

Raising A Small Flock of Sheep in Ohio



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A small flock of sheep can be a rewarding and profitable experience. Sheep offer an opportunity to earn extra money by utilizing land and buildings that otherwise may provide little or no returns. Sheep fit very well into a supplemental farm enterprise program. It is easy to get into the sheep business, as operating and investment costs are relatively low. Labor requirements are also relatively low, compared to other livestock enterprises.

SHEEP, ARE THEY FOR ME?

Determine the reason you are considering raising sheep. Are other family members interested in sheep? Do you want an extra enterprise on the farm? Have you had previous experience with sheep? Have you recently bought or acquired a house in the country that has some acreage with it? Perhaps there are children who want to raise some animals as a project? A small flock of sheep may fit into the plans for you and your family.

DECIDING ON A EWE FLOCK

Observe other sheep flock owners in the community. Many people will be happy to share their experiences. Your County Extension Agent can provide valuable information about raising sheep. Develop a plan on what you expect to do with the sheep before you buy them. Your planned marketing program will help determine what kind of sheep you should buy for your breeding flock.

You can sell lambs as feeder lambs, market lambs for slaughter or use them for home consumption. Another market is as breeding stock to other sheep producers. Sheep produce two crops per year—lambs and wool. The value of the lambs is usually much higher than the wool; consequently, most people prefer sheep of the meat type breeding in preference to wool type sheep.

It is usually best to start with crossbred ewes. You need to gain some of the necessary management skills associated with lambing and feeding before venturing into purebred or registered seedstock production. Purebred and registered ewes cost more and require greater skill for managing the flock. Purebred or registered sheep do not guarantee quality, high performance or higher returns. Registration papers merely indicate known ancestry.

Cost of housing and equipment for sheep can and should be kept to a minimum. By starting with a small



A flock of crossbred ewes and their lambs.

flock of ewes, you may be able to provide care. If you decide to expand the size of your flock, you will have experience and animals you can save for replacement ewes.

Beware of Dogs

Predators, particularly dogs, are a serious problem for sheep raisers. Many dogs that attack sheep are strays that have been abandoned. Sheep which have been run by dogs, even if they are not killed or severely damaged, will be extremely nervous and often will not do well. Inquire about the dog situation in your area before you start in the sheep business. Some counties have bounty payments that are paid to sheep owners who suffer death losses due to dogs. Check with your county auditor for details.

Source of Breeding Stock

Ohio has many reliable breeders of most breeds of sheep. Within your county or immediate area you may be able to find several breeders who have ewes or ewe lambs for sale. Your County or Area Extension Agent will be able to provide assistance. Ask if there is a directory of sheep breeders who sell breeding stock. Local flock owners usually know where to get good ewes. They can tell you when sheep sales are held and the kind of sheep sold at most sales. Purchase your breeding stock from a reputable breeder, dealer or flock owner.

It may be possible to find a farm sale listed which includes a small flock of ewes complete with a ram. This could be less expensive than visiting several farms, buying a few here and others elsewhere. Buying ewes from several sources to start a small flock can be a source of health problems. Ewes from western ranges are sometimes available through livestock markets or dealers. In late summer or early fall the supply of western replacement ewes is greatest. This is usually the preferable time to buy breeding stock.

Selection of Breeding Stock

Soundness

Sound ewes should be of prime importance in your decision. This includes the udder, feet, legs and mouth. The ewe's udder is one of the first things to inspect. Physically handle each of the two sections or quarters to make sure there are no defects. The udder should have a teat on each side, be soft and pliable and free of lumps and scar tissue.

Sheep are basically forage consuming livestock, thus their feet and legs are important. Animals are expected to move freely and be unhampered by poor legs, weak pasterns or a lame condition. The weak pasterns may be of genetic or nutrition origin. The lameness may be due to overgrown hooves or foot rot. If it's foot rot be cautious since this condition may spread to other sheep in the flock.

Check the mouth of the sheep. An animal said to be "off" in its mouth cannot properly forage. Sheep have no upper incisor teeth, but a hard surface known as dental pad in their place. In the lower jaw you find eight incisor teeth or four pairs. When the mouth is closed the teeth and dental pad should meet evenly. You can check this condition by merely running your thumb or finger between the lips around the area or by merely opening the lips and looking.



A sound ewe bred to a good ram will produce growthy lambs

Age

Select a younger animal with as many years of productive life remaining as possible. Productive life varies by breed and also by individuals within a breed. It may approach 8 to 10 years; however, 5 to 6 years is more common.

