



8

WEANING

Weaning is a time of stress for all concerned. The emotional bond between a ewe and her lambs is quite strong, and a forced separation is cause for mental trauma of a high order. Both ewes and lambs make their unhappiness known by loud and persistent ba-a-a-ing, wild-eyed stares, and aimless rushing about. The noise level in the area reaches an annual peak at this time, attaining levels that would send an OSHA representative scurrying for a violation notice if it occurred in a public workplace. The shepherd who had the forethought to build the house and the sheep quarters well apart will be repaid with at least a modicum of quiet. This is also the time of year when many shepherds in suburban areas meet many of their neighbors for the first time—when the latter arrive on the doorstep to complain about the ruckus or send representatives from the local constabulary to do the same. To all but the most irate, an unyielding and calm explanation of the temporary nature of weaning sounds will usually restore neighborly relations.

The weaning cacophony can be minimized by some advance preparations, mostly by getting ewes and lambs accustomed to short-term separations

before the final separation occurs. As mentioned in the last chapter, putting lambs into a creep area and sending ewes off to pasture each day is good training. In addition, the ewes' milk supplies can be reduced by feed and salt adjustments enough ahead of time to make the final cutoff less dramatic.

A really casual shepherd can let the ewes and lambs do the weaning themselves. At some point, many of the lambs will change over to solid food on their own, and gradually stop nursing. Alternatively, the ewe may decide that she has had it with nursing lambs and refuse to let them at the teats. A combination of these possibilities will accomplish weaning painlessly, even if a bit haphazardly. A few lambs and ewes will want to continue their relationship indefinitely, of course, but most will wean themselves naturally. Letting them do it themselves is probably all right for a small hobby flock but is not very practical for a large farm flock.

WHEN TO WEAN

There is a full range of opinions among shepherds about when to wean, but there are some general principles that can be used as a guide.

Bottle lambs, including those on a self-feeding setup, should be weaned as soon as possible because they cost more in feed than they make in weight gains on a replacer diet. Some sheep raisers recommend weaning at three weeks, though this is quite early. Six weeks should be considered the longest nursing time for bottle lambs. Do everything to encourage bottle lambs to start on solid food so their rumens begin to develop. Once they are eating solid food regularly, wean them. They will drop in rate of gain and may even lose some weight, but in the long run early weaning is cost effective. Watch early-weaned lambs especially carefully to see that they make the change satisfactorily.

Lambs that are nursing can be left to suck longer. The only exception is if you want to rebreed the ewes quickly. Typical weaning times for ewe-sucking lambs are in the eight- to twelve-week range. We wean at about ten weeks.

Lambs gain very quickly on the combination of ewe's milk and a palatable creep feed or lush pasture, so don't be in too big a hurry to wean. What saves you money with bottle lambs does not make sense for lambs that are getting the real thing: straight from the ewe. Let the ewes do their excellent job of making lamb food of the highest quality.

WEANING



Ample pasture and plenty of fresh water will provide all of a sheep's nutritional needs. These weaned lambs also get a free-choice grain mixture for quick growth.

NUTRITION

In order to get ready to wean, the feed to the ewes should be reduced over a period of a week or more prior to actual weaning. The simplest step is to reduce the amount of grain fed. If the ewes are being fed hay, the quality of the hay can also be drastically lowered or a reduced quantity can be fed. For ewes on pasture, reduce their grazing time. However it is done, milk production is easily slowed by feed adjustments.

As the date approaches, the shepherd should cut the milk supply further by reducing water as well as feed. Salt should be removed entirely, and don't forget salt added to feedstuffs. Feed can be sharply reduced over the last few days and water withheld altogether for at least the twenty-four hours prior to weaning; some say for longer. If mastitis has been a problem with your flock, consider putting sulfamethazine in the ewes' drinking water for three days, starting four days before the date of weaning, then withhold water the last day, as suggested by Dr. Charles Parker of the U.S. Sheep Experiment Station, Dubois, Idaho. If water is to be withheld very long, be sure also to

withhold food so as to avoid impaction of the rumen with dry solids. This is not generally a problem, because most sheep will voluntarily slow down on eating if they lack water.

