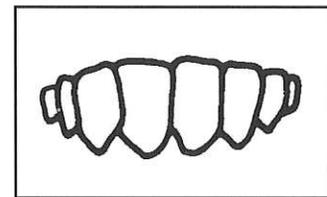
Yearling's teeth



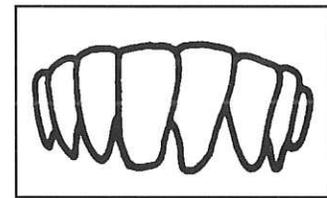
2-year-old's teeth



3-year-old's teeth



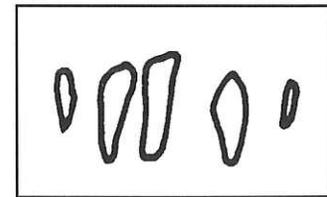
4-year-old's teeth



Narrower, worn teeth of an older sheep



"Broken" mouth



North Central Region Publication #300

Figure 9

Management Practices

Space Requirements for Lambs

Your project animal requires adequate space to achieve optimal performance. Have your barn or pen ready before purchasing your lamb. Start with a small pen. You can make it larger when the lamb needs more exercise. Also provide a simple shed or shelter that will keep the animal dry and provide shade during hot weather.

Another good resource for space requirements is the *Midwest Plan Service Sheep Housing and Equipment Handbook #MWPS-3*.

Feed and Watering Equipment

A feed trough and hay rack are essential. They can be purchased at a livestock supply store, or you and fellow club members can construct your own. (You can find good plans or blueprints in Appendix 3, in the back of this book.) In addition to the rack and trough, you will also want a small wooden box or feeder in which to place trace mineral salt.

Space Requirements

Loose Barn Space

(adult sheep)

10–12 square feet for bred ewes

15–20 square feet for ewes with lambs

(lambs)

10 square feet for large lambs

6 square feet for small lambs

Outside Lot Space

20–25 square feet for bred ewes

or ewes with lambs

Pasture Space

$\frac{1}{8}$ – $\frac{1}{4}$ acre depending on feed supply

Feed Trough Space

(mature sheep)

18 linear inches for hand feeding

8–12 linear inches for self feeding

(lambs)

8–12 linear inches for hand feeding

4–6 linear inches for self feeding

Lambing Pen

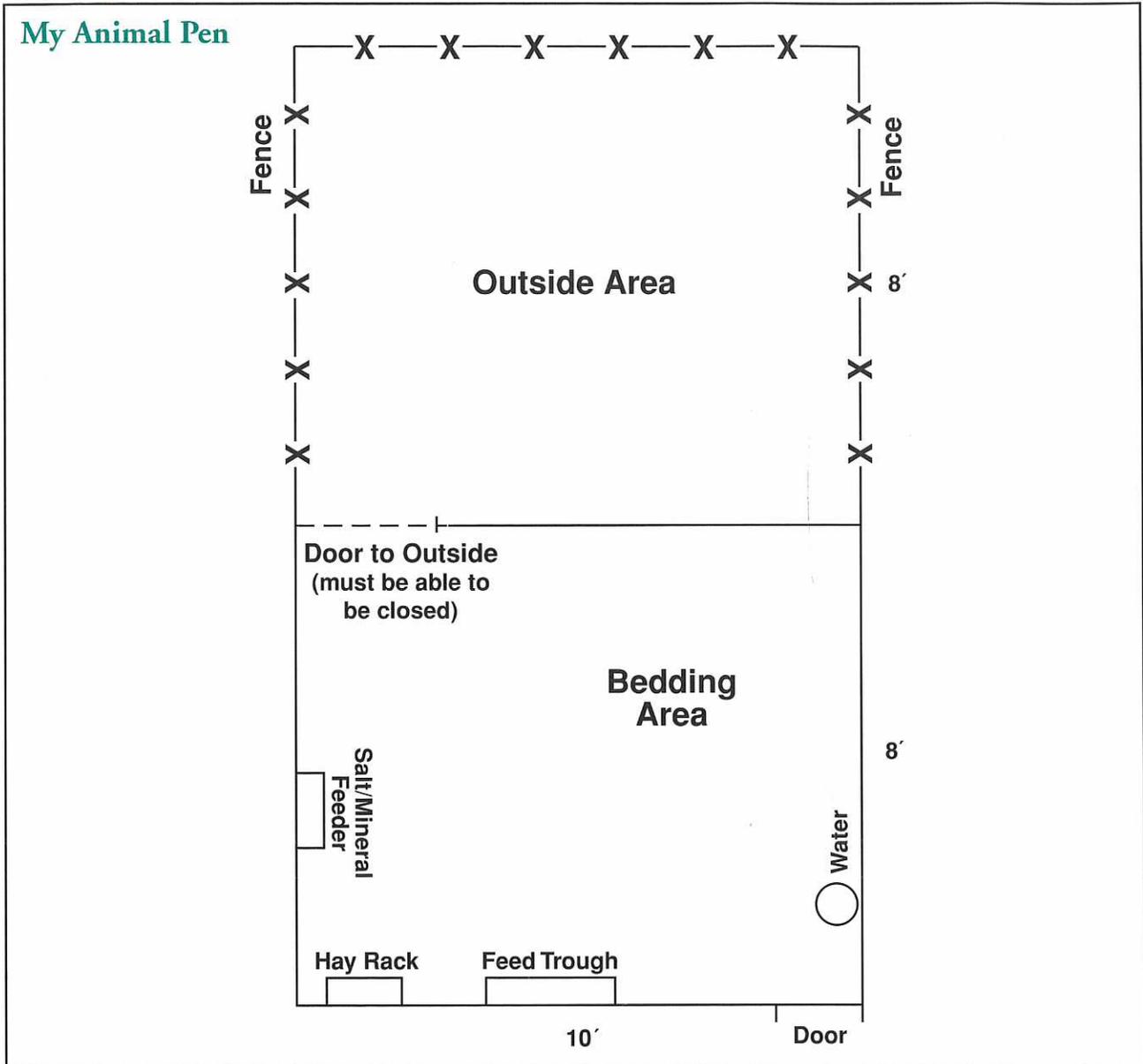
4 x 6 feet or 5 x 5 feet square pen

(depending on the size of the ewe)

General Needs

- The sleeping area should be cool, dry, and draft free.
- Use sawdust or wood shavings for bedding. Try to stay away from straw, as the lamb will tend to eat it and develop a “hay belly.”
- If in a dirt pen, locate water where it will drain off if spilled.
- Lambs need shade in the summer.
- Fresh air access.
- Space for exercising.
- Clean, fresh water readily available.
- Change the water twice per day if you use a bucket.
- A lamb will drink 2–4 quarts of water per day depending upon the weather.
- Keep feed troughs clean. Lambs will not consume dirty feed.
- Clean feed troughs, waterers, salt boxes, and pens on a regular basis to prevent health problems.

Example Pen for Two Market Lambs



Catching and Leading a Sheep

When working with sheep, always move slowly and quietly. The best way to catch a sheep is by its hindflank. This method has the least amount of risk of hurting the animal. Never grab it by the leg. (See Figure 10.)

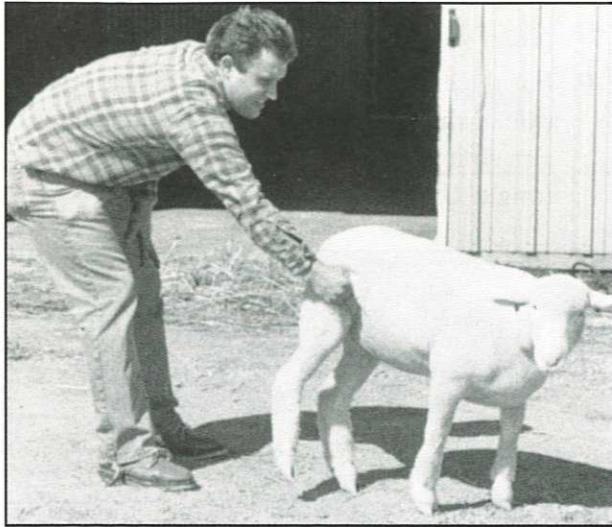


Figure 10
Catching a sheep

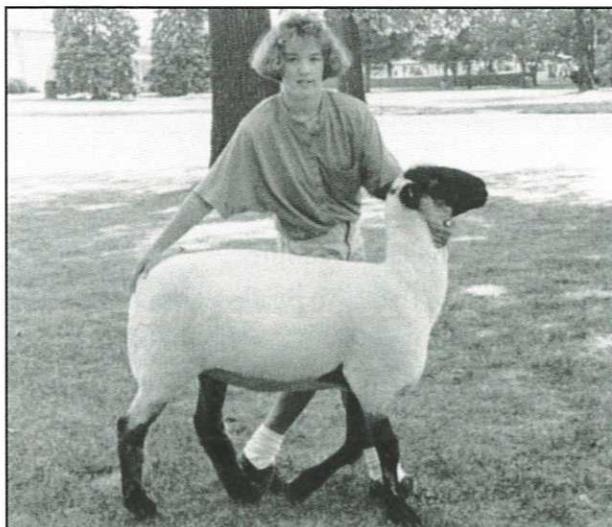


Figure 11
Moving a sheep

1. Quietly and slowly enter the pen.
2. Move the lambs so you can get behind them.
3. Quickly and firmly grab the rear flank of the animal you want and lift it upward toward your body.
4. Someone might need to help you by catching the lamb's head. If you can, take your free hand and place it under the lamb's jaw.
5. Release the flank and place that hand behind the lamb's head or on the dock.
6. Hold the lamb as mentioned until it is under control. You are now ready to move the animal.
7. Move the lamb with your left hand under the jaw, keeping the head level. With your right hand, apply pressure behind the head or lift up gently on the dock. Stay on the left side of the lamb near the shoulder, face the lamb's side, and walk forward slowly. (See Figure 11.)

