

LARGE EWE FLOCK OPERATION IN MICHIGAN

a dozen guidelines

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INTEREST IN LARGE COMMERCIAL EWE FLOCK operations in Michigan points up the need for a few basic guide lines if these operations are to be successful.

Management practices that are successful with flocks of 20 to 80 ewes are not always successful when applied to flocks of 100 or more ewes. Management problems increase as the size of the flock increases. Generally, flocks of 60 to 80 ewes do not require much change in management over a 20- to 40-ewe flock. When the size of the flock is increased to 100 or more ewes, certain guide lines must be followed to be successful.

1. Type of ewes

Young Western type ewes will be the best investment in the long run for the large flock. These may be either of the black face or white face type. (See M.S.U. Extension Bulletin 332—Western Ewes For Michigan Farm Flocks).

It is highly desirable to purchase these Western ewes from one ranch or band. They should be of the same age—at least no more than two years difference in their ages. Carloads or semi-loads are about 200 to 250 head. It is much better to have these arrive in Michigan in late August or early September so that

they can recover from shipping and have a chance to gain weight before breeding.

Most farmers planning to buy Western ewes should place their order with a livestock dealer or commission firm that understands the sheep business and in whom they have confidence.

California black face ewe lambs born in October or November are frequently available for shipment to Michigan in late April or early May. These lambs make excellent replacement ewes if handled properly. These are usually out of Corriedale or Columbia ewes and sired by Suffolk or Hampshire rams. Since they are approximately 6 months older than most native ewe lambs and have a full summer for growth after arrival in Michigan, they can be expected to produce a higher percent lamb crop with fewer problems than native ewe lambs. The California ewe lambs should be sheared as soon as they are acclimated to Michigan conditions.

These ewe lambs cost less per head than similar yearling ewes. The purchase of these ewe lambs would be most advantageous to farmers who have an abundant supply of summer pasture. Again, purchase of these ewes should be made through livestock dealers or commission firms who have had previous experience in buying this type of ewe.

Older Western ewes especially those past 5 years and those known as "solid mouths" are cheaper but should be bought only by persons who have had previous sheep experience and know how to handle this type of ewe in large flocks. Under no circum-

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stances should "broken mouthed" or "gummer" ewes be bought for a large flock operation.

It is *not* recommended to buy small flocks of native ewes, even at a low price, with which to begin a large sheep operation. This means "buying trouble." These ewes are generally short-lived and will not handle well in large flocks. They are suitable for small farm flocks providing one is willing to take the risk of buying diseases such as foot rot.

2. Saving ewe lambs

Generally, the large sheep operation will find it more profitable to buy young Western type ewes as needed to enlarge the flock or as replacements, than to save ewe lambs. If ewe lambs are to be saved, a different breed of ram is required (see below for breed of ram to use) than if all lambs are sold. The ewe lambs must be wintered in a separate lot and fed grain if they are to become desirable ewes. If ewe lambs are well wintered, they can be bred to lamb at one year of age thereby reducing the cost of the ewe. But this can be only recommended if special attention is given the first winter.

3. Kind and number of rams to use

When no ewe lambs are to be saved, only excellent quality mutton type rams should be used. The two breeds most commonly used are Suffolks and Hampshires. Both breeds give excellent quality market lambs. The program is further simplified if only one breed of ram is used. This will result in a more uniform set of market lambs.

If ewe lambs are to be saved, a large, growthy, open faced, heavy shearing Corriedale or Columbia or a Dorset ram should be used, but only on enough ewes needed to produce replacement ewe lambs. All other ewes in the flock should be bred to the mutton type ram. (For suggested crossbreeding programs, see Extension Bulletin 408—Crossbreeding Programs for Commercial Lamb Production in Michigan.) The ewe lambs saved for replacements should be bred to a ram of the Suffolk breed because of the ease of lambing. While in small flocks, a yearling ram will handle 40 ewes, in large flocks at least three rams are needed per 100 ewes. If these rams are sorted for age and vigor, they will do a more effective job than if both older and younger rams are run together.

4. Size of band

Under Michigan conditions the large sheep operation will be more successful if the flock can be handled in units or bands of not more than 400 ewes to a band.

Bands of 200 would be preferred and there would be some further advantages in handling bands of 100 if fields and lots made this practical. Often these bands can be grouped according to age, type, lambing time, and breed of ram to use.

5. Platoon system

Many large flock operators can make more efficient use of labor, buildings, equipment, ram power, and pasture as well as distributing the marketing period over 8 to 9 months by dividing the flock into a number of bands or platoons according to the time of lambing.

The best way to make this division is to arrange to paint the briskets of the rams with a paste made from a powdered paint pigment such as venetian red or yellow ochre or lamp black and No. 10 motor oil. Many paint and hardware stores no longer stock these pigments in powder form but they can be ordered if several weeks notice is given. Turn all available rams with the entire ewe flock. As the ewes are bred they will be marked by the ram. It is necessary to paint the briskets of the rams every day.