The lambs will of course need water to make up for the loss of ewe's milk. For bottle lambs, dilute the replacer more and more as weaning approaches, ending up with plain water. Have water available in tanks that are low enough for even the smallest ones to reach into. Some lambs will climb into tanks that are too low, so some compromise height has to be determined. Keeping tanks full usually discourages lambs from climbing in. If you can arrange it, the best way to provide water is with a demand valve that is licked or nudged to give a drink. Lambs adapt readily to these valves inasmuch as the transition from the ewe to a dispenser valve isn't too drastic. The small steel nipples made for pigs are perfect for lambs. You can mount three to four of them on a length of pipe fittings made up of T fittings and straight fittings, and attach the whole thing to a garden hose. The pipe with nipples is best mounted on a stand that can be moved, because lost water will make a muddy area. Lambs learn to use the nipples almost instantly. I was once asked by a visitor from New Zealand how long it took to train lambs to use the nipples as he was watching lambs suck vigorously. I told him that I had just turned on the water for the first time as he drove into the farm a few minutes previously.

Nothing is perfect, of course, and as you sit back feeling happy about keeping the water free of manure and dirt, realize that a demand valve is a perfectly wonderful way to spread sore mouth. If the lambs have been vaccinated, however, there is doubtless little problem, and the plusses outweigh the minuses.

The lambs will have been sampling creep feed for some time and there should be little fuss over the change to all solid food. But the composition of the feed should be changed to reflect the fact that they are no longer getting the protein from milk. You will want to increase the protein content by about 2 percent to make up for the missing milk. Be sure that the mixture also contains enough calcium to compensate for the loss of milk. We feed a 16.5 percent protein mixture after weaning. This ration contains monensin, which raises the effective protein content to about 18 percent.

Lambs enjoy hay and will eat some of it, but mostly they seem to like to select out favorite nibbles and waste the rest. My Scottish ancestry makes me rebel at wasted hay, and I have concluded that the best thing is to limit hay to lambs rather severely so they will eat all of what they are given. We have had



Lambs adapt readily to self-service waterers and get fresh water on call with little work from the shepherd.

very good results from feeding free-choice grain mix plus about a quarter of a pound of hay a day per lamb. You will have to see how much they will eat without waste, and you may want to feed a bit more hay, but they seem to prosper on a rather small amount. You'll find that you have to give some hay or in their quest for roughage they will try to eat the barn, fence posts, feeders, twine, your pants, or anything else that's handy. Try to strike a balance between severely limiting hay and giving them so much that they waste a lot.

The question of limiting hay sometimes brings strong negative reactions from sheep raisers. I can only cite my own experiences and those of a lot of modern shepherds who are not believers in a lot of hay in a lamb's diet. One year we fed a bunch of wethers straight hay for two months trying to get them to market weight. At the end of the sixty days we weighed them, and on average they had not gained a pound. The cost of that hay was a total loss. You can't convince me that feeding hay is a profitable way to run a sheep business, at least not a lamb-growing business. I have had old-timers tell me that

they raised lambs on hay, and perhaps they did, but it seems like a poor plan to me. Pound for pound, corn is roughly twice as nutritious as hay, and it usually doesn't cost twice as much. More important, a grain mixture doesn't fill the lambs up as quickly, so they will get more feed into themselves and grow faster.

There is also the question of the relative cost of hay and grain when the lambs waste a lot of hay. If you can imagine lambs wasting two-thirds of their hay—which they will be most happy to do if you give them too much—and then combine that with the fact that hay is about 50 percent digestible, you will find that hay may actually be much more expensive than grain as a feed, in terms of what gets into the lamb. Happily, there is a solution that my kilted ancestors didn't have, and that is pelleted alfalfa. The cost of pelleted alfalfa is higher than plain hay, of course. However, it is sold with a guaranteed protein content, usually 15 to 18 percent, and the lambs will eat all of it, with zero waste. Pellets can be fed free choice, mixed with a grain mixture, or given out in measured amounts, whichever suits your feeding program. Some people feed pellets plus hay as the total ration, although that does not really provide enough energy for best growth. Some plain hay should be fed, even when you are using pellets, but it can be minimal—like one thirty- to forty-pound bale for every hundred lambs.

Commercial feeds often have added phosphorus, which should be avoided like the plague. Grain is rich in phosphorus and supplies a sheep's needs ordinarily. A diet with excessive phosphorus in relation to calcium causes water belly or urinary calculi in ram and wether lambs, in which mineral secretions, or stones, plug up the urethra.

If lambs are raised on a diet rich in grain, the ratio of calcium to phosphorus will be distorted from the optimal in favor of phosphorus. Addition of ground limestone to the feed to bring the ratio of calcium to phosphorus to about two to one or three to one will balance these minerals for a sheep's needs.

Addition of phosphorus to rations is something that the feed companies like to push very hard. I recall a feed company employee looking in a feeder at a ration of ours that was about 90 percent corn and asking whether I was sure that the lambs were getting enough phosphorus. I didn't know how to answer a question like that from a feed company man who had a Ph.D. in animal nutrition. I have no objection at all to feed companies making a profit, but I do object to them trying to shove extra phosphorus into my male lambs.