Putting on a Halter

Have a helper hold the animal. Hold the halter in your right hand so the lead portion is on the bottom and points to the right. Stand facing the animal's head, with the halter in your right hand. Place the top portion of the halter behind the lamb's ears, insert the lamb's nose through the loop made by the bottom portion of the halter. When the halter is on, the lead portion (the part that tightens the halter) should be under the chin and come out on the left side of the lamb's head.

Deworming

Young lambs can suffer severely from a relatively mild infection with parasites. To be successful with your project, you must follow a definite, systematic, and regular program of parasite control. There are two basic methods of giving deworming medication—drenching (administering a liquid) and giving a bolus (a large pill). Be sure to follow proper label directions and allow ample withdrawal time for the dewormer before marketing your animal.

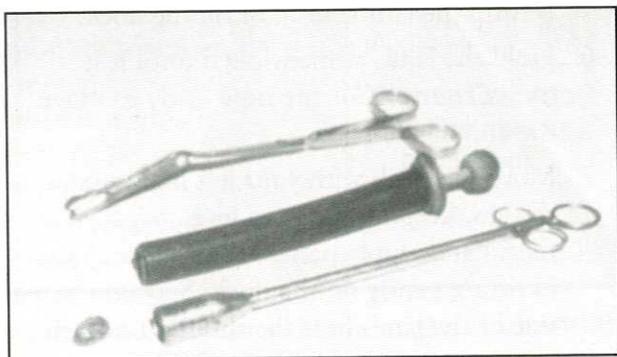


Figure 12

Deworming Using a Balling Gun

A balling gun allows you to put the bolus down the animal's throat, so it will not spit it out. (See Figure 12.)

1. Read and follow directions on the deworming package.
2. Gather all the equipment in an easy-to-reach place.
3. Remove a bolus from the container.
4. Break the bolus into the size indicated on the package.
5. Pull the plunger back on the balling gun.
6. Place the bolus in the end of the balling gun.

7. Hold loaded balling gun upward to prevent bolus from dropping out. You may have someone hold this for you.
8. Catch and restrain the lamb.
9. Put the lamb's head between your legs, or stand beside it with you left hand under the jaw, if you are right-handed (see Figure 13).
10. Put the end of the balling gun in the right side of the lamb's mouth. Insert the balling gun so it rests on the back of the lamb's tongue (Figure 13).



Figure 13

11. Push the plunger forcing the bolus into the back of the lamb's mouth.
12. Make sure the lamb swallows the bolus before letting it go.
13. Wash the balling gun well after use.
14. Be sure to record all necessary information on the *Treatment Record* in your project record book.

Deworming Using a Dose Syringe

Various sizes of simple and automatic syringes are available to administer liquid dewormers to sheep. (Figure 14)

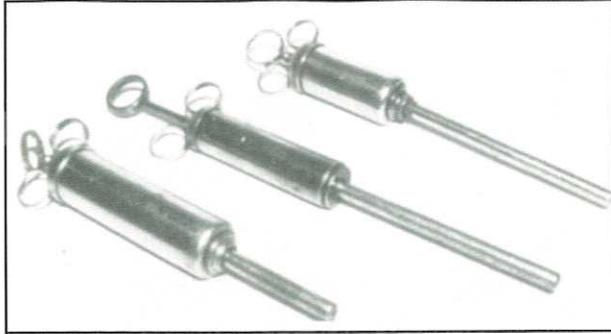


Figure 14

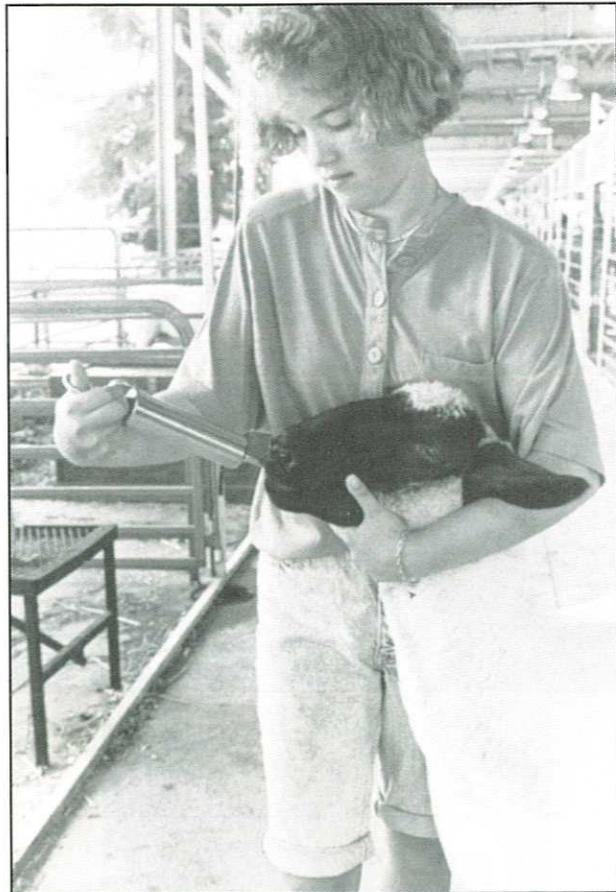


Figure 15

1. Gather necessary equipment and place it within easy reach.
2. Read and follow directions on the dewormer package. If the dewormer is a powder, mix it according to the directions.
3. Fill your dosing equipment with the proper amount of dewormer.
4. Catch and restrain the lamb. Have a helper hold the animal until you have the medication ready.
5. Put the lamb's head between your legs, or stand beside it with your left hand under the jaw, if you are right-handed (Figure 15).
6. Place the end of the syringe in the right corner of the lamb's mouth and rest it on the back of the tongue (Figure 15).
7. Slowly push the syringe plunger. Do not squirt the liquid dewormer rapidly from the syringe because this could cause the liquid to enter the animal's lungs or cause it to spit some of it out.
8. After the lamb has swallowed the recommended dose, let it go.
9. Wash the syringe well after use.
10. Be sure to record all necessary information on the *Treatment Record* in your project record book.

Setting a Sheep up on Its Rump

Setting a sheep up on its rump is done for shearing, foot trimming and other reasons. This should be done so it does not hurt or scare the animal.

1. Catch the sheep and stand on its left side.
2. Put your left hand under the jaw. Put your right hand on the sheep's rump. (See Figure 16.)



Figure 16

3. Quickly bend the sheep's head toward its right shoulder. Simultaneously, push the sheep's rump down and toward you. (See Figure 17.)

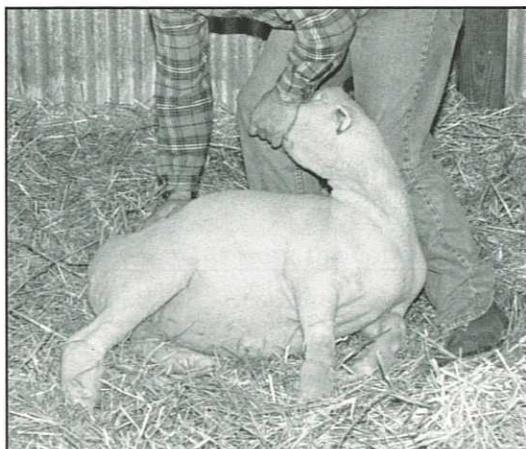


Figure 17

4. Stand firmly on your left leg and move your right leg backward as the sheep falls into a half sitting position.
5. Quickly lift the front legs and pull the sheep up into a sitting position. The sheep should sit firmly on its rump and lean back against your legs. (See Figures 18 and 19.)



