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# RAISING YOUR 4-H ORPHAN LAMB



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## Wyoming 4-H Sheep Project Orphan Lamb Phase

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# Raising Your 4-H Orphan Lamb

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## **Purpose and Requirements of Your Orphan Lamb Phase**

A 4-H club member enrolled in an Orphan Lamb Phase will start with three or more young lambs, raises these sheep to maturity, and increases the project from year to year until a flock is built up. Orphan lambs are often sold at maturity and a better grade or purebred sheep purchased from which to build a flock the following years. You are taught care and management of sheep under Wyoming range conditions. You are given training in sheep judging and selection. You have to prepare your sheep for market.

An older club member or a boy or girl with some experience may enroll in the Second of the Sheep Phase starting with the Ewe and Lamb. All animals raised in a club project must be owned by the club member. If pure-bred sheep are used in the project, they must be registered in the name of the member. After expenses are deducted, all profits or property acquired in the project go to the club member at the end of the year's work.

**Work Requirements:** The care and management of three or more orphan lambs raised to market age as feeders, and then sold or exchanged for ewes to continue the Ewe and Lamb Phase is the objective of this project. Try to have your project large enough so you will be proud to show your accomplishments.

**Record Requirements:** A record of the weight of the lambs at the beginning and at the close of the project, a record of the time you spent on the project, feeds used and their cost, other expenses, receipts, a closing inventory, and a story of your experiences for the year must be written in the record book furnished by the Agricultural Extension Service.

**Exhibit Requirement:** One market lamb must be shown at a local or county fair.

**Club Requirements:** To attend all regular meetings of my club and take part in its activities.



### **Goals Recommended for Your Orphan Lamb Phase**

1. Raise at least three lambs to market weight. Assume entire responsibility for feeding and care.
2. Attend all regular club meetings.
3. Study the club lessons before meetings.
4. Take part in a club tour and all club activities.
5. Try out for a demonstration.
6. Do some judging work.
7. Exhibit your lambs at a community or county fair.
8. Keep your club record up to date. At the end of the project, submit through your local leader to the county agricultural agent, a completed financial record and a good story of the year's club work.
9. Construct at least one article of sheep equipment.
10. Learn to recognize the various breeds of sheep.
11. Learn to fit and show your lambs.

## Time to Start

The Orphan Lamb Club should be started at least a short time before orphan lambs are to be secured so that all members will have some instruction on obtaining and caring for the new lambs. Lambing time will vary from February to June. After the first year, clubs should reorganize in the fall and meet regularly at least once a month throughout the year.

Boys and girls who enroll in this phase of 4-H orphan lamb work will usually start with orphan or "bum" lambs. "Bum" lambs are those whose mothers have died or have been unable or unwilling to nurse them. In range flocks the weaker of a pair of twins whose mother hasn't enough milk for both will die unless hand-fed. Lambs whose mothers die or have no milk must be hand-fed. Mother and lamb may become separated in the ordinary moving of the band, and the ewe loses the scent of her lamb. "Bum" or "orphan" lambs are particularly plentiful in range bands after very severe winters. Many of the owners are glad to give away these unclaimed lambs; others will sell them for 25 cent to two dollars each; still other range operators believe they help themselves and help the range sheep industry by killing bum lambs that cannot be cared for by their own crews.

Members of properly organized 4-H sheep clubs will seldom have trouble in getting sheepmen to let them have lambs. When the club is organized, a committee should be appointed for obtaining lambs. The club leader should be the directing member of this committee. The county agricultural agent will be glad to assist in every possible way, but club members should not depend upon him to find lambs for them. Do it yourself. If you don't take proper interest in your own business, you can't succeed.

The committee that is to select the lambs should consider some of the following facts:

1. Determine the breeding of the ewes and the quality and breeding of the rams. It is better to pay a little for lambs from a well-bred flock than to get lambs for nothing that are poorly bred.
2. If this is the first time members of your club have attempted to raise orphan lambs, it will be to your advantage to select lambs from a flock of sheep in which the ewes and rams are uniform, large, thick, and smooth bodied since lambs from a carefully selected flock of this type are easier to start on feed,

are faster growing, and produce better market lambs or breeding ewes than lambs from a flock of small, thin bodied ewes.