Teeth are used in determining or approximating the age of the individual sheep. Each year one pair of the four pairs of temporary incisors are replaced by a large pair known as the permanent teeth. A yearling, for example, would have a permanent pair, the center two, plus three smaller pairs of temporary. A four-year-old would have four pairs of permanent. Ages beyond four years are more difficult to determine. With age the teeth begin to show wear, having wider spacing and eventually the loss of teeth. Animals fitting this description become known as "broken mouth" and should be avoided.

Condition

Ewes should be in a good, thrifty and alert condition. Avoid extremely thin or fat ewes. The thin ewe is probably the result of parasites. The fat ewe may be due to extra good care and feed or she may not have lambed for a year or longer.

Select sound ewes that are growthy and healthy. Look for ewes that produce good wool and growthy lambs. A good idea is to select for multiple births. Breed promotion literature serves as a source of information when looking at some of these points. Animals having the potential of combining good muscling or meat quality with a satisfactory wool coat are usually preferred. However if you are interested in wool, select ewes that exhibit quality wool fleeces.

Ram Selection

The ram influences every lamb born in the flock. Select a ram for structural soundness, growthiness and meatiness. Production tested rams are recommended. Ohio has a program that measures these traits in rams. The Ohio Ram Test Program offers for sale each year the better rams from several breeds that have been in the testing program. See your county agent for details of the program.

Breeding Season

Sheep are usually seasonal breeders. This varies by breed and by individuals within a breed. Generally speaking, with environment and nature taking its course, the first signs of breeding or estrus can be ex-

pected during late summer or early fall. If not bred, a ewe's estrus will occur every 17 to 21 days.

Some breeds and other individuals will also accept the ram during late winter and early spring. The breed, temperature, humidity and amount of daylight most often go together in determining the natural breeding season.

The normal gestation period is about 145 days. The ram should be kept separate from the flock until the breeding season or about 145 days before you want to expect the first lambs. Otherwise, the lambing season may extend throughout the entire year. The ram is usually left with the ewe flock for two heat periods or not more than 45 days.

To determine if a ram is working and to safeguard against using a sterile ram, a marking harness is a useful piece of equipment. Crayons are attached, with the color changed every 17 days. Those failing to settle will be remarked with a different color. Marking the ram on his brisket with livestock marking crayons will accomplish the same thing. By observing the flock and recording the marking dates, you can make preparation for each ewe's lambing date.

Shearing

A professional shearer should do your shearing. Check with local flock owners in your area to find out who does their shearing. Your county agent may know people who do sheep shearing.

Your facilities may influence the time when shearing should be done. Shear the ram immediately prior to the breeding season. Shearing the ewe flock ahead of lambing offers several advantages; however, care in handling of the pregnant ewe is of prime importance to her and the unborn fetuses.

Shearing ahead of lambing will yield a cleaner fleece and the flock owner will find this an aid in observing the ewes prior to lambing. A shorn ewe will seek shelter to lamb and it is easier for the lambs to nurse. Also, a shorn ewe is more sanitary for nursing lambs. Space requirements are reduced and the humidity is less in the shelter of a shorn flock.

If you decide not to shear ahead of lambing, "crotch out" the ewe by removing wool from the flank udder area, and around the dock. In all cases, it's a good practice to shear the flock prior to their returning to summer pasture. In tying a fleece, use only wool paper twine.

Wool growth for a year should yield a fleece weighing about 12 pounds or more for the wool breeds and about 7 pounds for the meat breeds. The importance of the wool crop as added income should not be overlooked when selecting your ewes.

Lambing Season

The ewe flock should be brought to an area adjacent to the shelter as the lambing season approaches. Provide an area large enough to allow ample exercise for the pregnant ewes. Access to the shelter during periods of inclement weather should be provided.

Up to this point very little labor, feed or supplement management has been required. Feeding the ewe, assisting with difficult deliveries, docking, castration, creep feeding and overall flock health are management practices that must be done on a timely basis in order to be a successful sheep raiser.

A method for identifying ewes and lambs should be developed. These records should be kept and used in

the selection of replacement stock. Such practices are an essential part of good management.

Marketing

You have several alternatives in the marketing of your two crops—lamb and wool. The lamb market wants well muscled, moderately finished lambs weighing 105 to 125 pounds. For the meat breeds under good management, a goal of 3 to 4 months after birth for reaching this weight is possible. For top performance, such lambs will need supplemental creep feeding in addition to the mother's milk. Some flock owners are able to wean and market at the same time. After "drying off,"

the ewe flock can be returned to pasture and, except for parasite control, requires very little additional care until the next breeding season.

You may be in an area where there is a demand for "Easter" lambs. A premium is paid for these lambs, which weigh 40 to 60 pounds. Also, 4-H and FFA members may be looking for lambs to take as projects. Local weekly livestock markets and lamb buyers serve as an outlet for lambs not kept for flock replacements or family needs.