Figure 18

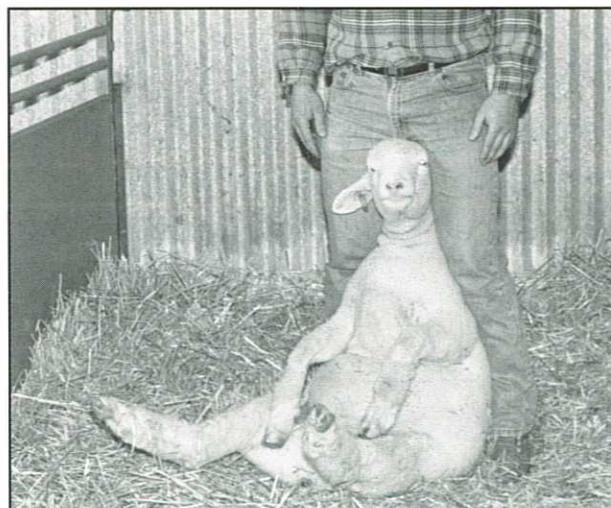


Figure 19

Foot Trimming

Keep your animal's feet trimmed regularly to prevent bone malformation and an incorrect walk. Also, dirt collecting between the toes makes feet sore.

The outside wall of the hoof should be trimmed even with the outside pad (Figure 20). Keep the outside from growing over the pad by trimming with a sharp pair of hoof trimmers. Be sure to cut deep enough to remove pockets where dirt and bacteria may accumulate and cause problems (Figure 21).

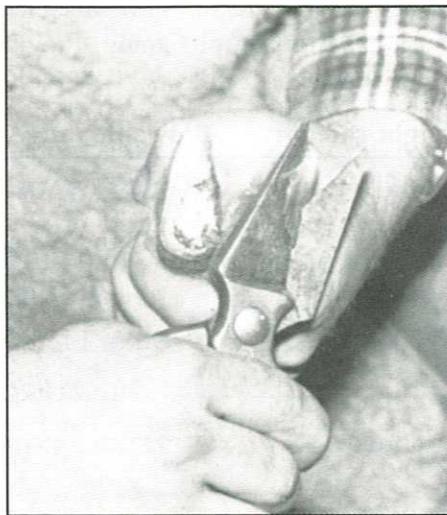


Figure 20

A well-trimmed foot should be flat and short. Notice the difference between the trimmed and untrimmed hoof (Figure 22).



Figure 21

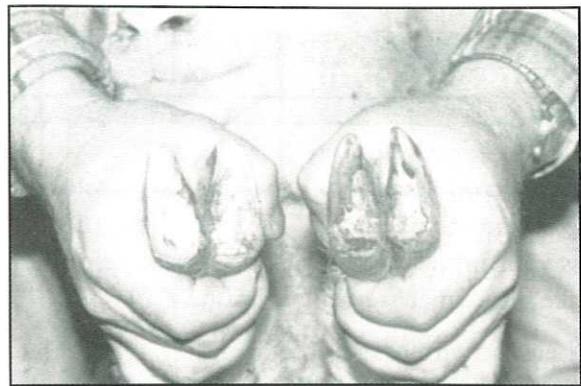


Figure 22

Notice the difference between the trimmed and untrimmed hoof.

Shearing the Market Lamb

You will probably want to shear your lamb once or twice before the fair. This will help keep it cool during the hot weather of summer. It will also help to keep the animal clean. Lambs that are cool and clean gain weight better and stay healthier. Shearing in preparation for the fair is discussed in Chapter 8, *Showing and Selling*.

Shearing the Breeding Flock

This can be done once or more a year. Shearing or crutching the ewes should be done before lambing. Show animals should be shorn before the show season begins. Rams should be shorn before breeding season.

Record Keeping

Good record keeping is vital for all successful 4-H project members. Records indicate the profit or loss your project has returned and also help you make future management decisions.

When you purchase feed and/or hay, record the weight purchased and the total cost in the feed record section of your Project Record Book. Also record veterinary, supply, and miscellaneous expenses. Save all invoices for purchases and include them with your project record book.

If you use feed from your farm, plan with your parents and advisor how you will use and estimate the value of all feed for your lambs. A sound method is to weigh carefully one day's total feed each week and then calculate the total weekly amount from these figures, using the price per pound suggested by your parents and advisor.

Sheep Performance

(Reprinted from *Pennsylvania 4-H Livestock Judging Manual*)

Performance data for sheep can be listed in several different ways. Both actual data and ratios are used to select animals that are superior for lamb and wool production within a flock. Performance data is an important tool for selecting replacement animals and culling poor producing animals. Since in our judging classes we don't typically evaluate stud rams or ewes in production, we will be concerned primarily with the use of performance data for selecting replacement ewes and potential stud rams.

In order to understand performance data for sheep, familiarize yourself with the following sheep production traits and the associated terms:

1. **Birth date**—Date an animal was born (actual).
2. **Birth weight**—The weight of a lamb taken within 24 hours after birth. Heavy birth weights are associated with lambing problems (actual, ratio).

3. **Type of birth and type of rearing**—The number of lambs born and raised by a ewe. The following designations are used; S-single, TW-twin, TR-triplet, and Q-quadruplet (e.g., Type of birth-TW, Type of rearing-S).

4. **Preweaning weights and postweaning weights**—Considerable variation exists among sheep producers for age at weaning. Since all performance records for sheep are to be evaluated within flock, preweaning and postweaning weights will be listed according to management procedures for a particular flock.

Age-weight categories—The weight of a lamb adjusted to a particular age (actual, ratio, FEPD). Standard age weight categories for sheep according to National Sheep Improvement Program (NSIP) guidelines are as follows:

<u>Age-weight category</u>	<u>Allowable range in age</u>
30-day	23 to 37 days
60-day	38 to 83 days
90-day	68 to 113 days
120-day	98 to 143 days
180-day	150 to 210 days
365-day	335 to 395 days

5. **Weaning weight**—A specified weaning weight will be given for one of the age weight categories listed above. Usually, weaning weight would correspond with 30, 60, 90, or 120-day weight (actual, ratio, FEPD).

6. **Yearling weight**—The weight of a sheep taken after 335 days of age and before 395 days of age, and adjusted to a constant age of 365 days (actual, ratio, FEPD).

7. **Fleece quantity and quality**—Wool measurements on an animal are taken only once in its lifetime, and should be measured at approximately one year of age. Wool measurements include:

Grease weight—Weight of the freshly shorn fleece in pounds to the nearest tenth of a pound.

Clean weight—Weight of the cleaned fleece in pounds to the nearest tenth of a pound, as determined by a wool testing laboratory.

Staple length—Length of the unstretched wool fibers in inches to the nearest tenth of an inch, obtained from the mid-side area of the animal.

Grade—Fleece grade is recorded to the nearest tenth of a micron (1 micron = $\frac{1}{25,400}$ inch).

Expected progeny difference for sheep

Sheep producers have requested more objective selection tools for selecting replacements and culling poor producing animals within a flock. Expected progeny differences have been used in the beef cattle industry for some time, and are very similar to those used by the beef cattle industry to predict progeny performance of the animal. However, EPD's for most sheep breeds are for *within flock comparisons only*. The EPD's take the form of flock expected progeny differences (FEPD) to indicate the necessity to make comparisons within a flock and not across different flocks.

Expected progeny differences for sheep are being developed primarily for the following economically important traits.

1. Maternal FEPD's

Number of lambs born—A positive FEPD indicates that the ewe has the capability to

produce more lambs than a ewe with zero or negative FEPD for this trait. This FEPD is an indicator of prolificacy or the genetic ability of the ewe to produce lambs.

Pounds of lamb weaned—This FEPD is an indication of reproductive rate, maternal ability of the ewe, lamb survivability, and growth. A FEPD of +6.0 means the ewe should wean lambs that are 6 pounds heavier than lambs produced by a ewe with a FEPD of zero.

2. Growth FEPD's

Weight at preweaning, weaning, and postweaning—These FEPD's correspond to the age-weight categories of 30, 60, 90, 120, 180, and 365 day weights in lambs, and are used to evaluate the genetic merit for growth.

In each instance, the age should be listed also. These FEPD's are very similar to and should be interpreted much like the FEPD's for other age-weight listings (e.g., 205-day weight in beef cattle).

3. Wool FEPD's

Wool FEPD's are listed for grease fleece weight, clean fleece weight, staple length, and fiber diameter.

Example classes with production situations and data for sheep

Three classes of sheep with performance data are included as examples of different scenarios and ways of presenting performance data.

Suffolk ram lambs

Rank these rams as you would use them for stud rams in a purebred Suffolk flock. Feed and labor resources are more than adequate to maintain the flock of ewes. You profit mainly from selling rams and ewes to other purebred Suffolk breeders, and a few rams to commercial sheep producers. You retain your own replacement ewes.

No.	Birth type	Birth rearing	Birth weight	60-day adj.		120-day adj.		Dam's fleece wt.
				weight	ratio	weight	ratio	
1	TW	TW	9.3	61	91	120	97	8.6
2	S	S	12.0	76	114	136	109	9.5
3	TW	S	10.2	72	108	130	105	10.4
4	TR	TW	9.6	66	99	123	99	7.0

Dorset fall ewe lambs

Rank these ewes as you would use them as replacement ewes in a purebred flock of Dorset sheep. You sell a few rams to other purebred Dorset breeders, but you mainly profit from the sale of rams and ewes to commercial sheep operations.