3. Find out definitely when lambing operations are to start in the band from which lambs are to be obtained. Arrange with club members to be on hand to get their lambs at the proper time.
4. Pay at least a little for the lambs. At least it is advisable to offer to pay for the lambs you get although most range men will not accept pay because orphans are a loss to them anyway. However, keep all your dealings on a strictly business basis.
5. Unless the members have had experience in raising orphan lambs, don't pay a lot of extra money to get pure-bred lambs when good grades can be bought at fair prices.

### **Feeding Your Orphan Lamb**

If you are to succeed in raising orphan lambs, you must observe the following primary rules faithfully:

1. The lambs must be given a milk substitute as nearly like their mother's milk as possible. Good, clean, cow's milk that is rich in butterfat is the best of readily available substitutes for feeding the first few weeks.
2. Lambs must be fed individually. You cannot hope to succeed with orphan lambs unless you take pains to feed milk to each one according to its specific needs. Even grain is best fed individually.
3. Lambs must be fed regularly and frequently. Regularity in feeding is essential to avoid digestive disorders. For the first week or 10 days, lambs should be fed at 2½- to 3-hour intervals during the day: at 5 a.m. for the first feeding; at 8 a.m. for the second; at 11 a.m. for the third; at 2 p.m. for the fourth; at 5 p.m. for the fifth; and at 8 p.m. for the last.
4. Absolute cleanliness must be practiced. Sheep are naturally clean. The good shepherd feeds from clean troughs, uses clean pails, and beds his sheep in clean pens. Get yourself into the habit of thoroughly cleaning all feeding pails immediately after you have used them. Pails used in feeding milk must be rinsed first, then scalded in boiling water.



### Feeding Rules

Start out by feeding 2 to 4 tablespoonsful of milk every 3 hours. Increase the amount gradually.

Always heat milk from 95 degrees to 100 degrees Fahrenheit.

Never let milk boil.

Stir milk each time so that the butter-fat in the milk is well mixed.

Watch the lambs carefully to make sure they have regular bowel movement within 24 hours. If not, give a teaspoonful of castor oil to each one that has no bowel movement.

Never permit the lamb to stuff itself. When two weeks old, it should drink 1 to 1½ quarts of milk per day.

Lambs may be taught to drink in the same manner as calves. A "swan's bill" nipple will work best. The hole in the end of the nipple should be enlarged to speed up the flow of milk. The milk may be warmed to 100 degrees Fahrenheit by immersing the bottle in water of this temperature or slightly above.

By the time the lambs are two weeks old, they will be receiving from  $\frac{3}{8}$  to  $\frac{1}{2}$  pint of milk per feeding four times daily. When they are three weeks old, the feed may be increased to 1 pint three times daily. Skim milk may be substituted gradually for whole milk, beginning about the fourth week. If milk is scarce, dried skimmilk may be used as a substitute after the second or third week. Ask your county agent about directions for feeding dried milk.

### A Guide in Feeding Milk to Lambs

Age	Number of feedings daily	Milk		Pints of Milk per day
		in tablespoons	in pints	
1 to 6 days	6 to 8	2 to 4	1/10	1/2 to 3/4
2nd week	4 to 5	8 to 12	1/4 to 3/8	1 to 1 1/2
3rd week	4	12 to 16	3/8 to 1/2	1 1/2 to 2
4th week	4 to 3	18 to 24	3/4	2 to 2 1/2
6th week	3	32	1	3
8th week	3		1 1/3	4

### Docking and Castrating

Docking should be done when the lambs are 10 days to two weeks old. Bum lambs should be castrated at the same time. Get someone who is experienced to help do the work so the lambs will be hurt as little as possible. Abide by the following rules in docking and castrating:

1. Always select a bright, clear day. Never operate on a cold day.
2. Provide a clean place. Have the lambs well rested for the operation. A well-rested lamb will not bleed as much as one that is hot and excited.
3. Always pen lambs closely to catch them to avoid excitement.
4. During the operation, the helper holds the lamb with head up against his body, and with the right front and hind legs grasped in his right hand and the left front and hind legs grasped in his left hand. His hands should touch. This gives a good position for the operation.
5. Methods vary from place to place and almost all produce good results. However, certain precautions should be observed. Knives and similar instruments should be kept clean and frequently placed in a disinfectant solution. Following handling, the lamb and ewe should be removed from corrals and holding sheds to clean pasture or its equivalent as soon as possible. Warm, bright days are preferred for this work, although it should be done when the lamb is 10 to 14 days of age.
6. In castrating, cut off the lower one third of the scrotum at one stroke. With the thumb and forefinger of the left hand, grasp the cord of the testicle nearest you, and close to the body, pinching it tightly between the walls of the scrotum.