The Mid-States Wool Growers purchase wool, and local handlers and shearers can give you more information on selling your wool. Hobbyists in many areas seek fleeces from small flock owners for spinning or other uses.

HOUSING AND EQUIPMENT FOR SHEEP

You can build most of the housing and equipment illustrated or described in this bulletin. Before you build equipment, compare the cost of the materials you will need with the cost of buying ready-made equipment. Even if the original cost of ready-made equipment is higher, it may be cheaper to use if it is more durable and has built-in conveniences.

Your county extension agent, agriculture, can give you additional information about USDA and other building plans and materials you will need. Consult local sheep raisers, too, before you buy or build shelters and equipment. They may be able to offer helpful suggestions.

Shelters

Conventional Shelters

A small flock of sheep can be housed in a barn with other stock or in separate housing such as the all-

purpose unit illustrated in Figure 1. Many existing barns are suitable for raising sheep, providing they are not damp and are free of drafts. Sheep should not be shut in, except during storms and when they are lambing during cold weather.

The complete unit of Figure 1 can house 30 to 36 ewes. It can be closed in during storms. The pen panels, feed racks, creep and trough can be arranged for lambing, shearing, finishing lambs and other operations. With electricity at the barn, you can equip the lambing pens with heat lamps to warm newborn lambs in cold weather.

Here are some points to keep in mind when you are planning a shelter:

- Allow eight square feet of floor space for each lamb, 12 square feet for a small ewe and lamb and 20 square feet for a large ewe and twin lambs.
- Build the shelter or barn on well-drained land. It should face southeast or east away from the wind.
- Locate windows and doors where they will let in plenty of light. Windows and doors should fit tight to prevent drafts.
- Crushed limestone, sand, gravel or compacted clay floors should slope toward the front of the building.
- Roofing should be sound and resistant to wind damage.
- Place troughs on eaves for rain runoff.
- Pole-type sheds are generally cheaper to build than those on concrete or masonry foundations. Poles and lumber that are in contact with the ground should be pressure-treated with a preservative that is not toxic to animals.

Feeding Equipment

Build and locate feeders where you can fill them easily. Keep them clean. Sheep may refuse to eat from a dirty feeder. Keep feed dry and free from insects.

Feed Racks

Combination hay and grain racks are best for small flocks. When weather permits, feed hay outdoors in portable racks. A rack suitable for outdoor use, as well as indoors, is shown in Figure 2.

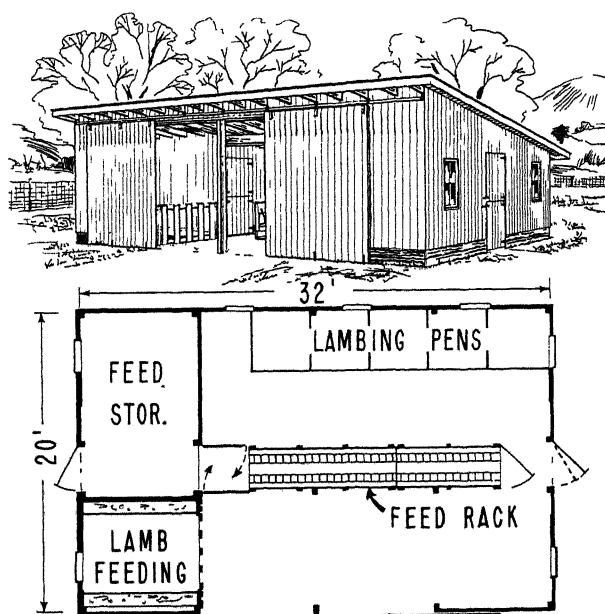


Fig. 1: A complete unit for a small flock of sheep (USDA Plan 5919)

Feed Troughs

Feed troughs are generally made of wood. Although troughs may be V-shaped, flat-bottom troughs are more stable and easier to keep clean.

For small farms, portable feed troughs are more practical than stationary ones. They can be used in the field, as well as near the barn.

In a combination hay and grain trough, provide 10 to 12 inches of trough space for each lamb and as much as 18 inches for each ewe weighing 140 pounds or more. Grain self-feeders should provide 3 to 4 inches per lamb.

Water Troughs

Allow one foot of trough space for every 10 sheep. One sheep will drink about two and one-half gallons of water per day.

Use a non-freezing float valve connected to a reservoir or water hydrant to control the water level in the trough, thus providing a constant supply of fresh water.

For good drainage, be sure that the ground slopes away from the tank. A paved surface that extends 8 to 10 feet around the tank prevents mudholes from forming.

Locate the tanks in protected places such as behind a windbreak or in a shed to reduce the danger of freezing.