A lamb requires roughly three grams of phosphorus a day, pretty much regardless of its weight. If hay alone is fed, the lamb would have to eat somewhere in the range of two and a half to five pounds a day to get the three grams. On a straight corn diet, less than two pounds a day would provide sufficient phosphorus. The hay diet would provide calcium and phosphorus in a ratio of about 1.5:1 (Ca:P) to over 6:1 (Ca:P) depending on the type of hay. Enough calcium would be provided by about three pounds of grass hays or by less than a pound of typical alfalfa hays. In contrast, a diet of straight shelled corn provides very little calcium, and the hapless lamb would have to eat a truly phenomenal fifty-five pounds of corn a day to get enough calcium. Not that anyone would feed straight corn, but that gives you some idea of the amount of calcium in America's number-one feed grain. If that feed rep had asked whether the lambs were getting enough calcium, the question might have made sense.

What about adding phosphorus to a lamb's feed? On a purely hay or alfalfa-pellet diet, some additional phosphorus might be called for. The lamb would have to eat about five pounds of hay to get enough, and that is a lot of hay to jam into one lamb every day.

A far more sensible approach is to give the lambs a varied diet composed of hay, grains, oilseeds, and other foods that naturally contain balanced amounts of calcium and phosphorus, among other nutrients. The simplest feeding scheme is to feed a grain mixture that has enough finely ground limestone added to balance the relative excess of phosphorus. Hay can then be given in any amount preferred to provide a total diet, because hay has about the right ratio of Ca to P for sheep. If urinary calculi are a problem with such a diet, have your feed analyzed to find the Ca:P ratio rather than using average values from tables. If urinary calculi are still a problem, up to 2 percent ammonium chloride may be added to grain mixtures as a preventive measure.

ENVIRONMENT

Weaning is another time when the tightness of your fences will be tested. When the ewes and lambs are separated, they will try like the dickens to get back together. Lambs will find a crack to squeeze through that they have ignored previously, and ewes will leap fences with an agility and grace never seen the rest of the year. I recall being astonished one year to see a grossly

overweight Montadale ewe sail over two fences like a deer to get back to her youngster. If your interior fencing keeps ewes and lambs apart at weaning, then you have pretty good fences.

I have previously mentioned that woven wire with the stays twelve inches apart is the preferred stuff for interior fencing because the ewes can get their heads unstuck if they push them through to eat on the other side. The one exception to this is the area where lambs are confined. Here, six-inch stays are required, or some altogether different sort of fencing. For places like creep areas, galvanized steel hog panels are handy. They are tight enough to confine lambs, but are short enough to let the shepherd step over them easily. The panels are relatively expensive, but creep areas are small so the total cost is not prohibitive.

It is also convenient to have one or more small pastures with lamb-tight fencing to let the weaned lambs use. This gives them an area to play around in but keeps them from rejoining their moms. Once they have gotten over the shock of weaning they can be run out to other pastures with less tight fencing. Many shepherds let the lambs feed ahead of the ewes in a rotation scheme to give them first crack at grass, although for most of us weaning is at a time of year when pastures are not at a peak productivity and keeping the lambs in a well-fenced, familiar feedlot area with hay and grain available is probably the best plan.

HANDLING: EWES

Don't let yourself be tempted to separate the ewes from the lambs and then forget about the ewes for the rest of the time until breeding season approaches. After all of the attention paid to detail during and after lambing, it would be kind of nice to goof off, but weaning is a time when that old enemy mastitis can sneak in on your flock. Even with feed, salt, and water reduced, the ewes will continue to produce milk, some of them more than others. The only way to monitor the ewe's progress is to palpate (feel) bags a few times. Confine the ewes in a small pen and quickly check the bags to make sure they are drying up as they should. Generally you can just look at the bags and palpate any that seem swollen.

It is a bit of a Catch-22 situation in that pressure of milk in the bag causes milk secretion to slow down and stop, but at the same time, a too-full bag



Lambs enjoy access to some hills and trees for a bit of recreation.

needs to have the pressure relieved by a little milking out. It is strictly a matter of judgment and you will have to learn by trial and error when to milk a little out and when to leave a tight bag alone. Some producers turn the flock out after weaning and hope for the best. If the flock is large in relation to the time and labor available for checking bags, this may be the only solution. If this is done, one must accept the fact that some bags will probably be lost, and you won't even know about it until the next lambing. You will lose the ewe, plus the cost of the feed that went into her over the intervening months. It doesn't take very many lost breeding ewes to justify the cost of checking their bags two or three times after weaning.