Slip the thumb and forefinger of the right hand over the testicle and pull it out, breaking the cord at the point held by the left hand. Disinfect wound.

7. Cut off the tail with a docking pincers, a sharp knife, or burn off with a hot docking iron about 1 to 1¼ inches from the base of the tail. Roll the skin forward before making the cut so the loose skin will roll back and cover the exposed bone.



8. Perform the operation quickly.
9. Operate in the forenoon so the lambs may get the benefit of the afternoon sunshine.
10. Provide a clean place for the lambs after the operation or turn them on clean sod.

## Housing

If you have only a few lambs, they may be kept in any place that can be kept clean, warm, dry, and free from drafts. A drafty, damp place will surely bring disaster. During cold weather when the lambs must be kept indoors, a sunny place should be provided. Remember that sunlight is one of the best germ destroyers in existence. Remember, too, that all young animals must have some sunshine if they are to avoid rickets and some other diseases.

Wherever you house your lambs, be sure that there are no old boards or trash of any kind standing around that can fall upon them or in which they might get caught. Many lambs are accidentally killed in such places every year. In selecting a pasture lot for the lambs, be sure that there are no deep furrows, ditches, or holes. If lambs get on their backs in such places, they soon die.

## Summer Care of Lambs

The care that the lamb gets throughout the feeding period is just as essential to success as is good breeding and good feeding. Hoofs should be trimmed occasionally during the summer so the lamb will stand up well on its toes. This will prevent weak pasterns. A pair of hoof trimmers or a sharp pocket knife may be used. The walls of the hoof should be trimmed down so the wearing surface is level from toe to heel.

If the lambs have been in contact with older sheep at any time, they may gather some ticks. If seriously infested, they should be dipped. Ask your local leader or county agent for advise on methods of treating for control of ticks and where the best materials may be obtained. It is important that dipping be done on a cool bright day to avoid colds and pneumonia.

Shade should always be provided during the summer while the lambs are on pasture. If there are no trees or brush in the field, provide home-made shelter.

Fresh water and salt should always be available.

Fresh pasture should be provided if the pasture lot is too small for the number of lambs kept. Remember to feed your lambs grain. Not much grain will be needed if the pasture is good. The poorer the pasture, the more important it is to provide grain.

Regular feeding is always a necessity.

Every encouragement should be given the lambs to eat. Plenty of feed early in the life of the lamb gives it a good start so it is strong and thrifty before the hot days of summer.

## Feeding

Fresh hay should be kept before lambs at all times. Always put hay for lambs in a rack so it cannot be soiled. Remember that sheep demand feed that is clean. Bright, leafy alfalfa or clover hay is the best hay for lambs.

The grain fed must depend upon the kinds available. Good mixtures are:

1 part wheat bran or ground wheat—1 part ground or crushed oats.