A single tank in a fence line or in a corner can serve two or more lots.

Feedlots

Most sheep raisers who finish their lambs for market confine them in a shed or in a feedlot that has adequate shelter or barn space of eight square feet per lamb.

Locate lots in well-drained areas close to feed storage facilities. Allow 15 to 20 square feet per head.

A paved feedlot which prevents mudholes is best. If you do not want to pave an entire feedlot, pave only around the feeders and waterers.

Make sure that runoff from the feedlot does not pollute streams.

Self-feeders can save you time and labor in feeding lambs. You can buy a commercially made self-feeder or check with your County Extension Agent, Agriculture, on plans to build a suitable self-feeder. Self-feeders generally hold 6-10 days' supply of pelleted feed or grain. Do not self-feed pellets or grain to mature sheep.

Panels and Pens

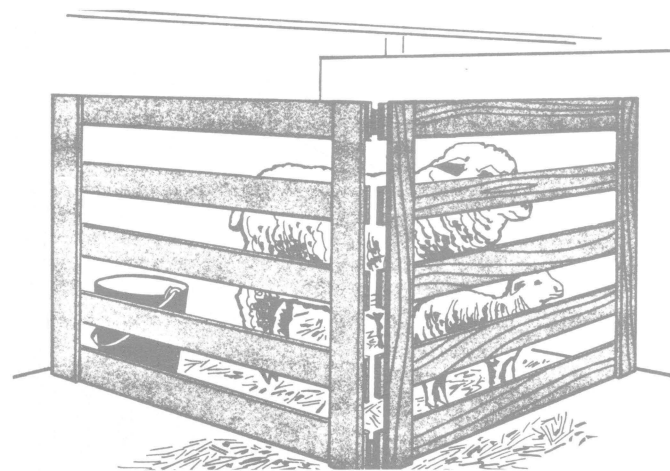
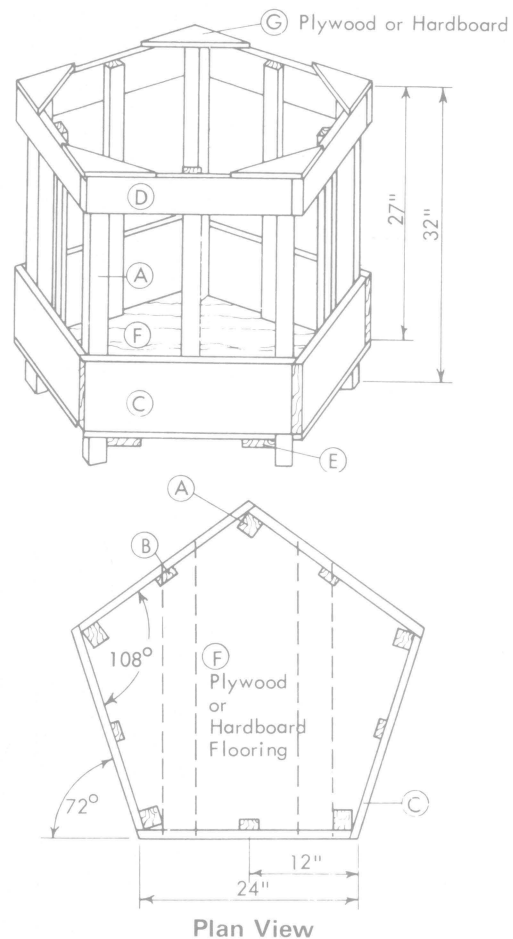
Use panels to control sheep at shearing time and to form temporary lambing pens for ewes and newborn lambs. Hinged panels are preferred.

Illustrations for building feeding and lambing panels are given in Figure 3.

Fences

Build outside fences five feet high. Use seven and one-half foot posts driven or set two and one-half feet in to the ground. Stretch one strand of barbed wire close to the ground. Run four-foot woven wire fencing above it.

Build cross fences at least 40 inches high. They need not be equipped with barbed wire.



If you use homemade gates, make sure they are strong. They should be as high as the fence.

Electric fences are showing some promise of being effective for protecting sheep against predators and dogs. Follow manufacturers recommendations on proper materials and construction of electric fences.

FORAGES FOR SHEEP LIVESTOCK ENTERPRISE

In developing a forage program for a small flock, consider the present resources and goals. How many acres of pasture and hay are presently available? How many animals can presently be carried on this acreage? Are there crop residues available that could provide a portion of the feed requirements? How many animals are desired?

As a general rule, it will take from one to five acres of pasture per animal unit (six head of sheep) depending on pasture productivity. About two tons of hay are needed for winter feeding per animal unit. Some land in its present state of productivity will adequately supply the forage for a small sheep flock.

