SHEEP MANAGEMENT
in Oregon

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AS a result of increased costs which have cut down large sheep operations in eastern Oregon and an increase in small farms, sheep raising in the state has become an increasingly important problem for many farmers and in many areas previously not concerned. Owners of small farms and rural residences have found that flocks of sheep can be raised to good advantage. Under good care and management, they have found it not unusual to market a 150 per cent lamb crop.

The amount of labor involved in raising small flocks is small, although in more densely settled areas dogs sometimes become a problem. Also, the amount of necessary winter feed is not great, usually about 300 pounds of good quality hay per ewe. The main disadvantage of the small flock is the cost of the ram per lamb sired. Sheep are very efficient in their conversion of grass and roughage to marketable lambs and wool.

The dry land conditions of the Willamette Valley enable farmers to market early lambs by the time the lush grass is gone (about July 1). The ewe flock can be carried on dry grass and grass-seed aftermath until breeding time once again brings on the need for fresh pasture.

When considering the raising of sheep, a farmer should know that, generally speaking, sheep are adapted better to well drained soils and require plenty of hay and pasture. Feeding of excess grain is not profitable for such an enterprise. It is questionable economy to feed more than one hundred pounds of grain annually to a ewe and her offspring. Good quality silage free of mold, however, affords good feed to the ewe flock.

Buildings and Fences

Sheep do not require an elaborate set up of buildings, but they do need some protection from the weather. This can be provided generally by an open shed which has been well bedded and is dry. The open side should be away from the direction of the prevailing wind. At lambing time, a 4' x 4' pen is needed for the ewe and her lambs. It is well to provide some source of heat, such as a pig brooder or a heat lamp, in the lambing pens. In most cases a low, woven wire fence turns the flock.
Labor

The amount of labor required with a farm flock is relatively small except during lambing time. At this time labor is essential and often requires long hours and careful observation to save the lamb crop. The operator must be always on the alert for diseases and predators such as dogs and coyotes.

Fall Management

![A well grown, rugged, heavily muscled ram is essential in producing market topping lambs. A ram such as the one shown above, bred to heavy m.iking ewes, is the basis for the best native lambs which are produced in Oregon. Keep the ram away from the ewes except during the breeding season.](image)

Rams

In selecting the ram, one should be sure that he fits the type of the ewe flock and that he has a deep, wide body carrying a straight top line and heavy leg of mutton. He should stand on a rather rugged foot and bone and have the desirable characteristics of the particular breed in question. Both the length and quality of fleece should be taken into consideration. A ram should not have an over-shot or undershot lower jaw; the teeth should meet with the upper...
pad properly. One mature ram should be secured for each 25 or 30 ewes that are to be mated.

As the breeding season approaches, at least the belly and the scrotum of the ram should be sheared. (The ram should be sheared in July.) He should be given extra feed and care so that he will be in good condition at the time he is turned with the ewes.

During the breeding season, the ram's brisket should be painted with a vegetable dye mixed with oil in order to determine which ewes have been bred. The color should be changed every 14 days. Lighter colors should be used first, then go to darker colors. Best results are obtained by removing the ram from the ewe flock during the day. Give the ram one pound to one and a half pounds of grain daily and all the good hay and water he will consume. Provide shade or a dark stall for the ram. A small lot separate from the ewe flock should be provided for the ram except during the breeding season.

Ewes

When selecting ewes, consider those ewes that are of good quality, have sound udders and good teeth, and carry the characteristics to which you are breeding. Ewes should be culled from the flock if they have teeth which have come out naturally or have broken off. Ewes having spoiled udders, as well as those having inferior quality wool or those which are poor milkers, should be removed from the flock. The culling of ewes should be a year-round opera-