or

2 parts wheat bran—1 part ground barley or corn

or

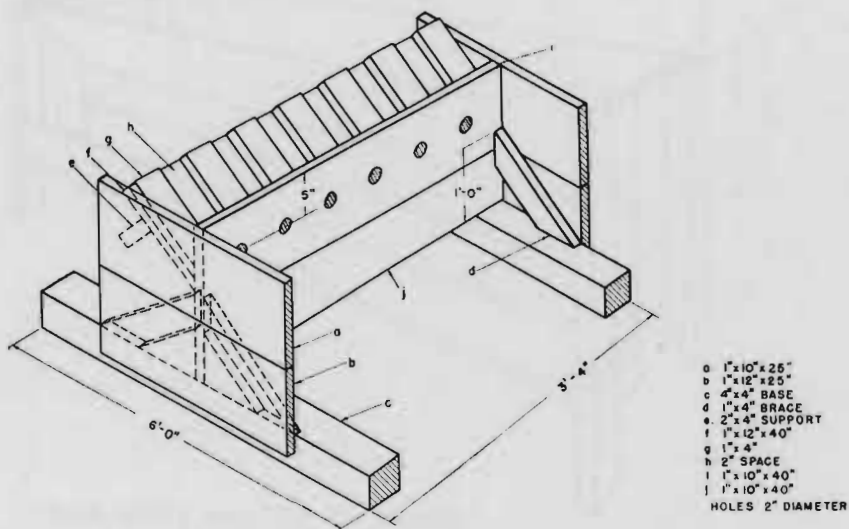
2 parts wheat bran—2 parts oats, 1 part soybean oil meal

or

2 parts oats—2 parts barley—1 part linseed oil meal, cottonseed meal, or soybean oil meal

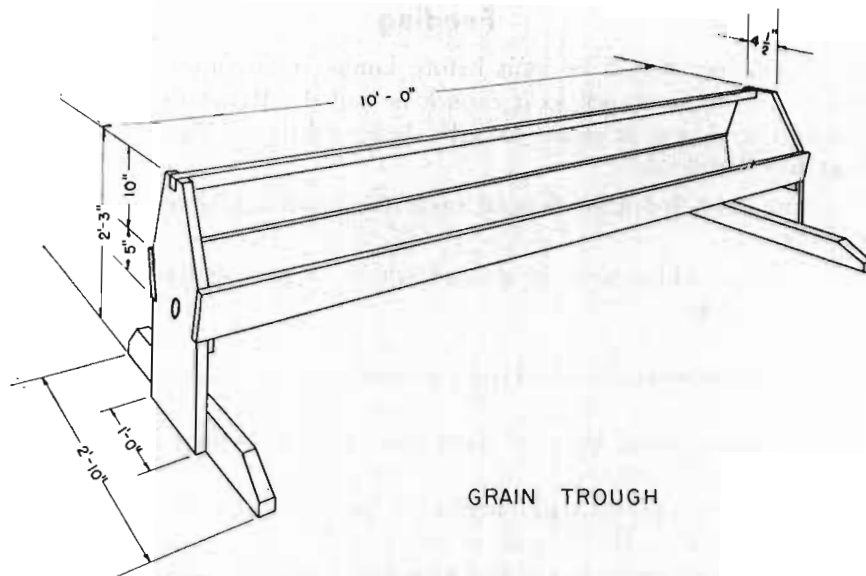
Lambs will begin to eat grain by the time they four or five weeks old. All grain should be ground or crushed until the lambs are 7 to

## Equipment



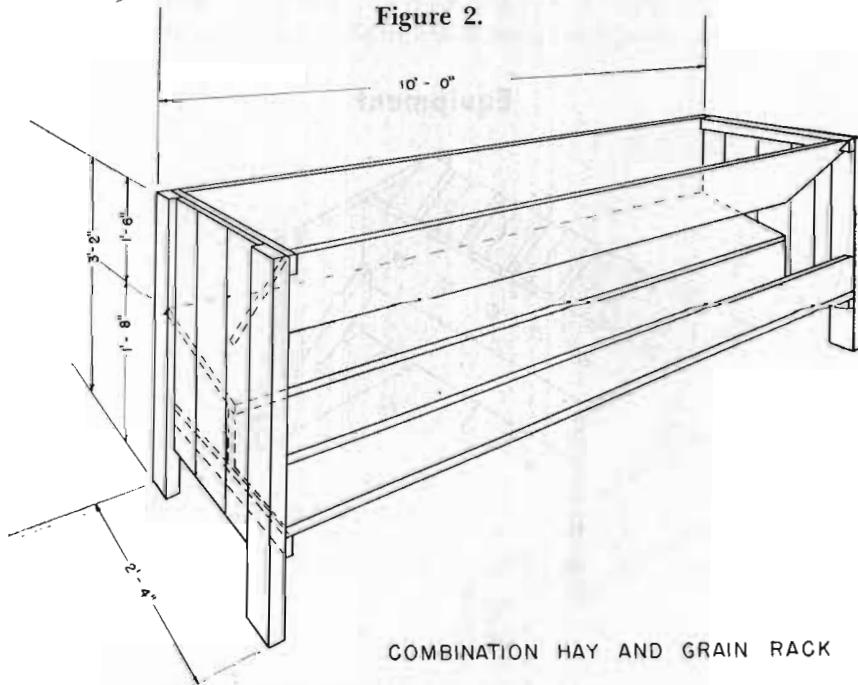
BOTTLE RACK FOR FEEDING MILK

Figure 1.