If the land available will not produce sufficient feed for the livestock numbers desired, or if the desire is to expand the livestock numbers, you have several alternatives.

Clipping

The pasture area can be expanded and production potential increased with brush and weed control. In many areas brush and weeds have encroached into pasture land, and "bush-hogging" or clipping may be the first step in pasture improvement. This is also a good time to eradicate such vigorous weeds as Canada thistle, tall ironweed and multiflora rose. A combination of clipping and herbicide treatment may be needed to control such species.

Fertilizer

The next step is to improve soil fertility. Pastures are frequently low in pH and phosphorus and may need potash. Obtain a soil analysis to find the present fertility levels and apply nutrients as necessary. In many cases a thin unproductive pasture can be developed into a good bluegrass pasture with the application of fertilizer and the healing factor of time.

Surface Treatment of Pasture

% Bluegrass Cover	Years to 90-100% Cover
10	6-10
10-25	5- 6
25-50	3- 4
50-75	2

Rotational Graze

Rotational grazing of pastures is necessary for maintaining stands of the productive forage species and to allow for the control of grazing. Rotational grazing increases carrying capacity of pastures by reducing selective grazing and animal tramping.

Rotational grazing involves dividing the pasture into three to six areas. Graze each area no closer than two inches before rotating sheep to the next area. This permits a recovery period before the area is grazed again.

During the periods of heavy growth, some areas may be mechanically harvested and the forage stored or stockpiled for winter use or for supplemental feed during the hot part of the summer when pastures are usually less productive.



Sheep do better on pastures when rotational grazing is practiced.

Reseeding

Summer Pasture: grass, orchardgrass; legume, red clover, alfalfa or birdsfoot trefoil (Northern Ohio).

Winter Pasture: grass, tall fescue; legume, red clover or alfalfa.

In preparation for reseeding, apply corrective applications of limestone and fertilizer, based on soil analysis. The area can be plowed and a conventional seedbed prepared, the area surface tilled (trash mulch) or a no-tillage seeding can be the technique of soil preparation for the seeding. Consult the local County Extension Agent, Agriculture, for details for these seeding techniques.

Seedings should be made during April, early May or during August.

A two- to fourfold increase in forage yield can be expected by establishing the more productive cool season grasses and legumes.

Feed Source	Period	Ac. Per AU ¹	Forage Mixtures
Summer pasture	6-7 Mos.	1.0-2.0	grass-legume orchardgrass-ladino orchardgrass-red clover orchardgrass-alfalfa bluegrass-white clover bluegrass-birdsfoot trefoil
Winter pasture	5-6 Mos.	.8-1.5	tall rescue-red clover tall fescue-ladino clover
Winter feed 2 tons hay/AU	5-6 Mos.	.5-1.0	orchardgrass-alfalfa s. bromegrass-alfalfa timothy-red clover timothy-birdsfoot trefoil

1) an AU (animal unit) consists of 6 head mature sheep

Year Around System

Build the forage program to have a total year around feed supply. Some areas may be suited only for pasture because of terrain, slope, etc. Other fields may be best suited to hay production due to limited fencing, water supply, etc.

The hay and pasture should be integrated into one system.

Harvest excess pasture as hay and feed when needed. New seedlings are best harvested as hay. Crop residues can be utilized, when available. Versatility of the forage program is enhanced and labor is reduced.

ewe FLOCK NUTRITION

Ewes bred in the fall can be placed on a maintenance diet until the last month of gestation. However, they should be on good pasture and gaining weight during the breeding season. A maintenance ration may consist of fall pasture or meadow aftermath, or three to four pounds of good quality hay. Hay for sheep should be harvested with a hay conditioner in order to increase consumption. Ewes may remain on pasture until frost or snow reduces its productivity. After the grazing season, ewes may be fed three to four pounds of hay daily per head or half this amount of hay when one pound of ground ear corn is fed.

A general rule is that ewes should gain 15 to 25 pounds during gestation.

Six weeks before lambing, ewes should receive one-half to one pound per head daily of a grain mixture. If ewes are in thin condition, more than one pound daily may be advisable. The amount of grain fed depends on the roughage available and the condition of the animal. Commercially prepared feeds are convenient to use and often times comparable in cost to mixing your own grain ration.

Suggested rations for a 150 pound ewe lactating 8 to 10 weeks (pounds per head per day):

1. 1.5 pounds shelled corn
4 pounds alfalfa or 4.5 pounds mixed hay
2. 2.0 pounds ground ear corn
2.0 pounds alfalfa or 2.5 pounds mixed hay

The amounts given are average amounts for the 5 to 6 week period prior to lambing. A lesser amount would be fed early in the period and a greater amount fed the last of the period.