No.	Birth date	Birth type	Rearing type	Birth weight	FEPDs			
					Maternal		Growth	
					Lambs born	Pounds weaned	60-day weight	365-day weight
1	9/5	S	S	12.0	-.067	+4.1	+1.2	+5.2
2	9/7	TW	TW	7.5	-.022	+3.7	+1.3	-2.7
3	9/20	TW	TW	8.5	+.036	+5.0	+2.0	+12.2
4	9/22	TR	TR	10.5	+0.41	+6.1	+3.1	+9.7

Yearling Hampshire rams

Assume these rams are terminal sires to be used on Rambouillet x Dorset crossbred ewes for production of feeder lambs. All lambs are finished in a feedlot on the farm. Ewes are maintained on range conditions typical of sheep production operations in the Rocky Mountain states.

No.	Birth date	Birth type	Rearing type	Birth weight	FEPDs			
					Maternal		Growth	
					Lambs born	Pounds weaned	60-day weight	365-day weight
1	2/5	S	S	12.3	-.010	+2.6	+5.2	+8.2
2	2/7	S	S	14.0	+.060	+1.9	+3.2	+4.4
3	2/20	TW	S	10.2	+.210	-1.6	-2.2	-8.2
4	2/22	TR	TR	9.6	+.122	+1.1	+4.4	+9.7

Animal Identification

Each animal in your care needs to be permanently identified. This is especially true if you have more than one lamb for your project. Individual animal identification enables good record keeping from which you can measure your progress. You will need to know the animal identification number when you are recording weights and medication treatments in your project record book. Also, if your animal becomes lost, stolen, or needs medical attention when you are not available, the only way to know the animal's identity and health history is by permanent identification. This is most commonly done by ear tagging or tattooing. Your county 4-H program may identify all 4-H animals through county-wide tagging or tattooing. If not, you are responsible for identifying all your project animals.

Ear Tagging

Ear tags identify individual rams and ewes. A number on the tag shows the flock name and number. The name applies to all the sheep in that particular flock. Following the flock name is a specific number assigned to each animal. An example is O.S.U. 671. O.S.U. is the flock name; 671 is the individual sheep's number. For registered purebred animals, the breed association assigns a registration number and papers.

1. Gather necessary equipment and place it within easy reach.
2. Catch and restrain the sheep. Have an assistant hold it.
3. Clean hands, equipment and sheep's ear with alcohol.

4. Place ear punch between the two blood veins on the under side of the ear. (See Figure 23.)



Figure 23

5. Quickly punch a hole in the ear.
6. Remove the ear punch from the ear.
7. Put ear tag through the hole so the number can be read from outside the ear.
8. Permanently close ear tag by placing metal lip through the hole at the end of the ear tag. Bend lip 90 degrees with pliers. (See Figure 24.)



Figure 24

9. Write the registration and flock number in your record book.

Note: Some brands of ear tags allow the ear hole to be punched and the tag applied at the same time. This eliminates Steps 6 through 8.

Management for Breeding Ewes—An Example for January Lambing

An annual schedule of management activities will help you produce healthy lambs.

January

- Check ewes regularly for lambing or health problems.
- Disinfect lambing pens between ewes.
- Identify lambs before moving them to a mixing pen.
- Dock, castrate and give lambs appropriate shots.
- Start lambs on creep feed.
- Feed ewes according to the number of lambs they have. Ewes nursing twins and triplets have high nutritional needs.

February

- Provide plenty of clean, fresh water to sheep, especially nursing ewes.
- Provide salt and minerals free choice.
- Make sure lambs have had all shots.
- Cull ewes that did not breed.

March

- Start weaning lambs.
- Reduce ewes' feed
- Select lambs to keep and those to market.
- Plan your deworming program for pastured sheep. (See Extension Fact Sheet.)

April

- Shear all sheep.
- Get pastures ready for sheep. (See Extension Fact Sheet.)
- Trim all sheep's feet.
- Separate ewe and ram lambs.
- Market lambs you are not keeping as replacements.
- Turn rams in for fall lambing.
- Market unsound and unproductive ewes.

May

- Pasture ewes.
- Attend sales to market or purchase breeding stock.
- Isolate any new breeding stock.

June

- Register the purebred replacement lambs.
- Check sheep for foot rot. Treat immediately if observed.
- Observe pastured ewes for bloat or maggots.
- Exercise market lambs and show sheep.
- Work with and train animals for show.

July

- Cull out lambs for show.
- Check pasture quality.
- Provide plenty of clean water for all sheep.
- Provide shade for pastured animals.

August

- Vaccinate ewes for abortion diseases two weeks before breeding. (Consult your veterinarian for recommended vaccinations.)
- Shear rams for breeding.
- Purchase breeding harness crayons.
- Get supplies ready for fall lambing.
- Start flushing ewes.
- Turn rams in around August 10 for January lambs.

September

- Record breeding dates on the barn record. (See page 149.)
- Change the marking crayons on rams every 16 to 17 days.

October

- Change the marking crayons on rams every 16 to 17 days.
- Check ewes for foot rot problems.
- Sell rams that are not to be kept for breeding.

November

- Check pasture quality. You may need to supplement feed.
- Shear and trim feet of replacements and brood ewes.
- Pregnancy check ewes.

December

- Give vaccine booster to ewes. (See the guidelines in the health section.)
- Crutch or shear ewes.
- Start increasing the energy in the feed of ewes.
- Check lambing supplies and clean lambing area.

Determine Rectal Temperature of Sheep

One way to check the animal's general health is by measuring rectal temperature. An elevated temperature may be an early sign of a health problem and is reason enough to watch the sheep to make sure nothing else develops. The normal range of a mature sheep's temperature is: 101.4° F to 104.9° F with an average of 102.3° F. (See Figure 25.)

1. Gather the necessary equipment and place it within easy reach.
2. Catch and restrain the animal. Have an assistant hold it.
3. Grasp the thermometer firmly with your thumb and forefinger near the end. Hold it away from your body and shake the mercury down with a snapping motion of your wrist.
4. Moisten the thermometer with petroleum jelly.
5. Place the bulb end of the thermometer on the anus of the sheep and turn it from left to right as you gently push it into the rectum. The thermometer should be pushed in until only $\frac{1}{2}$ to $\frac{3}{4}$ of an inch sticks out. A string may be tied to the end of the thermometer so it can be easily retrieved should it slip in too far.



Figure 25

6. Leave the thermometer in the rectum about one minute.
7. Withdraw the thermometer and clean it with a rag.
8. Turn the thermometer so the mercury can be read. Record the temperature to the nearest degree mark.
9. Let the sheep go.
10. Disinfect the thermometer between uses and store it in a cool place.

Note: Do not use your household thermometer. Obtain one designed for sheep from a veterinarian.

Pre-breeding

Deworm the ewes if part of your worming plan and trim their feet and use a footbath if foot rot is a problem. Two weeks before breeding, flush the ewes. Flushing increases their energy levels. This can be done by supplementing their diet with grain or rested pasture. This may need to be done earlier than two weeks before the breeding season if the ewes are in poor body condition. A teaser ram is one that has been surgically sterilized and thus, cannot get a ewe pregnant. He can be placed with the ewes ten to 14 days prior to placing the intact ram with the ewes. This is done to shorten the breeding season and ultimately shorten the lambing season.

The ewes also should be sheared, or at least crutched (had the wool removed from the udder, flanks and around the dock).

Putting on a Breeding Harness

A breeding harness allows you to determine when a ewe may have been bred. The harness contains special chalk which leaves a mark on the ewe after the ram mounts (or breeds) her. When you notice a mark on an ewe, record the date. This will help you determine when she will lamb. (See Appendix II, page 154)

Have a helper hold the ram. The short straps and the narrow end of the marking crayon, should be nearest the front of the ram. Place the crayon between the ram's front legs, resting it on his breast bone. The short straps come up between the front legs, over his chest, up toward the neck and to the top of the shoulder. The two sets of straps crisscross at the shoulder and are buckled. (See Figure 26.)

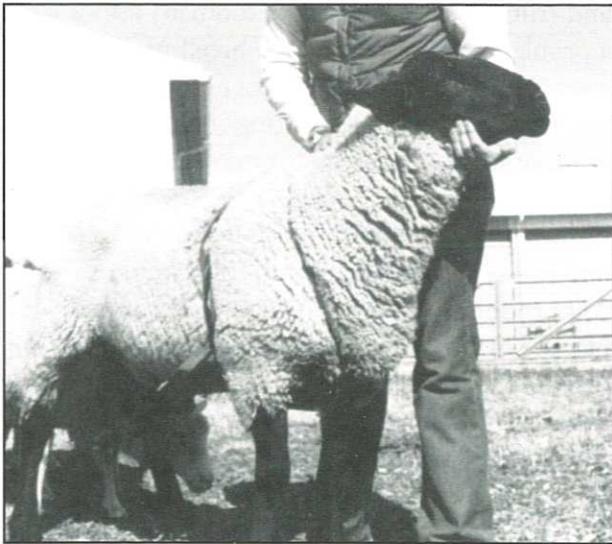


Figure 26

Breeding

Ewes can be bred in the fall, September through December or the spring, January through March. Rams should be placed in the same pen with the ewes 148 days or more before you want the lambs

to be born. (See *Gestation Table*, on the next page or the *Breeding Chart*, Appendix II page 154, in back of book.) The ram should have a breeding harness on (see Figures 26 and 27) or his breast should be painted. This will help you know when a ewe is serviced because she will have a “raddle” mark from the breeding harness crayon (see Figure 28). When you see the mark on a ewe, write the date in the *Barn Record*. The marking crayon should be changed every 16 days to progressively darker colors.