Figure 2. A good pasture program is an essential part of a successful sheep enterprise. The successful producer of lambs always plans to have more high quality succulent pasture than he will ordinarily need.
Figure 3. The incisor teeth of sheep differ at various ages: upper left, lamb; upper right, yearling, with two permanent teeth and six lamb teeth; middle left, 2-year-old; middle right, 3-year-old; lower left, 4-year-old; lower right, an old sheep showing long narrow teeth with two missing.
Replacement ewe lambs should be selected at weaning time. Select early, big, ewe lambs from good mothers. After the lambs are weaned, the ewe flock should be carried on pasture to prevent them from becoming excessively fat. This will probably affect the breeding of next year’s lamb crop. However, do not let the ewes become thin. Two to three weeks prior to the breeding season, the ewes should be turned on fresh pasture so they will be in a gaining condition at the time the ram is put with the flock. This will tend to produce a more uniform lamb crop and a possibility of more twins. During the gestation period of approximately 146 days, the ewes should gain from 15 to 25 pounds each. If the ewes are thin or are showing some age, they should be fed grain five to six weeks prior to lambing time. There is no particular choice as to the kind of grain fed. Provide from 200 to 400 pounds of good legume and grass hay for each ewe. If the quality of hay is good, there is no necessity in feeding a protein supplement along with the grain toward the end of the gestation period. Two to three pounds of good silage may be substituted for each pound of hay. Four to six pounds of silage per day is sufficient when fed with one or two pounds of good hay. The phenothiazine salt mixture should be kept before the flock at all times. A separate box for steamed bonemeal should be provided.

Ewe lambs that are well grown out may be bred to lamb as yearlings. A lamb crop of 60 to 65 per cent may be expected. These young ewes will require more feed and care than older ewes.

The lambing period will be governed by weather conditions and available barns and equipment. Ewes should lamb in January and February in western Oregon and March through May in eastern Oregon.

**Pregnancy Disease**

Pregnancy disease is rather a common occurrence in sheep that are underfed during the gestation period. The cause of the disease is a malfunction of the metabolism of sugars. This may occur in either thin or fat ewes. The lack of exercise during this late period seems to speed up the number of cases. Driving the ewes about a mile per day in bad weather will give sufficient exercise. In the early stages, the ewes lag at the end of the flock, stand around by themselves. Later they go down and turn their heads around to the side and a paralysis of the hindquarters sets in. One-half cup of sirup in a pint of water given as a drench three or four times a day will usually bring about a recovery. This treatment is only partially effective, however. Prevention is better than the cure.
Lambing season is the most critical time in the sheepman's year. Most lamb losses result from neglect. Some of the causes of death are chills, infection from unsanitary quarters, and starvation. Losses from chilled lambs may be cut a great deal by the use of heat lamps, a lamb brooder, or a jug of hot water set next to the lamb. Immersing the lamb in warm water and then drying him with a sack will also help. Such treatment requires careful management to keep the ewe claiming her lamb, because of the change in its smell.

The lambing quarters should be thoroughly cleaned and fresh bedding kept in the shed. It is desirable that the individual lambing pen be disinfected between each time it is used.

Very soon after the lamb is born, the navel should be disinfected with tincture of iodine. To do this, fill a vaseline bottle about one-half full of iodine. Place the navel cord in the bottle, press the bottle to the stomach, and turn the lamb on its back.

Proper feeding of ewes prior to lambing time will do a great deal to bring the ewes into milk after the lamb is born. Check each teat to see that there is milk present. Frequently there is a wax plug that must be removed from the opening in the teat.

When the ewe has difficulty in lambing, it may be necessary to take the lamb. Thoroughly wash the hands and arms in a good disinfectant, trim the fingernails, apply a light coating of vaseline, enter
Figure 3. A lamb brooder provides a place for the lamb to get additional warmth and the above also provides a place for the ewe to be fed and watered by a trough 2 feet wide and 4 inches deep. The heat is from a 150-watt bulb placed under the feed trough. It may be constructed in units of four pens.

Figure 6. A double unit of the combination ewe feeder and lamb brooder will usually handle the farm flock needs. Keep the ewe and her lambs in these pens for 2 or 3 days depending on the strength of the lamb.
the vagina with the hand, and place the lamb in normal position. Place the head between the front legs and pull outward and downward.

**Care of Lamb**

Some other difficulties that may occur shortly after lambing are inverted eyelids, diarrhea, pinning, and pulpy kidney.

**Inverted eyelids**

Inverted eyelids are a common occurrence in new born lambs. Roll the eyelids out in the normal position. Using a pair of scissors, cut out a piece of skin about half the size of a dime from the lower eyelid. This will usually clear up the eye without any further trouble. Foreign objects, such as gress seeds, pieces of straw, and hay, frequently get into the eyes of sheep. When this occurs, the objects should be removed from the eye and the eye treated with a few drops of 15 per cent argyrol, sulpha ointment, or a saturated solution of boric acid.

Pink eye affects sheep much the same way as cattle. The eyeball is bloodshot and frequently waters. This is usually an infection and may be treated with the same material mentioned above, or a 1 per cent solution of Chloromycetin.