At lambing time, the grain allowance may be reduced, but dry roughages should be fed free choice. Five to seven days should elapse after lambing before ewes are placed on full feed. Following lambing, increase feed to meet the needs of the lactating ewe.

Suggested rations for a 150 pound lactating 8 to 10 weeks (pounds per head per day):

1. 1 pound shelled corn
5-6 pounds alfalfa or good mixed hay (Add .2 pound of protein supplement if grass hay)
2. 2-3 pounds ground ear corn
3 pounds alfalfa or good mixed hay (Add .2 pound of protein supplement if grass hay)
.3 pounds protein supplement
3. 1 pound shelled corn
11 pounds corn silage
0.7 pound protein supplement

You may need to increase or decrease the amount fed, depending upon the condition of the ewes. Some weight and condition loss of the lactating ewe is to be expected.

Ewes with twin lambs should be separated from ewes with single lambs and receive 25 to 35 percent more feed.

After ewes have lactated 8 to 10 weeks, reduce feed, wean the lambs and as soon as the ewes are dry turn them out on spring pasture. Normally pasture will be adequate until breeding season.

Ewes and lambs should always have access to clean, fresh water and a mineral mixture such as equal parts dicalcium phosphate and a trace mineral salt containing selenium.

In general, it will take about 600 pounds of hay and about 75 pounds of grain or commercial feed to winter one ewe, and one acre of good pasture will provide grazing for three to four ewes.

Creep Feeding

Lambs should be taught to eat feed as soon as possible by providing them with a grain mixture when they are three weeks old. Provide a creep area for lambs that doesn't permit access by the ewes. Several commercial creep rations are available for lambs. Creep rations should contain an 18 percent or higher protein level until lambs are weaned.

Feed rams the same kind of feeds as ewes but slightly larger quantities. They need a generous allowance of relatively high quality feed just before and during the breeding season. Rams should not be over conditioned at any time.

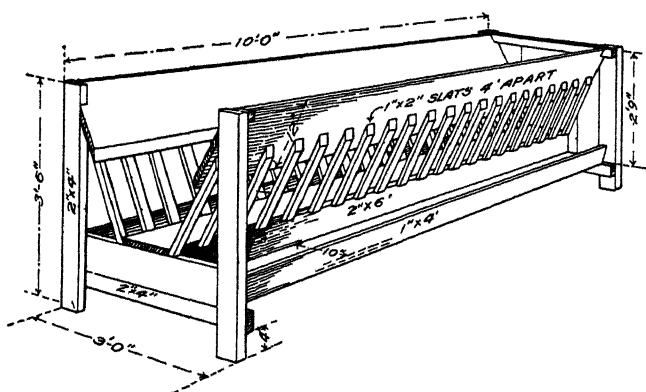


Fig. 4: combination grain and hay rack.

FLOCK HEALTH FOR THE SMALL LIVESTOCK ENTERPRISE SHEEP PRODUCER

A successful small sheep operation is dependent on favorable market conditions and maximum protection. Health problems influence production and performance. Disease is often the limiting factor in successful lamb production. Parasites, if not controlled, are a serious problem. When considering a flock health program, emphasis should be placed on prevention.

The key ingredient in a successful health program is a close working relationship between the producer and veterinarian. A planned disease and parasite prevention program tailor-made to your farm situation is best. Such factors as management ability, feed supply, diseases prevalent in the area and disease patterns that change from year to year need to be considered. An early competent, professional diagnosis program is as important in a small flock as a large one. The following are guidelines for a health program for small sheep producers:

A. Purchase of breeding stock:

1. Buy from a reputable breeder, producer or firm.
2. Refuse to accept sheep showing lameness or evidence of foot rot.
3. Isolate all newly purchased rams or ewes for 30 days, carefully trim and check all feet before adding to the flock.

B. Breeding and reproduction:

1. Flush ewes with legume hay or grain two weeks prior to breeding. Do not allow ewes to graze legume pastures during breeding season.
2. Use a brisket marker on rams, record breeding activity.
3. Tag and crotch ewes prior to lambing.
4. Have frozen colostrum available at lambing time. Force Feed weak lambs 50 cc of colostrum using a stomach tube.
5. Iodine navel at birth with 2 percent tincture of iodine.
6. Give each newborn lamb $\frac{1}{2}$ to 1 cc of Bo-Se.
7. Use selenium fortified salt as sole source of salt for breeding flock and lambs.