Figure 27

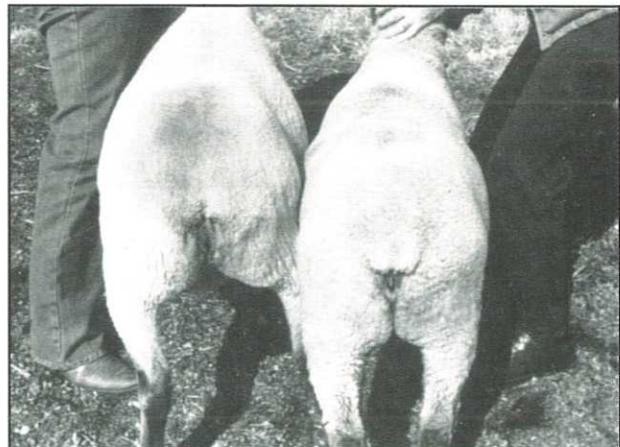


Figure 28

A ram lamb can breed 25 ewes and a mature ram can breed 40–60 ewes in a pasture-breeding program.

Lambing Time

Shearing ewes before lambing reduces barn moisture and helps keep the area around the ewe's vulva more sanitary during birth. It also will make it easier for the lamb to find the udder to nurse. If the ewe cannot be sheared completely, at least shear the wool from the udder, flanks and dock area. This is called crutching out. (See Figure 29.)



Figure 29

Pregnant ewes should be checked often to figure out when they are approaching lambing. If good breeding records are kept, you should know when a ewe is due to lamb. (See *Barn Record*, Appendix I, in back of book.) The gestation period, (time from breeding to birth), varies among breeds and individuals. Usually the gestation period ranges from 144 to 152 days. The average is 148 days (See *Gestation Table*.) Ewes begin showing signs of approaching birth 14–21 days before lambing.

Gestation table for sheep

(Based on a gestation period of 150 days)

To determine day due to freshen, take breeding day and subtract the number indicated in the table. For example, if bred July 10, ewe would be due to freshen December 7; if bred November 20, she would be due April 19.

When Bred in:	Due Month Is:	Day
July	December	-3
August	January	-3
September	February	-3
October	March	-1
November	April	-1
December	May	-1
January	June	-1
February	July	0
March	August	0
April	September	-3
May	October	-3
June	November	-3

Signs of lambing:

- Swollen, distended, or redness of the udder
- Swelling and redness of the vulva
- Sinking in front of the hips
- Nervous or restless behavior of the ewe
- Characteristic bleating by the ewe

When the ewe begins to show any signs of lambing, move her to a lambing pen or separate her from the other ewes. The water bag (placental fluid) will break when the ewe begins to give birth. (See Figure 30.) Once this happens, a normal birth usually occurs in about $\frac{1}{2}$ to $1\frac{1}{2}$ hours. If the ewe has labored (had muscular contractions) for some time and little progress has been made, or her contractions are infrequent and she gets up and lies down frequently, it is usually time to check the lamb's position. The normal birth position is front legs first with the head lying on top and between them. (See Figure 31.)

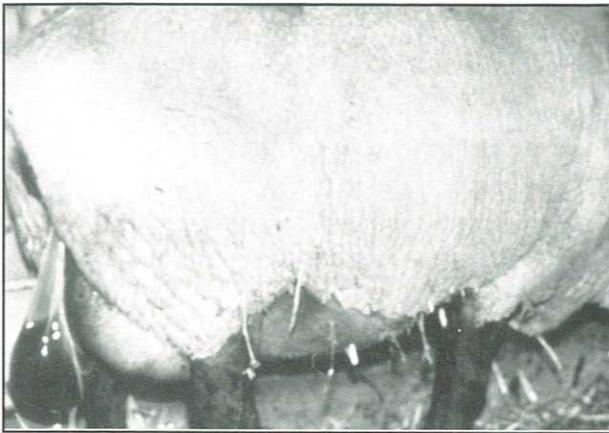


Figure 30

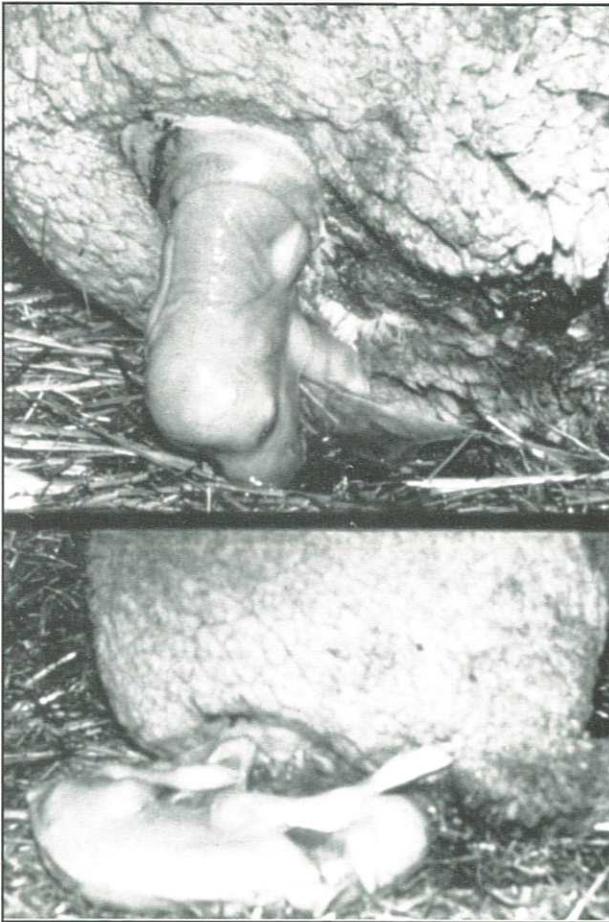


Figure 31

Examining the Ewe

To check the lamb's position, make sure your hands are clean and your nails are short and smooth. Remove all jewelry. Wash the ewe's rear parts with soap and warm water. Wear a disposable plastic sleeve and lubricate it with petroleum jelly or mineral oil. Have someone restrain the ewe.

Close your fingers together shaping your hand like a cone. Place the tips of your fingers into the vulva, slowly rotating your hand to cause the vagina and cervix to dilate. Slowly and gently push your hand into the birth canal and locate the lamb. Determine the position of the lamb and proceed accordingly. If the lamb seems in a normal position, grasp it at the knees and pull firmly in a slightly downward motion. (Never pull in a quick, jerky motion.)

Do not hesitate to call a veterinarian or other experienced producer if you are unsure of what is going on.

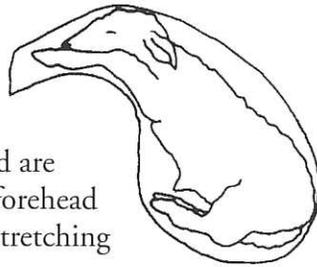
After helping a ewe with lambing, check for more lambs after giving her sufficient time to have them herself. NEVER attempt to pull out the afterbirth. Place a bucket of fresh, lukewarm water in the lambing pen when you are sure she is finished lambing for her to drink.

Lambing Problems

If the ewe is having birthing problems, here is what you might try. If you are not able to easily correct the problem, get help immediately.

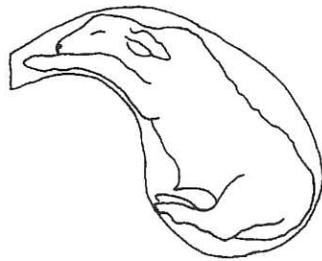
Big-Headed Lamb

One leg at a time should be stretched out and then pulled together with one hand, while the first two fingers of the other hand are slipped over the lamb's forehead and in back of its ears, stretching the lips of the vulva.



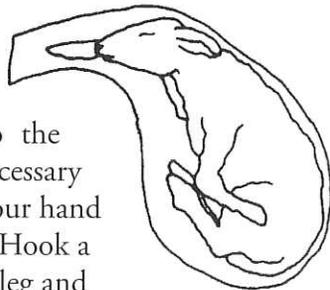
Big-Shouldered Lambs

Pull to the left and then to the right, not straight down.



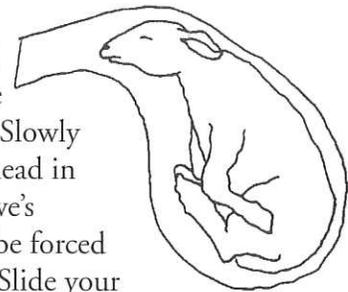
One Front Leg Turned Back

Tie a long soft cord around the pastern of the foot presented. Push the lamb back into the uterus only as far as necessary to allow you to slide your hand along the lamb's neck. Hook a finger under the other leg and straighten it out. Place both legs in their normal position and gently pull.