The flock is run through a sorting chute each day to count the number of ewes that are marked. When this number reaches the number that can be handled in the first group or platoon, the rams are removed for 2 or 3 weeks or for as long an interval as is desired between lambing periods. The process is repeated, dividing the flock into as many units as desired. The ewes bred by the ram each period are marked with a more permanent approved wool branding paint so that they can be sorted out from the flock at least one month before lambing and fed grain before going to lambing quarters. All ewes are later exposed to rams to make certain all are bred.

This method is preferred over turning the rams with a given number of ewes, since this procedure would result in lambs being born over a period of several weeks, whereas the ram-marking system can result in as many as 100 ewes being bred in a 3- to 5-day period, thus greatly reducing the lambing period for each group.

Once a ewe is identified as lambing in a particular group, she can usually be depended upon to breed with her group the following year. This system can therefore be the basis for dividing the flock into platoons or bands and handled as a group as long as the ewes are on the farm. Additional ewes can usually be moved up to an earlier lambing group by exposing them to a ram. Painting the brisket of the ram will identify these ewes.

6. Equipment

Sheep require a considerable amount of hand labor and handling such as drenching, shearing, foot trimming, and lambing. These jobs can be done properly and on time only if proper equipment and housing are available.

BUILDINGS (EARLY LAMBING)

- (1) A reasonably warm but well-ventilated and well-lighted lambing barn or shed. The older basement barns make excellent lambing barns, but pole barns with insulated rooms and ceilings can be very satisfactory. Generally, 12 square foot of floor space is recommended per ewe.
- (2) A pole type shed open on one side (usually south) in which to move the young lambs and ewes from the lambing shed. This can be successfully done as soon as the lambs are 1 or 2 weeks old.

EQUIPMENT NEEDED

Lambing pens (at least 20 per 100 ewes)
 Sorting or cutting chute
 Holding pens
 Loading Chute
 Self-filling drenching gun.
 Salt boxes
 Feed racks (18 inches per ewe)
 Grain troughs
 Lamb creep
 Heat lamps
 Telescoping or extension gates
 Dipping vat

Complete plans for these and other labor saving equipment are available in a Sheep Equipment Plan Book, Information Series No. 34, Agricultural Engineering Department, Michigan State University, East Lansing, Michigan at a cost of \$1.00.

A well planned sheep handling yard or area will make all operations easier.

7. Winter feed

Approximately 25 tons of legume hay are needed for wintering 100 ewes. The amount can be reduced if corn and grain fields are available for cleaning or rye pasture is available for late fall and early spring pasture. Both of these practices are recommended. Grass silage, haylage, or corn silage may replace up to one half of the hay. The number of pounds of these materials needed to replace one pound of hay will

depend on their dry matter content. If corn silage is used along with hay that is low in legumes, one-tenth pound of a protein supplement per ewe daily will be needed to supply adequate amounts of this nutrient. Approximately 2 bushels of grain are needed per ewe and 150 to 200 pounds of creep ration per lamb if the lambs are born in January, February, or early March and creep fed and marketed without turning them to pasture.

8. Water

A supply of fresh water must be available at all times. This can best be supplied by one of several types of all-weather automatic water bowls.

9. Pasture

Because types of pasture used for sheep will vary greatly in quality, no definite number of head per acre can be given. Generally 5 ewes and their lambs will equal one mature dairy or beef animal in their pasture requirements. This could be increased to 7 or 8 head if only the dry ewes are pastured.

10. Green chopping and dry lot feeding

Very little experimental information is available on feeding large numbers of ewes in a dry lot during the summer either by green chopping or stored feeds. Observations of a 150 ewe flock confined to a dry lot over a 5-year period would indicate that green chopping would not be practical with less than 400 ewes. If the green chopping method is followed, some type of "fence line" feeder must be used because of the hazard of hauling wagons among ewes and lambs.

Lambs should be weaned as soon as they are eating $\frac{2}{3}$ pound of grain per head daily. Dry ewes can be successfully fed in a dry lot during the summer either by green chopping or stored feeds but late born lambs appear to do poorly in hot weather when both ewes and lambs are fed in the dry lot.

11. Foot rot

Foot rot is the most serious disease that can affect the large flock operation because of the tremendous amount of hand labor involved in trimming and treating the feet of infected animals. Therefore, every precaution should be taken to keep this disease out of a flock. Don't "buy" this disease. Start the large flock with sheep that are free of the disease.

Carefully inspect all later purchases including the rams. All additions to the flock should be kept in

a separate pen or lot for a two week period to make certain this disease is not present. Routine hoof trimming of all sheep in the flock twice each year will also lessen the danger of this disease developing. (See Extension Bulletin 507—Prevention, Treatment, and Eradication of Contagious Foot Rot in Sheep).

12. External and internal parasite

Problems with parasites are more likely to become serious in large flocks than in small flocks. All ewes,

rams and lambs should be dipped routinely each year or at least at the first sign of ticks or lice. A well-planned internal parasite control program must be followed including the use of the phenothiazine trace mineralized salt mixture as well as drenching at recommended intervals. (See Extension Bulletin 479—Controlling Internal Parasites of Sheep and Extension Bulletin 445—Controlling Insects and Mites of Sheep and Goats.)