GRAIN TROUGH

Figure 2.



COMBINATION HAY AND GRAIN RACK

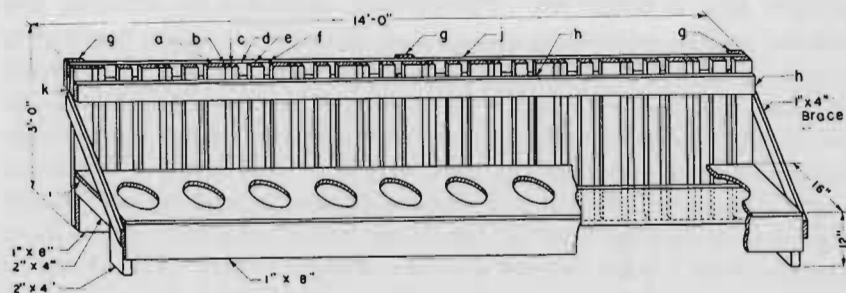
Figure 3. Combination hay-and-grain rack with solid front to keep feeding materials out of fleece.

8 weeks old; then, whole grain is better. Two-month-old lambs will eat from  $\frac{3}{8}$  to  $\frac{1}{2}$ -pounds of grain daily.

Always clean out the trough before putting in new feed. (A good type of grain trough is in Figure 2. A type of hay rack is shown in Figure 3. A Hansen lamb-feeder is shown in Figure 4.)

Be careful at all times to feed lambs individually. If you are feeding more than one lamb at one time, it will pay to build some sort of stanchions to hold them. About a 3 inch neck space for little lambs is required. Stanchions should be constructed so they are adjustable for different-sized lambs.

Lambs should have milk until three or four months old for best possible growth. Keep a record of each lamb's gain by weighing once a month and recording the weights in your record book.



- (a) 1" x 4" rigid support
  - (b and c) 1" x  $\frac{1}{2}$ " removable strips
  - (d) 3" space
  - (e) 3" movable strips fastened loosely by one bolt at top and one at bottom
  - (f) 2" space
  - (g) 1" x 4" x 6" guide blocks for sliding bar (i)
  - (h) 1" x 4" x 14" rigid piece to which strips a, b, and c are nailed
  - (i) 1" x 16" x 14" removable
  - (j) 1" x 3" x 14" sliding bar
  - (k) 1" x 3" x 4" blocks over which bar (j) slides
- The holes in (i) are 8" in diameter at top and tapered to fit feeding pans

#### HANSEN LAMB FEEDER

Figure 4. A Hansen lamb-feeder. It may be built to any length.

## Common Diseases and Parasites

*This information was compiled by Dr. J. F. Ryff, Director of Wyoming State Veterinary Laboratory, at the University of Wyoming, Laramie.*

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No amount of treatment begun at a late date can make up for the failure to apply common sense preventative measures to control disease and parasites. The production of a healthy lamb starts long before the lamb is dropped by properly taking care of the ewe. Unless proper facilities are available for lambing, the combination of bad weather and filthy conditions may prove to be an obstacle in production.

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Digestive disturbances may show up in the new born lamb, especially if it is bottle fed. Constipation, indicated by straining and distress, may be relieved by a small dose of castor oil, or, in very young lambs, by an enema of soapy water. Simple diarrhea will also respond to castor oil, but with bottle fed lambs, it is also advisable to decrease the amount of milk given the following day or two and to eliminate any possibility that the lamb may have had access to irritating foods. If the diarrhea is not checked by this procedure, one should regard it as having been of infectious nature originally or to have progressed to a point beyond a simple digestive upset. Use of one of the enteric sulfonamides, perhaps aided by 10 to 20 grains of bismuth subnitrate is now indicated.