**Diarrhea**

Diarrhea is often a result of unsanitary conditions. The lamb appears normal and then starts a mild diarrhea. It stands with its belly tucked up and then scours start with a possible trace of blood in the feces. Acidophilus milk and sulpha drugs are effective cures for most types of diarrhea.

**Pinning**

Pinning is caused by a gluing down of the tail from the first passed feces. Death will result if this condition is not remedied. Pull the tail loose and scrape the manure away with a stick, knife, or some other suitable instrument.

**Pulpy kidney**

Pulpy kidney usually strikes the heaviest lambs in the flock at about two weeks to several months of age. Death results from a toxin produced by bacteria in the digestive tract. There is no known cure, but a vaccine has been developed that does a good job when used as a preventive. This serum may be secured from veterinary supply houses, or treatment may be done by a veterinarian.
Docking and Castrating

The lambs should be docked when from 7 to 14 days of age, and the ram lambs castrated at the same time. The docking operation may be performed with a hot iron, a small pruning shears, heavy scissors, or a sharp knife. If the elastrator method is used, the rubber band should be applied the day the lamb is born. A good disinfectant should be used in all cases in any of these operations. The rubber band method seems to do well in castration also. In one method of castrating, a helper holds the lamb against his chest with a foreleg and a hind leg in each hand, while the operator grasps the scrotum with one hand and cuts off the bottom one-third with a sharp knife or scissors. Then, with one hand firmly pressed against the abdominal wall, he pulls out the testicles with the other hand, making sure to pull all of the cords. The testicles may be pulled out with the teeth. The scrotum should be thoroughly disinfected. Equipment should be kept in a disinfectant when not in use. The operator's hands should be thoroughly clean at all times.

Creep Feeding

Figure 7. Lambs will start eating grain as soon as they get their teeth which is at about 10 days of age. Locate the creep in a sunny, warm, dry place where the ewes gather. Almost any grain mix is satisfactory. Note the entrance panel.
A creep may be provided where lambs may go to eat with the ewes being excluded. This is a particularly good practice for early lambs when there is no pasture available. Any whole grain is a suitable feed. A protein supplement is not necessary, because the lambs get sufficient protein from the ewe’s milk. When the lambs are born in April or early May, it may not be necessary to creep feed them. The ewes will provide an abundance of milk at this time.

**Orphans**

An orphan lamb should be grafted to another ewe or raised on a bottle using cow milk. Usually, the ewe will take the lamb when both are placed in a small pen for three to four days. A small amount of kerosene or some of the ewe’s milk sprinkled over the lamb will also help. The skin from the dead lamb may be put on the grafted lamb. It may be necessary to tie the ewe for a while or hold her while the lamb sucks. Tying a dog near the ewe and lamb will sometimes help.

**Pastures**

An abundance of pasture is the backbone of any sheep enterprise. A good sheep operator provides pasture as nearly year-round as possible. This is done by using permanent and supplementary pasture. Sheep work well in cleaning up grass seed aftermath. The carrying capacity of pastures will be greatly increased by adding fertilizer and lime where necessary and reseeding with a combination of grasses and legumes fitted to a particular locality. Some of the grasses and legumes that may be used are Ladino clover, subterranean clover, red clover, fescue, rye grass, orchard grass, and meadow fox tail. Some sheep operators overgraze a pasture. This results in less plant growth and less feed and kills the stand of grass. Rotation of pastures will increase the amount of forage produced and help control stomach worms.

Small grains such as wheat and barley make very satisfactory supplementary pastures.

**Shearing**

From one-fourth to one-third of the sheep income is derived from wool. Therefore, it is necessary that we produce a good quality product to be marketed. Shearing may be done at any time of the year but usually is done in the late spring or early summer,
depending upon the locality. Willamette Valley shearing often is done in April. In the higher elevations of central and eastern Oregon, May is usually the shearing month.

Shearing should be done only when the wool is completely dry. Wet wool will rot in the sack. Use only paper twine in tying the fleece. Before the fleece is folded, remove all the tags and dung locks to prevent spoilage of the remaining good wool. In most cases it is advantageous to sell the wool on a graded basis.