C. Infectious diseases:

1. Vaccinate ewes twice for vibriosis during gestation, once per year in succeeding years.
2. Vaccinate ewes twice for types C and D Enterotoxemia in late pregnancy, once per year prior to lambing in succeeding years.
3. Vaccinate lambs twice, two weeks apart, for enterotoxemia, starting about 30 days of age.
4. Observe lambs for signs of coccidiosis (scouring, gaunt appearance, poor gains).
5. Pre-treat ewe flock with sulfa in the drinking water prior to lambing.

Treatment is as follows:

Mix one (1) gallon of a 12.5 percent sulfamethazine solution in 120 gallons of drinking water. Give the

ewes this mixture as the only source of drinking water, starting about 14 days before lambing begins. Treat according to the following schedule.

on medicated water	5 days
on unmedicated water	2 days
on medicated water	2 days
on unmedicated water	2 days
on medicated water	2 days

After 30 days, ewes that have not lambed should be retreated according to the same schedule. This treatment may also be used in the lamb's drinking water at weaning to help prevent pneumonia.

6. Observe for signs of acute scours in lambs. Accurate diagnosis is critical.
7. Call your veterinarian immediately if abortion occurs.

D. Parasite control:

1. Under most farm conditions, drench the ewe flock according to the following schedule:
 - a. 1-2 weeks prior to breeding.
 - b. Prior to lambing.
 - c. Prior to turning ewes on pasture.
 - d. At least once during the pasture season. Lambs turned on pasture may have to be drenched as often as once a month.
 2. Rotate pastures frequently.
 3. Dip sheep once per year.
- E. Dock all lambs and castrate male lambs before they are 14 days of age.



Sheep on good, clean pastures have less health problems.

INVESTMENT AND PRODUCTION COSTS

A major consideration with any new livestock enterprise is the cost to get established. The costs associated with sheep raising are less than most livestock enterprises. Investment will vary, depending on facilities

and equipment. The information in Table I can be used as a guide to determine the investment costs associated with a small ewe flock

Table 1: Cash Cost to Establish a 30 Ewe Flock in Ohio

Animals	Ewe	Suggested Cost Flock	Your Estimate
30 ewes @ \$90 ¹	\$ 90 00	\$2,700 00	_____
1 ram	10 00	300 00	_____
Sub Total	\$100 00	\$3,000 00	_____
Equipment²			
3 combination 5-sided hay and grain bunk @ \$25	\$ 2 50	\$ 75 00	_____
Feed troughs	1.17	35 00	_____
4 hinged panels for sorting and lambing @ \$10	1.34	40 00	_____
buckets and miscellaneous	.83	25.00	_____
Sub Total	\$ 5.84	\$ 175 00	_____
Shelter and Fence³			
20 x 30 pole building 20 sq. ft./ewe = 600 sq ft. @ \$3 00	\$ 60.00	\$1,800.00	_____
feed lot for lambs — 30 x 60 180 ft. of fence ⁴	13.33	400.00	_____
pasture fence — 15 acres wire 200 rods @ \$8.50	56.67	1,700 00	_____
OR electric 200 rods @ \$1 25 ⁵	8.33	250.00	_____
Sub Total	\$130.00 or 81.66	\$3,900.00 2,450.00	_____
 Total Cash Investment Cost	 \$235.84 or \$187.50	 \$7,075.00 or \$5,625.00	_____

Notes

1. Ewes — purchased as yearlings bred or ready to breed
2. Bunk, troughs, panels, etc., can be made by producer and reduce the cash cost slightly.
3. Shelter — existing farm buildings may be available at no additional producer investment cost. Water assumed available for sheep in pasture and at buildings.
4. The lambs can be finished in the same facilities used for wintering ewes. Ewes to be on pasture as growth permits.
5. Electric fence is being successfully used by some producers for sheep at substantial cost reduction, compared to woven wire fencing. Farmers having satisfactory fence for sheep pasture would not incur this investment cost.

**Table 2: Annual Cash Operating Cost for a 30 Ewe Flock
(1.35 lambs per ewe)**

	Ewe	Suggested Flock	Ewe	Your Estimate Flock
Feed ¹				
Corn (6.5 bu. @ \$2.20)	\$14.95	\$448.50	_____	_____
Supplement (30 lbs @ \$.12)	3.60	108.00	_____	_____
Hay (harvest, fertilizer & lime)	5.45	163.50	_____	_____
Salt and minerals	1.00	30.00	_____	_____
Sub Total	<u>\$25.00</u>	<u>\$750.00</u>	_____	_____
Veterinary and medications	\$ 4.00	\$120.00	_____	_____
Marketing (40 head)	1.34	40.00	_____	_____
Shearing (31 head)	1.03	31.00	_____	_____
Supplies	1.00	30.00	_____	_____
Fence Maintenance	1.30	39.00	_____	_____
Sub Total	<u>\$ 8.67</u>	<u>\$260.00</u>	_____	_____
Ewe replacement (5 year life, cull 6 head @ \$90 cost less \$30 salvage) ²	\$12.00	\$360.00	_____	_____
Loss by death of ewes, 3%	2.70	81.00	_____	_____
Ram replacement (3 year life, \$300 cost less \$60 salvage)	2.67	80.00	_____	_____
Sub Total	<u>\$17.37</u>	<u>\$521.00</u>	_____	_____
Total Cash Cost ³	<u>\$51.04</u>	<u>\$1,531.00</u>	_____	_____