HANDLING LAMBS

Weighing

The lambs will require little handling at weaning except to weigh them soon afterward. Don't pass up this weighing chore just because you are busy. Lamb

weights are the basic data you need to evaluate your breeding stock, and this is the time to get the numbers, so do it. I also encourage you to buy a good scale to weigh both lambs and sheep, and to put it in a chute/corral/pen arrangement that makes weighing easy to do. Scales designed for pigs work great.

Shearing

Once the stress of weaning has subsided, you might consider shearing some or all of the lambs. There is no simple answer as to whether you should shear lambs. One consideration is the cost of shearing relative to the value of the wool from the lamb. If shearing a lamb costs you a dollar, you'd have to get a dollar's worth of wool from the lamb just to come out even. For the value of the wool, check local market conditions unless you sell to a niche market such as handspinners.

To complicate matters, recognize that you are paid for the weight of the wool attached to the lamb when you sell it. So if lamb prices are higher than wool prices, you might want to leave it on. However, the price for unshorn lambs is usually lower than for shorn ones with a pelt about one inch in length (a so-called number-one pelt). The key factor here is the value of lamb pelts, and that ranges widely from year to year—from zero difference to as much as \$6.00 difference in the past decades.

There are also other considerations. If you are selling breeding stock, you probably will want to shear the lambs to make them have a more attractive appearance to prospective buyers. This is especially important with Suffolk or Suffolk-cross lambs because they are born with a dark wool that grows out white, or at least whiter, so shearing is needed to give the characteristic white and black pattern. Even with all-white breeds, a nicely shorn lamb will usually command a higher price—unless, of course, you are raising long-wooled breeds.

If lambs are being fattened in summer, shearing may be a worthwhile management practice to keep them cool and growing in the hottest parts of the season. Whether shorn lambs actually do grow better in hot weather is a matter of opinion, and you will have to decide for yourself, because the climate and heat tolerance of the sheep will be different for almost every farm.

If you choose not to shear, you will have to be alert for accumulations of dirt and dung around the rear of the lambs. Any dung tags hanging from the lambs can cost you dearly when it comes time to sell them. A buyer who sees

dung tags will take them as a sign of poor management, just as he would with undocked tails, so the price you receive will be reduced accordingly. You may get stung twice for your inattention to detail. You will get a lower basic price because of the bad impression your lambs give, and the weight of the lambs may be arbitrarily reduced by some pounds for the weight of those hanging clumps. So, if you don't shear, at least take the time to clip off the tags around the rears of those that need this treatment.

If you do decide to shear, do it when the weather is favorable, which may not be easy to plan if you depend on someone else to shear for you. If you can, try to shear just before warm, dry weather because the shearing stresses the lambs, and then if they are out in a cold rain or a late snowstorm, the survival rate can be low.

In warm weather, protect the freshly shorn lambs from sunburn and from flies. Flies will literally chew holes into the backs of freshly shorn lambs, and mosquitoes can suck their blood. Protect lambs with insect repellent sprays. Treat any shearing cuts, and spray them with repellent to prevent flies from laying eggs in the wounds.

If you notice any lice or keds on the lambs when you shear, treat the lambs with a powder or spray, although most of the parasites and their eggs will go with the wool. External parasites will slow the growth of a lamb to nothing if they are left untreated. A shorn animal is very easy to treat, so don't pass up the chance.

MEDICAL

Vaccination and Worming

A second PI-3 vaccination is favored by some at this time. If the lambs are to be placed in a drylot, worming might be appropriate if they have been with the ewes in a pasture up to this time. You should wait a few days after shearing to worm them, because the combined stress of shearing, vaccination, and worming added to weaning may be a bit much for some of the little ones.

Rectal Prolapse

A medical problem that may appear about this time is rectal prolapse. In a rectal prolapse, a piece of the rectum is pushed out, turning inside out as it appears. A piece a few inches long may hang out, and it will get dirty,

sunburned, dried, cut, and eventually split open if left untreated, resulting in the death of the lamb. I feel compelled to mention that the only time I ever had this problem with lambs was with lambs from one Suffolk sire, the original owner of whom also had prolapse problems in his flock, so it could be a genetic thing.

One treatment is to push the washed mass back inside and suture up the anus to prevent its coming out again. The trouble with this method is that if the opening is left loose enough for the lamb to defecate, the rectum will push out again. If it is tighter, the rectum may push against the stitches, swell, and plug up.