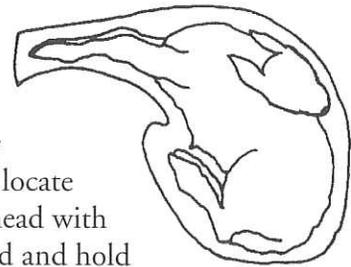
Both Front Legs Turned Backward, Head Alone is Presented

Lubricate the lamb's head with mineral oil if it is outside the ewe and dry and swollen. Slowly and firmly push the head in steadily against the ewe's straining until it can be forced back into the uterus. Slide your hand along the lamb's neck and hook a finger under the front legs and place them in their normal position.



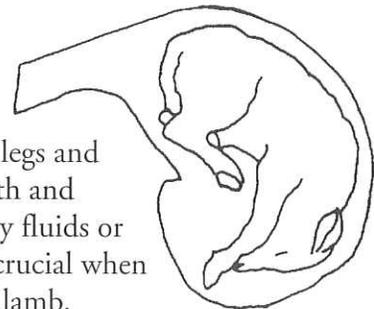
Legs Presented but Head Twisted Back

Tie a long soft cord over each pastern. Push legs back into the uterus. Slide your hand up the legs and locate the head. Grasp the head with the palm of your hand and hold it steady while you bring the front legs into the right position by pulling on the strings. Guide the head with the palm of your hand and fingers as the head enters the pelvic region.



Lamb is Backward, or Breech

Pull the lamb with the hind legs first. Immediately after the lamb is born, hold it by the hind legs and clear both the mouth and nasal passages of any fluids or afterbirth. Time is crucial when pulling a backward lamb.



After The Lamb Is Born

1. Clear mouth and nasal of any fluids. (See Figure 32.)



Figure 32

2. Rub lamb vigorously with a clean, dry towel.
3. Place the lamb at the ewe's head so she will smell and clean the lamb.
4. Put the ewe and lamb in a clean, dry, draft-free lambing pen.
5. Dip the lamb's naval cord in 7 percent tincture of iodine to prevent infections entering the lamb's body. Make sure to coat the whole cord completely several times.
6. Catch and restrain ewe.
7. Milk two or three squirts of colostrum (first milk) from the ewe's teats. Squirt some in the lamb's mouth, then leave the pen and allow it to nurse.

Lambing

Place the ewe and her lamb(s) in a lambing pen for one to three days. After three days move the ewe and lambs to a mixing pen. Before moving them be sure to identify the lambs (ear tag or paint brand). Record this information on the *Barn Record* in your project book.

During cold weather, a heat lamp will give the lamb(s) additional warmth. It should be contained in a special shield with a panel in front so the ewe cannot get under the lamp and be burned or knock the lamp down. (See Figure 33.)

The lambing pen should be 4 feet x 6 feet or 5 feet x 5 feet with the heat lamp in a rear corner. The ewe's feed should be in the front of the pen. Lambing pens should be cleaned and disinfected between each ewe and her lamb(s).

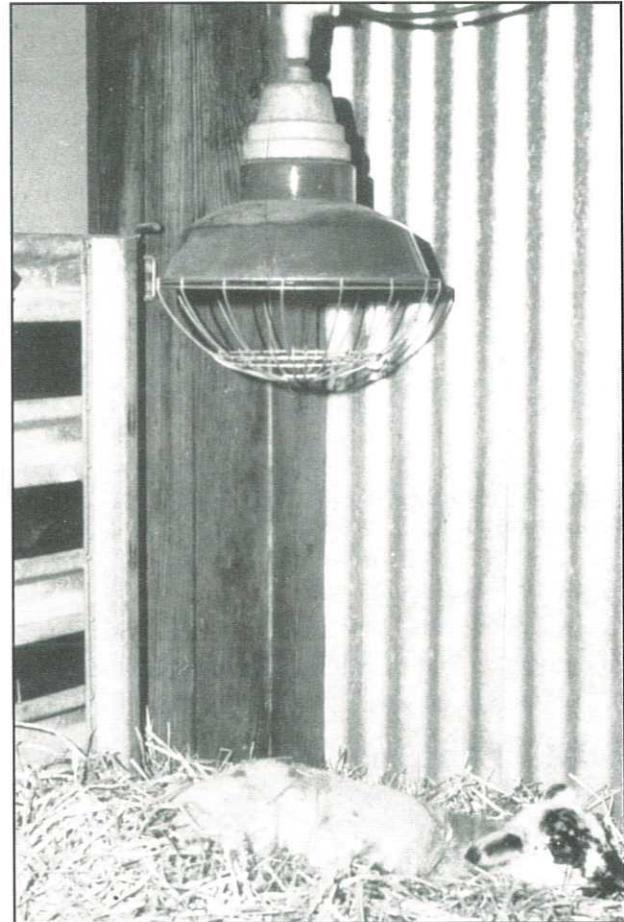


Figure 33

The lamb should nurse within the first hour after birth. It needs to have the colostrum (first milk) from the ewe because it is rich in nutrients and antibodies that help the lamb fight disease.

There are several ways to help a chilled or weak lamb. A chilled lamb stands with its back hunched, head down and shivers. Immerse it in warm (not hot) water. Periodically check the lamb's rectal temperature until it is normal. Do not let its head go under water. Remove it from

the water, rub it briskly and allow it to stay in a warm room until completely dry.

A chilled lamb also needs to get colostrum or milk into its stomach. Either milk the ewe and feed the lamb from a bottle or thaw previously-frozen colostrum and feed it to the lamb. If the lamb is too weak to nurse, place nourishment into it through a stomach tube.

Taking a lamb into a warm environment and away from its mother will sometimes cause the ewe to reject the lamb when it is returned. The lamb's smell may be disguised to encourage the mother to accept the lamb back. If you are attentive and do not let lambs get chilled or weak, this problem will not occur. If a lamb is orphaned, be sure it gets colostrum. Then feed it a milk replacer formulated for lambs. Follow the directions on the bag.

Stomach-Tube Feeding Weak and Chilled Lambs

1. Heat 2 to 4 ounces of colostrum milk to 95 to 100°F and place it in the syringe.

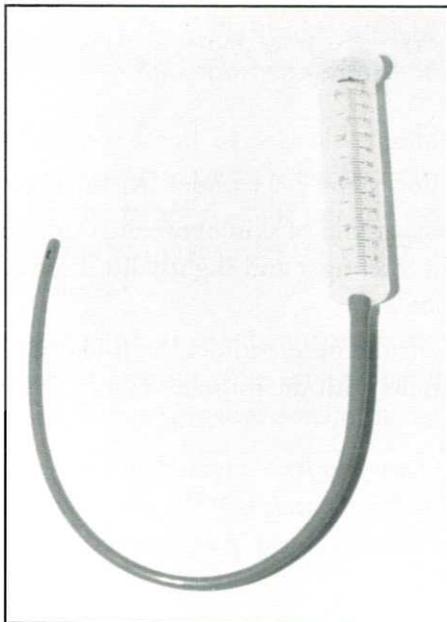


Figure 34

2. Hold the head securely between your legs and make sure the head is in a straight line with the neck and backbone.
3. Open its mouth with your left hand.
4. Using your right hand, slowly insert the clean tube over the tongue and back into the animal's throat. (See Figure 35.)



Figure 35

5. Insert the tube 6 to 8 inches into the lamb.
6. Remove the syringe from the tube.
7. Hold a wet finger over the end of the tube. If the finger feels cool, caused by air moving from the tube, then the tube is in the lungs. Do not put milk down the tube or it will cause the lamb to drown. Remove the tube and try it again.
8. When you don't feel air from the tube, attach the syringe to the tube.
9. Slowly push the plunger of the syringe to put the milk into the lamb's stomach.
10. Let the tube sit for a few seconds so all milk has drained into the stomach.
11. Remove the tube. If necessary, consult a veterinarian about the condition of the lamb and repeat this process every 2 to 4 hours as necessary.

Intramuscular Injection (IM Shot)

Intramuscular injections (IM shots) are used to give certain types of medication. Hypodermic syringes inject medication directly into the muscle tissue.

1. Gather the equipment needed and place it within easy reach.
2. Read and follow the directions on the medication or from a veterinarian.
3. Catch and restrain the sheep. Ask an assistant to help hold it.
4. Saturate a cotton ball with alcohol.
5. Open the package containing a sterilized disposable syringe and remove the syringe.
6. Swab the rubber plug on the top of the bottle with the cotton ball.
7. Pull syringe plunger back to fill it with about the same amount of air as the dose of medicine.
8. Push the needle through the rubber plug on top of the bottle and push the plunger in, forcing air into the bottle.
9. Slowly draw the plunger back, drawing medication into the syringe.
10. Fill the syringe to the recommended dosage. Be sure no air bubbles are in the syringe.
11. Withdraw the needle from the bottle.
12. The preferred site of injection should be the heavy neck muscle near the back of the head.