Notes:

1. All feeds except pasture are costed at prevalent market cost. Home raised feed may be available at reduced costs.
2. The flock will require breeding animal replacement as animals are culled. The effective cost of replacement is the price paid less the salvage received for the animal culled and the value of losses by death.
3. Repairs, replacement and interest on the investment monies in buildings, equipment and fence have not been included.

To make money with sheep you must raise more than one lamb per ewe. Since most ewes only produce one lamb crop a year, it is desirable to have your ewes raise twins. A 150 percent or better lamb crop raised to weaning is a desirable goal.

In raising sheep, you have variable and fixed costs. Feed costs account for the largest part of variable costs and are the major expense in a sheep enterprise. Supplies and purchased services represent a smaller portion of the out of pocket costs in caring for a ewe flock.

Table II indicates the cash operating costs of keeping a small flock of sheep. These budgeted cost figures serve as a guide in planning your annual cash expenses.

Fixed costs such as land charges, buildings, equipment maintenance and your family labor are not out of pocket costs but may account for 40 percent or more of the total costs in raising sheep. For more details, consult the "Ohio Livestock Enterprise Budgets," Bulletin MM-390, which is prepared each year by the Farm Management Extension Staff. A copy is available from your local County Extension Office.

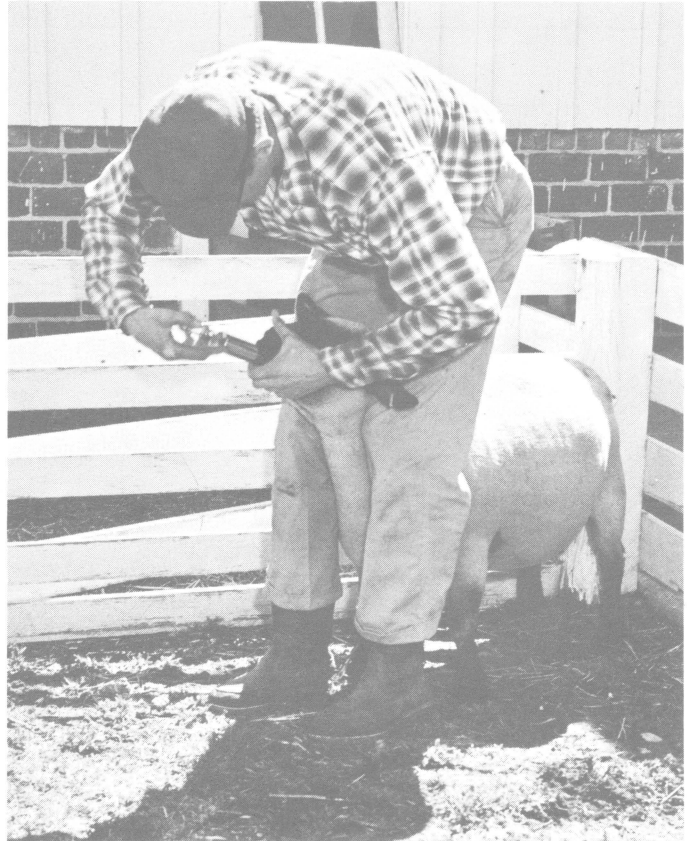
REFERENCES

1. "Sheep Raising in Ohio," Ohio Cooperative Extension Service, Bulletin 68.
2. "The Sheepman's Production Handbook," Sheep Industry Development Program, Inc., Denver, Colorado, 1971.
3. "Sheep Housing and Equipment Handbook," Midwest Plan Service.
4. "Housing and Equipment for Sheep," USDA, F.B. 2242.
5. "Raising a Small Flock of Sheep," USDA, F.B. 2222.
6. "Ohio Livestock Enterprise Budgets," MM-390.

ESSENTIAL MANAGEMENT PRACTICES



Foot trimming is a regular practice that should be done routinely to prevent lameness and help control footrot.



Drenching sheep for control of internal parasites must be done on a timely, scheduled basis.



All lambs should be docked prior to two weeks of age.



Ram lambs not kept for breeding stock should be castrated before they are two weeks old.