Another method that is widely used by both veterinarians and producers is to use a so-called rectal ring. A rectal ring isn't a ring at all, but a tube made of plastic pipe about two inches long and about an inch in diameter. There is a groove around the center of the pipe. The everted part of the rectum is left sticking out and the tube slipped inside the protruding rectum until the groove is flush with the anus. Then an Elastrator band is placed round the everted tissue, at the anus, so that the prolapsed portion of the rectum is pinched off by the rubber band which squeezes into the groove in the rectal ring. The blood supply to the prolapsed part of the rectum is cut to almost nil, so the tissue dies and eventually sloughs off, usually after a few days. Meanwhile the pressure of the rubber band causes the tissues against the anus to grow together so that the remaining rectum is grown to the tissue at the anus. The prolapsed part is effectively amputated, and the lamb is back to normal. When using a rectal ring, be sure that the tube doesn't get plugged up with feces. Clean the tube if needed and give a dose of mineral oil (two tablespoons) to keep things moving.

A more drastic method is used by some shepherds, and I have tried it with success. This is essentially the rectal ring method with no rectal ring. A piece of umbilical tape can be tied around the prolapsed tissue to help to hold onto the slippery mass. Then an Elastrator band is slipped over the prolapsed rectal tissue and placed snugly against the lamb's body. The band cuts off the circulation to the prolapsed tissue, and it dies and sloughs off in three to four days. The obvious difference between this and the rectal ring method is that the lamb cannot defecate at all. If the tissue does not slough off in four days, it can be cut off and the band removed. Needless to say, do not cut the tissues on the lamb's side of the Elastrator band, but on the other or distal side.

When the band is removed—and be aware that it may come off all by itself when the tissue is cut off—stand aside because feces may come out of the opening with almost explosive force, as you might imagine.

Lambs usually limit their food intake voluntarily when plugged up like this, but watch them closely. If they continue to eat very much, pen them away from food for a few days until the amputation is complete. Watch them for bloat and any other side effects.

I won't recommend this latter method to you, and I'm sure your veterinarian wouldn't either. Even a vet whose partner had badly botched a rectal-ring job for us didn't approve of a no-ring method. All I will say is that I have tried both the ring and no-ring ways many times and I prefer the no-ring way. Use your own judgment, and take your chances. Remember to protect the lamb against tetanus by giving 100 units of antitoxin when an Elastrator band is used, if you have had previous tetanus problems, and if the lamb did not receive vaccine previously. The best solution is not to dock too short and to get rid of any rams who sire prolapse-prone lambs.

OBSERVATIONS

As the lambs are weighed, look over the best ewe lambs as potential replacements. At the time of weaning, the qualities you see in the lambs may largely reflect their mother's traits rather than their own in the sense that you are seeing the results of heredity plus milking ability of the ewe. Make a preliminary selection now, and keep an eye on them to see how they progress on their own. You may want to separate these lambs and feed them for a little slower growth (more hay and less grain) if they are to become permanent members of the flock or are to be sold as breeders.

At the other end of the scale, be on the lookout for lambs that look small and weak, because they may have a very negative response to weaning. Some will not make the transition to solid food at all well, and these will bear watching. Some will eat the solid food just fine but will not drink enough water and will die of impaction. In studies at the U.S. Meat Animal Research Center in Clay Center, Nebraska, it was found that this condition is a particularly serious difficulty with lambs weaned very young (about ten days).

EVALUATION

Weaning is a good time to consider strategies for marketing your lambs. If you want to catch an early market, feed the heck out of them. Alternately, you may opt to slow-grow them on pasture in order to finish them later for a higher price in the winter. Maybe you will decide to fatten them for a while and then sell them as feeders. You may decide on a combination of all of these, if that is appropriate. Any lambs that are to be kept as breeders should be taken away at some point and given more hay and less grain to keep their rumens in good shape. A low-roughage diet leads to a stomach condition called parakeratosis that is not desirable if an animal is to be kept beyond a year or so. Therefore, don't try to raise your replacements on ground or pelleted feed without including some long hay (not pellets or ground hay) or pasture.

Weaning is also the time to evaluate ewes. The weaning weights are in and that is your primary information. The ewe that gives the most pounds of healthy lambs at weaning is the best one. A ewe who gives runty twins is not nearly as valuable as a ewe who gives a big, growthy single that outweighs both of the twins put together. If you use computer software to analyze your flock, you will certainly need both birth and weaning weights.

CONCLUSION

Apart from the appendixes that follow, our exploration of the cycle of the ewe is complete. You can lay this book down now, having managed to wade through a lot of material—enjoyably I hope. And although you may be finished, your ewes are not. They are already back to Building and Rebuilding even as you read this. They're getting ready to make lambs grow wool by stocking up on food and resting up. May they prosper, bless their hearts.