

## The Oklahoma Cooperative Extension Service Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.



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**Before getting into the sheep business**-ask yourself these questions:

1. Do I like sheep?
2. Will sheep fit into my current operation?
3. What size of sheep operation do I want?
4. Do I have adequate facilities to handle the number I want?
5. Will I have an adequate feed supply?
6. Do I want to lamb in the spring or fall?
7. What breeds should I select to achieve my goals?
8. When and where can I market my lambs?
9. Could I have a predator problem?

### Why Raise Sheep?

There are several reasons why you might want to consider raising sheep in Oklahoma. There are very few states in the U.S. that have year-round forage production like Oklahoma. Sheep are more efficient than beef cattle in the conversion of forage to retail product. The initial investment required to begin a sheep enterprise is relatively low. Expensive sheds and barns are not necessary; often buildings you already have will provide the dry, clean shelter needed by sheep. Sheep production is not limited only to meat production, because wool also provides a portion of the income. Fall lambing in Oklahoma has provided marketing of lambs during the peak of spring lamb prices. These factors have made the sheep operation a very profitable enterprise over the last several years.

Anyone considering getting into the sheep business should consider several things before actually purchasing any sheep. One of the first things to consider is the initial size of the flock. Do you begin with a commercial size flock of 200 to 300 ewes or a smaller flock of 20 to 50 ewes. Of course, the feed supply available will be a major contributing factor in this decision.

Sheep are not difficult animals to raise; however, they do require a higher level of management than beef cattle. Therefore, if you have never raised sheep before, the first suggestion would be to begin with 20 to 50 ewes and then increase numbers in future years, if the sheep business is for you.

### Pasture

Another factor to consider is the kind of pasture available. There are certain kinds of pasture that sheep like, such as sod type grasses that are fairly fine stemmed and high quality. They do not favor coarse grasses such as bluestems or love

## Starting a Sheep Enterprise

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grass. Well fertilized and managed bermuda grass can be utilized very efficiently with sheep. Such pastures are excellent only during May through July. In August and September, adequate dry matter is available; however, the protein level in the bermuda grass is low and additional protein should be supplemented. In fact, five to ten ewes per acre can usually be maintained during this period under central and eastern Oklahoma conditions. Buffalo and grama grasses are excellent pastures for sheep, but have a lower carrying capacity than bermuda grass.

Small grain pastures, such as wheat, rye, and rye grass make excellent fall and winter pastures for lactating ewes. Many producers working with smaller acreages have begun to over seed their bermuda pastures in the fall with Marshall rye grass or wheat to utilize those acreages with year-round forage. These practices require more intensive management practices, but return good dividends if done correctly.

Another way to have year-round forage is with the implementation of cool season perennials to your pastures. The USDA-ARS, Grazinglands Research Laboratory at El Reno has been performing studies on these types of pastures. These cool season grasses begin their fall growth in September and have had crude protein levels ranging from 20 to 25 percent in October. These grasses continue their growth through June and some species appear to maintaining a high crude protein level the majority of the growing season. Three of the nine grasses studied are proving the most beneficial for Oklahoma producers. These grasses include 'Paiute' orchard grass, Lincoln Smooth Brome grass, and 'Luna' pubescent wheatgrass.

Another possibility for cattle producers is the use of co-specie grazing practices. Cattle are very finicky and do not eat many kinds of weeds. Sheep, on the other hand, like to browse and very often will eat many different kinds of weeds that cattle will not eat. Sheep eat rag weeds very well and can be grazed with cattle. Research has shown that producers can run one to two ewes per cow with no additional feed costs and no detrimental effects on native pastures. In fact, many pastures have been improved with co-specie grazing.

### Building and Fences

Another factor to consider before entering the sheep business is the availability of buildings, corrals, and fences to adequately protect and control the sheep. Buildings do not need to be elaborate, but need to provide adequate space

to keep the sheep dry and comfortable. Space requirements vary depending on the breed and size of the ewes. A good rule of thumb is 10 to 12 square feet of shelter space per ewe, 12 to 16 square feet per ewe and lamb pair, and 6 to 8 square feet per feeder lamb.

Adequate fencing is needed to keep the various groups of sheep in their specific pastures. Barbed wire fences are usually adequate for ewes; however, lambs have a tendency to move through barbed wire quite easily. Hog wire fencing is probably the best permanent wire fencing (excluding electric fencing) to keep all ages and sizes of sheep in place. Electric fencing is excellent to keep sheep in and predators out if constructed correctly.