Infections may occur through the navel, docking and castrating wounds, the mouth, and respiratory tract. Stiffness, diarrhea, pneumonia, or simply marked weakness may result. Frequently lambs are able to withstand such infections even when raised under unsanitary conditions until their resistance is further broken down by chilling from unfavorable weather. Early treatment with sulfa drugs is useful, but it must be remembered that reinfection may occur until the premises are cleaned up. Treating the navel with tincture of iodine may prevent entry of bacteria by this route, but frequently the same bacteria may have just as harmful an effect when picked up by mouth from a soiled ewe or contaminated ground.

Stiffness of a non-infectious nature in lambs may show up under certain conditions. Small doses of Wheat Germ Oil ( $\frac{1}{2}$  teaspoonful),

by supplying vitamin E, remedies this.

Parasites can be divided into two groups: those living on the outside of the body and those inside. As can be understood, internal parasites can inflict a great deal of damage and yet often remain unrecognized. Usually very young lambs are not infested, but as they become older, the same amount of worms that an old sheep can tolerate may be sufficient to keep them in poor condition. If a lamb is in good condition, it may be able to overcome the bad effects of a heavy infestation, whereas a lamb that is poor originally will become even worse.

With the stomach and intestinal worms, eggs are produced in the intestinal tract, are passed out with the manure, and under favorable conditions are picked up by other sheep to grow into adult worms. An exception to this procedure occurs with tapeworms, where the eggs are picked up by a secondary host which is necessary before the parasite can again grow into a tapeworm stage in sheep. Coccidiosis is another form of internal parasite which is microscopic in size. A heavy infestation with it may produce scouring as might occur from worms.

As many of these internal parasites are small and may be overlooked even when a sheep is opened up, it is well to secure assistance before attempting any treatment. By far the preferred course would be to keep sheep away from ground occupied by other sheep previously, so these different internal parasites would not have a chance to secure a foothold. As a treatment, phenothiazine suspension, one-half ounce for large lambs, is effective for stomach worms and many intestinal worms but has no effect on tapeworms or coccidia.

Of the external parasites, maggots may occasionally get into the wool during prolonged damp weather, into slow healing wounds, or where manure has matted the wool. Usually simple removal is sufficient if steps are taken to prevent a recurrence, as the regular screw worm fly does not ordinarily appear in Wyoming. In the case of wounds, a simple repellent, as Oil of Pine Tar, may be useful.

Where it is considered desirable to eliminate the so-called sheep tick, the animal may be dipped in a dilute rotenone suspension. Spraying with 0.25 percent DDT is also used and gets away from the labor involved in dipping.

**Hand Dusting:** (*Suggested by Extension Entomologist T. R. Robb*)

1 percent Rotenone Dust

or

5 percent DDT Dust

In cases where either a spray or dip is impractical, and where only a few sheep need to be treated, dust may be used and either rubbed or blown well into the wool. These treatments will hold an infestation in check, but several applications may be necessary.

Untreated animals, of course, should not be allowed to run with those which have been sprayed.

Other conditions that may show up in lambs are sore mouth and related infections. True sore mouth is characterized by scabs appearing along the lips and muzzle, although other parts of the body may become involved. If this disease is present in the area, its appearance can be prevented by vaccinating lambs at docking time. If this cannot be done and the disease shows up, the scabs should be removed and sulfathiazole ointment applied. Lip and leg ulceration resembles sore mouth, but no vaccine is available against it. The same general plan of treatment is indicated, although in sever forms of either, internal treatment with sulfa drugs may be useful. Foot-rot is a somewhat similar form of disease that affects the foot. The accepted treatment for this is to clean up the affected foot as much as possible and then soak it in a saturated copper sulphate solution.

When lambs are supplied a large amount of concentrates, a condition called overeating or enterotoxemia may result. This is entirely separate from the founder that may follow the ingestion of too much grain and is marked by nervous symptoms and very frequently sudden deaths. In a way, it is an infectious disease as the heavy intake of concentrated feed allows an overgrowth of bacteria normally in the intestinal tract. With this increase in number, sufficient toxin is produced to bring on the disease. The most practical procedure where interotoxemia appears is to decrease the amount of concentrated feed and to make sure no lamb is able to get more than its share.