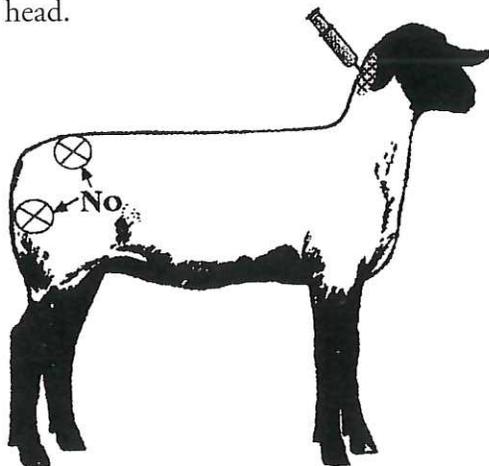


Figure 36

13. Insert the needle into the muscle with a quick thrust. Make sure the needle is inserted into the muscle, not just under the skin. (See Figure 36.)
14. Pull back on the plunger and watch for blood to appear in the syringe—a sign that the needle may have entered a blood vessel.
Injection should not be made if blood appears.
15. Slowly inject medication by pushing the plunger forward. Do not inject more than 10 cc of medication in one site.
16. Be sure to record all necessary information on the treatment record of your project book.

Subcutaneous Injection (SQ Shot)

Subcutaneous injections are also given with a hypodermic syringe. The medication is injected between the skin and muscle tissue. Injections should be given in the neck area also, but in some cases, such as with very small lambs, they can be given under the skin of the non-wooled area under and behind the front leg.

1. Follow steps 1–11 under IM Injection.
2. Grasp a fold of skin between your thumb and forefinger and slightly lift it, creating a “tent”.
3. Insert the needle under the fold of skin parallel with the muscle. (Figure 38.)

her what methods and tools were used for these management practices. If you or another club member has lambs that need to be docked or castrated, the following is a description of these management practices.

Castration

Knife Method

1. Wash your hands with soap and water.
2. Disinfect the knife with 7% (percent) iodine or other disinfectant.
3. Have a helper hold the lamb, using one hand to hold the front and rear leg on one side, while the other hand holds the opposite front and rear leg.

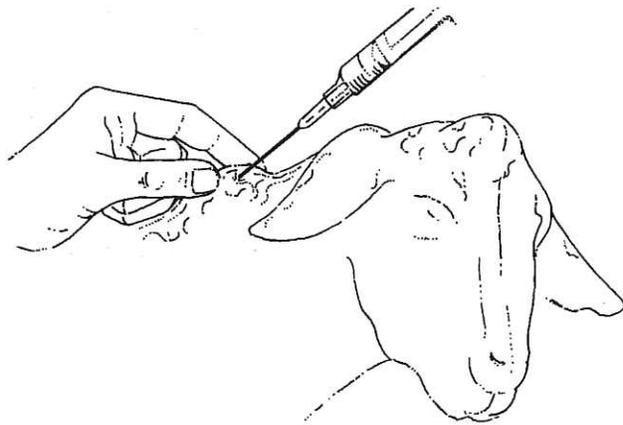


Figure 38

4. Slowly inject the medication by pushing the plunger forward.
5. Remove the needle and let the sheep go.
6. Record all necessary information on the treatment record of your project book.

Docking and Castration

Lambs between 4 and 14 days old should all be docked and the rams or male lambs castrated. Docking is the removal of the tail and castration is the removal of the testicles (castrated lambs are called wethers).

* Please note: Make sure lambs are castrated early in the project, because shows may disqualify lambs with testicular tissue development.

There are several different methods used to dock and castrate lambs. If you purchased your lambs from an established sheep producer, ask him or

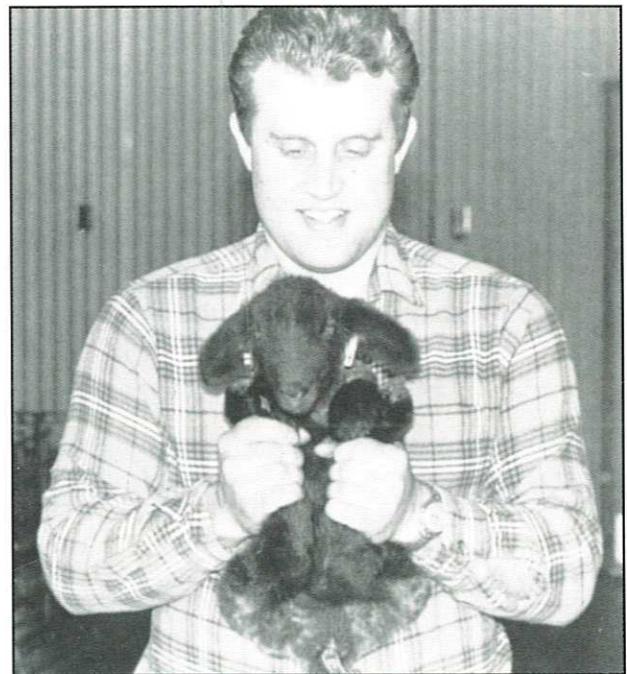


Figure 39

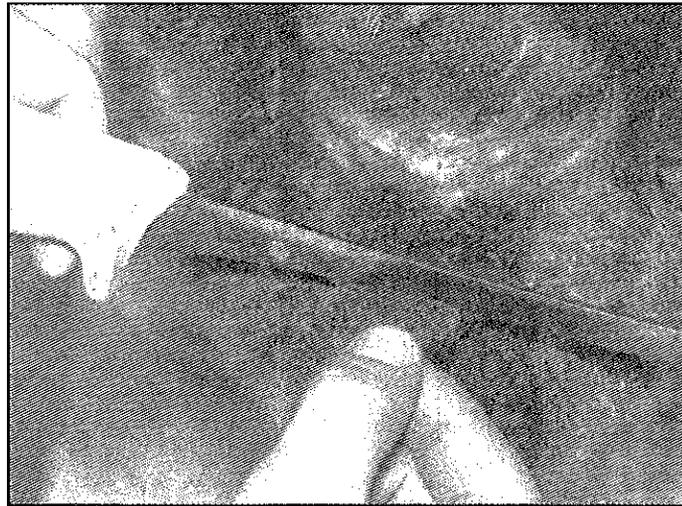


Figure 40



Figure 41

4. Cut off lower one-third of scrotum with the knife.
5. Pull out each testicle separately. Stretch the cord until it breaks. Note: On larger lambs, a Burdizzo should be used to crush each cord separately. Consult your veterinarian.
6. Apply iodine or other disinfectant to cut scrotum.
7. Apply fly repellent if done during warm weather.



Figure 42

Burdizzo (Emasculator)

A burdizzo clamp is sometimes used when tetanus or flies are a concern. This method requires more skill to ensure success.

1. Have a helper hold the lamb, using one hand to hold the front and rear leg on one side, while using the other hand to hold the opposite front and rear leg (Figure 39).
2. Place one of the spermatic cords between the jaws of the burdizzo clamp just above the testicle. Keep the cord pushed to the side of the scrotum so the center of the scrotum is not clamped. See Figure 43.



Figure 43

3. Close the burdizzo, crushing the cord between jaws of the burdizzo. Pull down on the testicle within the scrotum to make sure the cord is broken.
4. Repeat the procedure on the opposite cord and testicle.

Elastrator and Elastrator Band

An elastrator also may be used to castrate lambs (Figure 44).

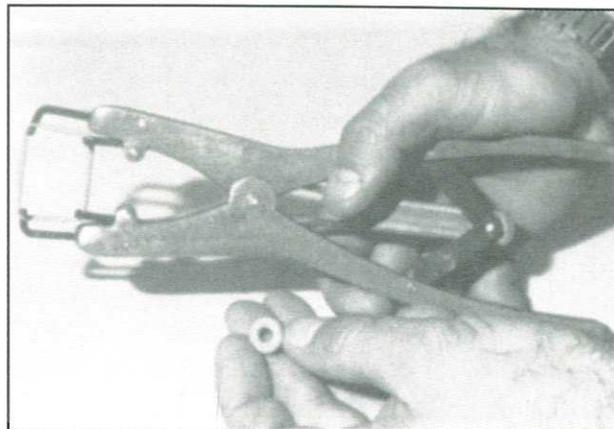


Figure 44

1. Have a helper hold the lamb, using one hand to hold the front and rear leg on one side, while the other hand holds the opposite front and rear leg (Figure 39).
2. Place an elastrator band on the elastrator prongs by sliding the band over the closed prongs to the base (Figure 45).



Figure 45

3. Squeeze the handles of the elastrator to stretch the band so it is large enough to pass the scrotum through.

4. Keep the band stretched and pull the scrotum through by sliding the band up to the body wall. Be sure both testicles are in the scrotum below the band. (Figure 46).