## Protection from Predators

Predation is one of the most serious problems confronting the sheep producer. It is very important to protect sheep from the two predominant predators, dogs, and coyotes. If you are in an area where many dogs are present, either wild dogs or pets, it is important to have adequate fencing to protect you sheep. Once a dog has learned to kill sheep, they must be destroyed or somehow kept away from the sheep at all times.

Coyotes are very different from the dog. Coyotes will normally kill only when they are hungry, and usually only one lamb or ewe will be killed. The dog may chase, hurt, and kill sheep for the fun of it. A dog attack may leave one or twenty sheep hurt or dead.

There are several ways to reduce or eliminate the predator problem. The first is the use of guard dogs or burros. The guard dogs have been the most well received in protecting sheep from predators. The burros seem to work well for the first two to three years and then become less effective. Guard dogs have been bred to protect sheep; those breeds include: Great Pyrenees, Komondor, Akbash, Anatolians, and Maremmas. The USDA Sheep Experiment Station at Dubois, ID, conducted a guard dog survey of sheep producers in the United States and Canada. That survey revealed that over 90 percent of the sheep producers surveyed felt that the guard dogs were effective in reducing predation.

Another method of reducing predator losses is with the use of electric fencing. Experience has shown that a seven or eight wire fence that is approximately 48 inches high is ideal for sheep and cattle. This fence will not only keep sheep in, but will also work well for keeping predators out. Spacing will depend on the number of wires used. A good fence design for a seven wire fence would begin with the bottom wire charged six inches above the ground. The next two wires would be spaced at 5-inch intervals and consist of a ground wire, followed by a charged wire. The next wire would be a ground wire spaced 6 inches up, followed by a charged wire and a ground wire at 8-inch intervals. The top wire would then be 10 inches up and would be a charged wire. This fence would be 48 inches high and should do a good job of livestock and predator control (see OSU Extension Facts F-3855).

## Seasonality of Breeds

There are several decisions you must make in selecting a breed or breed crosses to use in your sheep operation. Making those selections will depend upon several factors. Breed selection will depend upon when you want to lamb

the ewes—fall, winter, or spring. This will depend upon the type of operation and pasture availability. The ewe requires almost twice as much feed for the first two and one-half months after lambing as she does during most of the rest of the year. Lactation causes a drain on the ewe's reserves; she not only needs more feed, but she needs better quality feed. Those with winter pastures, such as small grain pastures, will want to consider fall lambing to take advantage of good fall and winter pastures for lactation. If winter pastures are not available, a winter lambing program may be advantageous.

If one plans to fall lamb, there are only a few breeds that will lamb during this season of the year. Those breeds include the Dorset, Rambouillet, and Polypay. The only breed available in large numbers is the Rambouillet breed, and these are readily available in west Texas. The Rambouillet breed is noted for fine-wool production and will breed out-of-season fairly well. The Dorset breed is known for being an excellent maternal breed that will readily breed out-of-season. The Dorset-Rambouillet cross ewe has been the mainstay of the commercial fall lambing programs in Oklahoma. This cross is noted for breeding out-of-season better than either straightbred and will produce about 20 more lambs per 100 ewes than the Rambouillet breed in the fall.

If one is planning a spring lambing program, any breed will work and all will produce more lambs per ewe in January, February, and March than in the off-season. Therefore, the selection of a breed strictly based upon lambing season is not important. Even the breeds noted for out-of-season lambing will produce a 10 to 20 percent higher lamb crop in the spring than in the fall. Breed selection in a spring lambing program must consider other important areas, such as wool quality, lambing percentage, growth rate, ewe adaptability, forage utilization, milking ability, mothering ability, etc. Therefore, it is easy to see that selecting a breed for a spring lambing program will be a much more difficult decision.

## Selecting Breeding Stock

Once you have decided what lambing time will best utilize your pasture situation, then you should begin to select breeding stock. This decision will be based upon the number of ewes that will be used in your sheep enterprise. If you are beginning with only a few ewes (20-50 ewes), availability will not be a major concern. However, if you are looking to begin the sheep business with a few hundred ewes, availability may be of concern.

Availability of ewes in larger numbers will normally be limited to Rambouillet ewes, which are readily available in larger numbers in west Texas. There are also many kinds of crossbred ewes involving crosses of blackfaces (Suffolk or Hampshire) or whitefaces (Columbia) with Rambouillets in the Rocky Mountain region. These crossbred ewes will breed for successful January and February lambing if that is the desired goal, but will not work well for fall-lambing. The Rambouillet ewes will work in the fall-lambing program, and as a base for the production of a Rambouillet-Dorset cross ewe.