Figure 8. Shearing the wool around the udder, flanks, between the hind legs and over the dock will eliminate work and save lambs at lambing time. Ewes which have been tagged will tend to keep clean on early succulent spring pasture. Tagging also reduces the danger from maggots. Wool blindness will cause poor sheep as they are unable to travel with the flock for forage.
Marketing

It is good policy to sell only fat lambs. To determine the fatness of a lamb, feel the covering over the backbone, the ribs, and the tail. The tail on a fat lamb will show covering over the joints; and as fatness increases, the joints will be more difficult to feel. A fat lamb will usually top the market with the weight varying from 70 to 115 pounds. Finish is the determining factor.

When the lambs are thin, about July 1, it is difficult to get them fat before cool weather. In this case, it is advisable to wean the lambs, shear them, and put them on good pasture. When the pasture is not good, it is advisable to feed some grain. When feeding lambs in dry lot, it is necessary to feed at least as much hay as concentrates by weight. This will reduce the losses from over-eating disease. When estimating the amount of feed necessary for fattening, supply 100 pounds of grain and 200 pounds of alfalfa hay for each lamb in a one hundred-day feeding period. The grain may be fed whole.

Ewes which are being culled from the flock may be sold any time they are fat.

Parasites

Common ticks

The common sheep tick is widely distributed over the state. The entire life cycle is spent on the sheep and is readily controlled by the use of DDT or rotenone, either used as a spray or dip. For one type of spray, mix 8 pounds of 50 per cent wettable DDT powder in 100 gallons of water. For another, mix 2 pounds of 5 per cent rotenone in 100 gallons of water. Six ounces of 5 per cent rotenone, when used as a dip, also will remove ticks. Where the ewes are treated in the fall, there is usually little trouble from ticks. When this treatment is delayed and the ticks move from the ewes to the lambs, the entire flock must be treated at once.

Worms

Symptoms of wormy sheep vary considerably. Some of the usual symptoms are scouring, occasional swelling under the jaw, bleached eyelids, and a general rundown, unthrifty appearance.

Stomach and intestinal worms are the major internal parasites in sheep and may be readily controlled by using phenothiazine. A one-ounce dose of phenothiazine given to the adult sheep in the spring of the year usually will remove any round worms if followed
When sheep are sprayed instead of dipped, they must be sprayed very thoroughly on their backs, sides, and bellies with at least 400 pounds of pressure. One gallon of solution per sheep is required. Spraying is more effective if the sheep have at least two months of wool growth.

by keeping a salt mixture of one part phenothiazine and nine parts ground, iodized salt before the sheep at all times. This mixture will not remove the worm load but will keep it down.

Maggots also cause a great deal of irritation. Death will occur if they are not removed. Maggots will usually appear on sheep that have not been tagged properly and have a sizable amount of wet manure wool on the hind parts. To get rid of them, remove the wool and manure with a pair of clippers and cover the area with a bone oil preparation such as Smear 62.

**Ulcers**

Lip and leg ulcers or sore mouth frequently infect the flock. Ulcers will appear on the lips, nostrils, and udders of ewes. This will affect the ewe's eating and will prevent the lambs from nursing the affected udder. The ulcers should be scraped down to live flesh, and raw sheep dip applied to the affected part. The vaccination for sore mouth is very effective and should be done immediately after the onset of the disease in the flock.
Black’s disease

Black’s disease is usually associated with sheep grazing wet, swampy pastures. There seems to be a definite tie-up with the snail which acts as secondary host for the Black’s disease fluke. Vaccination and dry pasture are the best preventives. This disease causes death by toxin produced by the bacteria in the dead liver tissue.

Foot rot

Foot rot affects large numbers of sheep annually. It is caused by an organism that enters a break in the skin usually between the hooves. It occurs in sheep whose feet have not been trimmed properly, permitting a moist condition to exist between the outside shell and the bottom of the foot. To prevent it, trim the feet in the fall and spring.

The symptom is lameness in any or all feet. The condition usually is associated with muddy lots. Sawdust or shavings on the sheep corral to a depth of 10 to 12 inches aids in preventing it.

Treatment consists of a foot bath made by dissolving two to three pounds of copper sulfate in a gallon of water. Put this solution about an inch deep in a 12 inch by 16 foot trough and arrange the trough so that the sheep must travel through it going to and from pasture. It may be necessary to drive the sheep through. Care should be taken to see that the sheep do not drink this solution or eat grass where the solution has drained. If the ewes are nursing lambs, precautions should be taken to prevent a build up of copper in the lamb’s system, which will cause copper poisoning. Individual cases of foot rot may be treated by using butter of antimony.

Further information

Further information on diseases and parasites may be obtained from the Department of Veterinary Medicine, Oregon State College, or from local veterinarians.