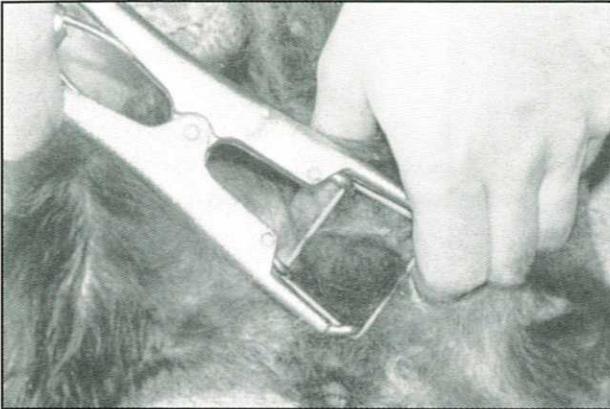


Figure 46

5. Release the elastrator handles and allow the prongs to close making sure that the testicles remain below the band. (Figure 47).

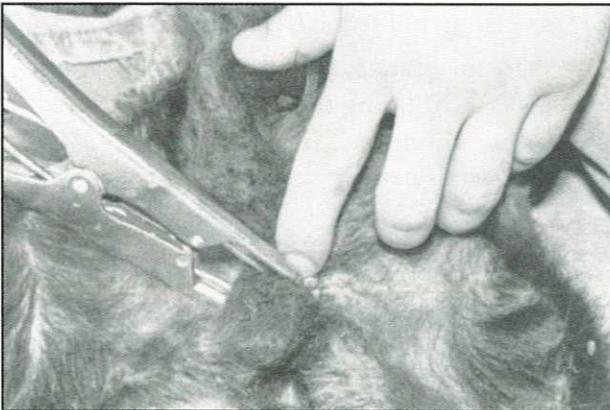


Figure 47

6. With your thumb and forefinger, roll the band off the elastrator prongs on to the scrotum (Figure 48).



Figure 48

7. The scrotum and band should fall off in about 7–14 days.

Docking

Several methods of tail docking are available to sheep producers. These may include the emasculatome (burdizzo) which crushes the tail and blood vessels and is used with a knife. The emasculator crushes and cuts at the same time (Figure 49). The elastrator method is used to cut blood supply off to the tail prior to its removal.

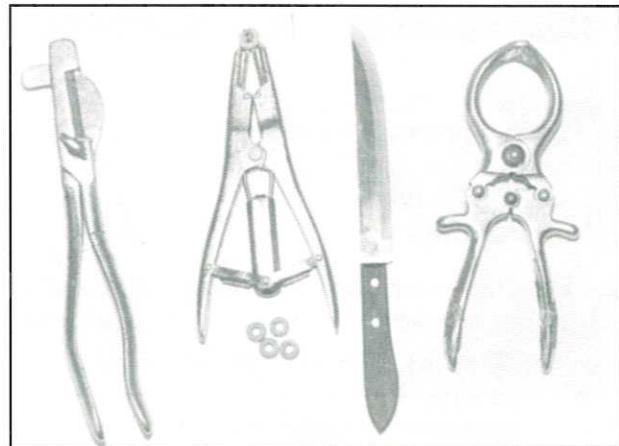


Figure 49

(L to R-emasculator, elastrator, knife, emasculatome (burdizzo))

Emasculator (Burdizzo) or Emasculator

1. Have a helper hold the lamb, using one hand to keep the front and rear leg to one side, while the other hand holds the opposite front and rear leg (Figure 39).
2. Place the tail between jaws of emasculator or emasculator about $\frac{3}{4}$ –1 inch from the body. Push loose skin toward the body so excess skin will cover the wound.
3. Close the jaws of the emasculator or emasculator (Figure 50).
Skip step 4 if using emasculator.)

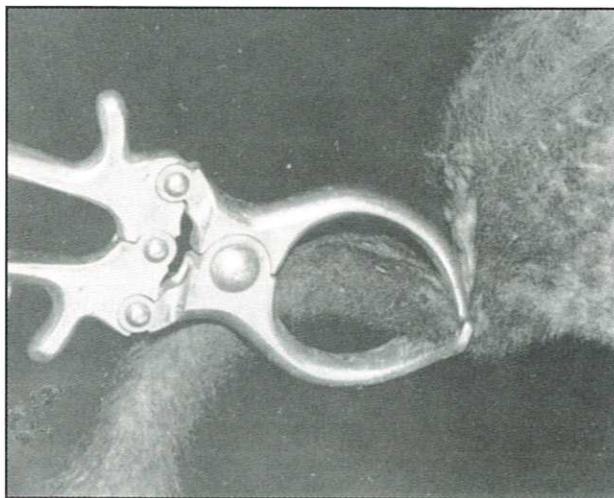


Figure 50

4. Cut inside the closed jaws of the emasculator with one quick slice of the knife (Figure 51).



Figure 51

5. Leave the emasculator or emasculator on approximately 30 seconds after the cut (Figure 52).

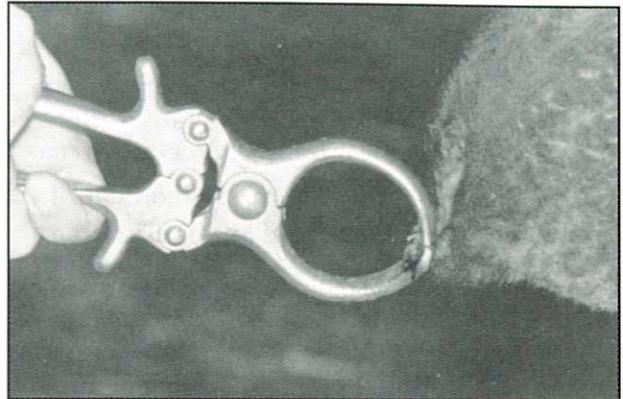


Figure 52

6. Remove the emasculator or emasculator.
7. Put disinfectant on tail stump (Figure 53).



Figure 53

8. Apply fly repellent if docking is done during warm weather.

Elastrator and Elastrator Band

Docking also can be done with an elastrator, which is an easy method for a beginner.

1. Have a helper hold the lamb, using one hand to keep the front and rear leg to one side, while the other hand holds the opposite front and rear leg (Figure 39). You may also hold the lamb between your legs.
2. Place an elastrator band on the elastrator prong by sliding the band over the closed prongs to the base.
3. Squeeze the handles of the elastrator to stretch the band so it is large enough to pull the tail through.
4. Keep the band stretched and pull the tail through by sliding the band over the tail to a point $\frac{3}{4}$ –1 inch from the body (Figure 54).

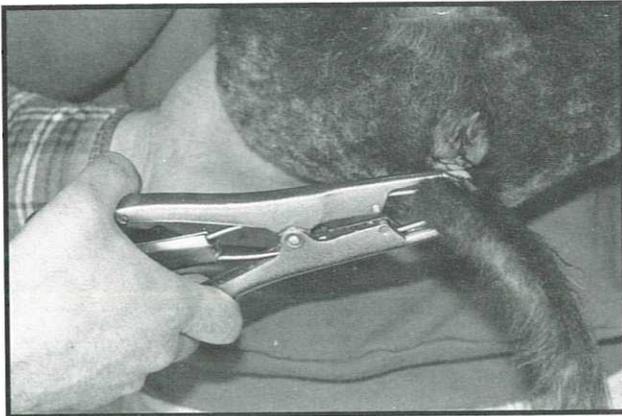


Figure 54

5. Release the elastrator handles and allow the prongs to close (Figure 55).



Figure 55

6. With your thumb and forefinger, roll the band off the elastrator prongs onto the tail (Figure 56).

Always provide a clean, dry, well-bedded pen for lambs, especially after docking and castration.



Figure 56

Weaning

Take lambs away from their mother (or wean) at 60 days of age or 45 pounds, whichever comes first. Make sure they are in a pen in which they cannot get out. Give them plenty of fresh water and keep them on the same diet as before weaning. Keep them on that diet for at least a week and then slowly change to a growing ration. Remove all grain and water from the ewes for 24–48 hours before weaning the lambs. Once the lambs are weaned put the ewe on a maintenance diet.

Lambing Supplies for the Barn

Drugs/Medications

- Antibiotic (consult your veterinarian)
- Clostridium perfringens types C and D (enterotoxemia) vaccine or antitoxin
- Vitamin E/Selenium compound (white-muscle disease)
- Tetanus antitoxin (if tetanus is a farm problem)
- Seven percent tincture of iodine
- Antiseptic scrub/lubricant for lambing difficulties
- Foot rot treatment
- Frozen colostrum and milk replacer
- Deworming medication for internal parasites
- Sore-mouth vaccine
- Propylene glycol (pregnancy disease)
- Bloat remedy
- Blood stopper powder
- Scarlet oil

Equipment

- Syringes and needles
- Thermometer
- Towels
- Disinfectant and fly repellent
- Paint stick
- Balling gun
- Dose syringe
- Marker paint and number set
- Emasculator, emasculator, or elastrator
- Wool clippers
- Ear tags
- Hoof trimmers
- Heat lamps
- Halter
- Bottles and nipples
- Barn sheet and clipboard
- Scales