In buying ewes to start a flock, there are several choices relative to age of ewes. One can buy yearling ewes if they are available, but these can be expensive. The advantage of yearling ewes is that they will be productive for five to eight years. It may also be possible to buy solid mouth (full set

of teeth), medium aged ewes (four to six years old) that still have several good years of production left. Such ewes are often suspect, because one wonders why someone is selling them. If the buyer can be sure there is nothing wrong with these ewes, this might be a good way to start.

One of the cheaper ways for people in Oklahoma to start in the commercial sheep business is with the purchase of older (four to seven years old) solid mouth Rambouillet ewes out of southwest Texas (San Angelo area). These ewes are basically used up under the extensive range conditions of west Texas, but can be quite productive for two or three more years on the better forages available in Oklahoma. It should be understood that: 1) these require more intensive management than the younger ewes, 2) their productivity may not be as good as the younger ewes, 3) 10 to 25 percent of these ewes will be problems (i.e. open, bad udders, poor mothers, etc.). However, their cost may be less than half that of the younger ewes. Using these ewes, bred to the right kind of rams to produce good crossbred ewe lambs, is a good way to get started in the sheep business with a minimal investment.

## Internal Parasites

Internal parasites can be a very serious problem to sheep producers, if they do not realize the danger and take management steps to keep the threat at a minimum. Parasites are maintained in the sheep and on the ground. Mature sheep have parasites in their digestive systems and pass eggs onto the pasture. If the weather and moisture conditions are right, the eggs hatch and the larvae crawl up onto the plants. Sheep that ingest these plants get these larvae into their systems. It is in this manner that lambs pick up parasites from the adult sheep in the flock.

Lambs are highly susceptible to sickness and even death from too many parasites. Consequently, it is good management to try to minimize or totally prevent the lambs from getting parasites before they are three or four months of age. Ideal conditions for spreading parasites from adult sheep to lambs exist when lambs are running with their mothers on permanent pasture, such as bermuda grass that is actively growing. In fact, the problem is very serious for lambs born in March and early April. A good management scheme, to prevent the lambs from becoming heavily parasitized, is to not let them out on permanent pastures with their mothers.

Early spring and late summer conditions are the worst for parasite infestations. At other times of the year, such as during the hot dry weather in the summer, the pasture conditions are not as conducive for spreading parasites from adult sheep to lambs. In the winter there are fewer problems because the parasites do not undergo the life cycle changes from egg to larvae nearly as rapidly as under the warm, moist spring conditions.

Another management tool is the use of temporary pastures as much as possible. There is not much danger of lambs becoming parasite infested if they are on wheat pasture where the land has been plowed. Also, rotational grazing of summer

pastures can help reduce some of the parasite problems associated with permanent pastures. A well-planned parasite control program, involving timely drenching of ewes along with pasture management, can keep the problem under control (see OSU Extension Facts F-3858).

## Marketing

Another factor to consider when entering the sheep business is the availability of markets. Because sheep numbers in Oklahoma are fairly low, there are relatively few markets available to producers. The fewer the markets, the less the competition for lambs.

With 20 to 50 ewes, it might be possible to distribute the market lambs locally through direct marketing. This marketing strategy has worked very well for producers in other areas of the United States. Find a slaughter plant in the area that will work with you and sell whole or half lambs to people in the neighborhood who like lamb. Because lamb is not readily available in many communities, many people buy a lamb in this manner in order to have lamb available for food consumption.

Those considering a two or three hundred ewe flock usually cannot distribute their lambs in this manner and will have to find a market where they can sell 50 to 100 lambs at one time. Oklahoma has developed an effective computer marketing program which allows producers to pool their lambs together and then market these lambs in truckload lots. This allows producers to receive a good market price for their lambs. More information on telemarketing and computer marketing can be obtained from your extension sheep specialist.

## Summary

The factors to consider before going into the sheep business include the amount and kind of feed available, the availability of fences and buildings to protect and manage the flock, and predator control. One should also consider lambing the sheep at a time that is coordinated with the best feed supply for the lactating ewes.

It is important to get the kind of sheep that will work best under existing conditions. The owner who can raise his own replacements, or has a constant and reliable source of replacements, will increase the chance of having highly productive sheep.

Managing pastures and drenching to control parasites is very important, as well as working with other sheep producers to improve marketing alternatives.

Anyone who can use all of these tools can use sheep as a profitable enterprise. Sheep enterprises reward the producer who uses intelligence, experience, and good management skills. If one is beginning a sheep enterprise to make money, that individual should learn as much as possible about the business ahead of the time, so that correct timely management decisions can be made.