Remedies are a poor substitute for prevention. Where they must be used, it is essential that the condition to be treated be properly recognized. Many very useful drugs have no value at all if used for some other condition than that for which they are recommended. This is especially true of the sulfa drugs. One group, the so-called enteric sulfas like sulfaguanidine and sulfathalidine, is of use only for bacterial infections of the intestinal tract. They are not as toxic as the other sulfa drugs as only a small amount gets into the blood stream. The other type is represented by drugs, such as sulfanilamide and sulfamerazine whose effectiveness depends upon keeping a constant amount in the blood. Such drugs are usually given by mouth at the



rate of one grain per pound of body weight daily, although divided doses may be necessary. Such treatment should be kept up for three or four days. Although the sulfa drugs have been very useful, they cannot in any sense be regarded as cure-alls or substitutes for sanitary precautions.

### **Sheep Club Demonstrations**

The demonstration is an essential part of every standard 4-H club yearly program. It teaches boys and girls to think clearly, gives them poise before the public, unifies their project experiences around practical problems of the farm and home, and gives them an opportunity to express themselves in terms of their own work in an interesting and instructive way.

Sheep club members should get the habit early of demonstrating by giving short, informal demonstrations of certain practices in connection with their club work. Then, when the time comes to select a team or individual from the club to demonstrate in public or in county contests, all members of the club should compete for the honor of representing the club.

The subject of demonstrations is discussed more in detail in the special circular, "Now We Demonstrate." A copy may be obtained from your county extension office or from the State 4-H Club Office in Laramie.

Club members often are unable to decide on what the subject of their demonstrations should be. Remember, that the best demonstration will be the one in which you simply and forcefully demonstrate one or more of the things you did and learned in carrying out your project this year. A few suggestions which may give you an idea for your demonstration are:

**Raising the Orphan Lamb.**

**Construction of Equipment for Feeding Orphan Lambs, such as a Grain trough, or a Feeder.**

**Fitting and Showing the Lamb.**

**Treating Sheep to Kill Ticks.**

Following is an outline of the first subject listed. This outline is given because it may be of some help in guiding those who are new in working up demonstrations:

## Raising the Orphan Lamb

**Equipment:** Lamb, milk, bottle, equipment, hot water for heating, grain and hay, feeding rack, grain rack, hay rack (actual size or small models), chart stand, chart.

**Number 1 team member talking:**

Give introduction of team members and club projects carried. Tell of importance of sheep in your locality and feed and pasture available on farms that can well be utilized by sheep. Explain that you have learned that it is important to exercise a great deal of care in raising lambs. This will show the practical importance and value of this demonstration on raising the orphan lamb.

**Number 2 team member assisting.**

He acknowledges introduction.

**Number 2 team member talking:**

Explain what bum or orphan lambs are. State that it takes too much labor and trouble for the average sheepman to raise bums, and, that they can be obtained by club members. Explain kind of lambs which are most desirable from well-bred sheep and of a type if there is opportunity for any selection in choice. List on a chart the desirable features of a good lamb. Tell how lambs are obtained or how you obtained your lamb.

My teammate \_\_\_\_\_ will show and explain how to handle and feed lambs when first obtained.

**Number 1 team member assisting.**

**Number 1 team member talking:**

Tell how to handle and feed lambs. Give (by chart) primary rules that must be followed.

Have milk and bottle and nipple. Heat milk to proper temperature. Show amount to start with. On chart have feeding rules and table for use as guide in feeding milk to lambs.

Have Hansen lamb-feeder or similar equipment that is used as an aid in feeding lambs.

**Number 2** will continue by telling when and how to feed grain.

**Number 1 team member talking:**

Give summary and conclusions. If you plan to sell the bum lambs you have raised and use the money for better bred sheep, bring out this fact.

Ask if there are any questions. If so, give answers politely. After questions, if any, thank audience for attention. Give references for further information.

**Number 2 team member assisting.**

Gets chart, milk, bottle, and other equipment for No. 1 and assists.

**Number 2 team member assisting.**

Cleans up and sees that everything is neat and in order.

## Notes

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