

Lamb Feeding

Feedlot practices in Colorado.

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THE fattening of lambs with feeds grown on Colorado's irrigated farms has become an important industry since its start in 1889 as an emergency measure toward furnishing a market for the abundance of alfalfa hay produced. At the present time, in her four principal lamb feeding sections, Colorado fattens normally 32 percent of the total sheep and lambs fattened during the winter feeding season in the entire United States.

Beef Industry

The development and favorable growth of the sugar beet industry in Colorado has been closely linked with lamb fattening operations. The beet by-products such as beet tops, wet pulp, beet molasses and dried molasses beet pulp have served to lower fattening costs and have enabled competition with cornbelt feeders.

Feedlots are found on practically every farm varying in capacity from 1,000 to 50,000 animals, with an average of about 5,000. These lots, arranged in a series of smaller pens of about a 500 head capacity, are generally located on sloping land to provide adequate drainage. They are protected only by windbreaks and are constructed in such a manner that partition panels can be removed, stacked and stored after the lambs are marketed. Automatic watering troughs are usually standard equipment for each lot. Fresh, clean water has been found to be a most essential part of the successful feedlot.

There are generally three types of feed-

ing practiced: (1) hand-feeding both grain and alfalfa; (2) hand-feeding grain and self-feeding alfalfa; (3) self-feeding both grain and roughage as a mixture in a self-feeder. The advantages and disadvantages of the various methods of feeding are even at the present time a much debated issue. Economy and closer control over the lambs are stressed in the first two methods. Greater gain and a better "quick finish" together with a lower death loss is claimed for the self-feeding method.

The lambs are usually given a rest with plenty of good, leafy alfalfa hay and water for a short period after they are taken off the cars. Experience has taught the feeders the importance of this method of management. The lambs, weaned just previous to shipment, are tired and thirsty. Their resistance is at low ebb, and rest does much to prevent the early feedlot death losses. When pasture or stubble is available, at this time, lambs are turned out during the day and brought back to the lots each night. Vaccination for contagious ecthyma (sore mouth) shortly after arrival is becoming a more general practice each year and is largely replacing the old method of treating infected individual lambs with iodine. Contagious ecthyma itself is not usually fatal, but the secondary infections which follow have always taken a rather large toll among feedlot lambs. During late years the practice of keeping lambs on dry rations during the first three weeks has helped much to prevent outbreaks of coccidiosis which, at times, has been responsible for some disastrous death losses.

Generally, lambs are forced on full feed of grain in about 30 to 40 days. Under Colorado conditions a pound and one-quarter of corn or barley is considered a "safe" full feed of concentrates. Any amount beyond this always presents a danger of death loss. Variations from this

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amount are often found in various groups of lambs. Quite often mortality begins at a much lower figure than the one quoted above. Other lambs are able to consume amounts far beyond this without apparent injury. When an extremely high grain feed and fast finish is desired, dried beet pulp lightens any grain ration and renders it less apt to cause trouble. Lambs once "off feed" from too heavy a grain allowance may show a high mortality rate if the amount of grain is not immediately cut or taken away altogether for the time being. Such lambs are seldom able to again take a normal maximum grain feed. In such cases, after the lambs have recovered from their indigestion, maximum gains may generally be produced by substituting dried molasses beet pulp for not more than one-half of the grain allowance. Experimental work at the Colorado station has shown that dried pulp fed in this manner has the same feed replacement value as corn.

Feeding Molasses

Beet molasses is often used as part of the fattening ration. It is a standard ingredient in grain and hay mixtures since it not only minimizes the dust of such feeds, but also acts as a binder for the grain and hay preventing the sorting of corn from the mixture by the lambs. It is surprising how adept lambs become in sorting this grain from ground mixtures bringing about an inevitable mortality increase. Beet molasses, Steffen's process, has about the same feeding value as cane molasses but because of its more laxative effect due to mineral salts, it should not constitute over 0.3 pound of the daily ration.

Wet beet pulp feeding, combined with grain and alfalfa, is a common practice in Colorado. As a matter of fact, the ration which under experimental conditions has proven itself the best feed combination from a standpoint of rate and cost of gain, is composed of 1.25 pounds of grain, 3 pounds of wet beet pulp, and 1.50 pounds of alfalfa per head per day. This feed combination produces a bloom on the lambs which generally commands the

market top. Because of the succulence of this ration, it is well to take away the wet pulp about ten days previous to shipping insuring a lower "shrink" in shipment to market.

Another beet by-product commonly used is beet tops. They are a protein or growth-producing feed which is generally used in the fall as soon as the beets are harvested. One of the common methods of using tops is to turn the lambs into the field where the tops are heaped in piles the size of an inverted washtub. Handling the tops in this manner insures against loss through drying and scattering of the feed, cuts trampling to a minimum, and also makes the tops more easily found when snow covers the ground. Under ordinary conditions, the tops from an acre of beets will furnish sufficient feed for 1,000 lambs per day. Tops have a laxative effect and consequently some dry roughage should always be fed along with them. If lambs have access to stubble land in addition to the beet field, the tops from 7 tons of beets (about one-half acre) and 1.5 acres of alfalfa and small grain stubble should carry 1,000 lambs for one day.

Sorting Lambs

Sorting lambs according to size, limiting the grain trough allowance per lamb, good dry straw bedding, and clean feed have helped much to cut death loss to a minimum. Feeding practices such as lambing down corn, using tainted or slightly moldy feeds, irregular feeding, and changing too rapidly from one feed to another are entirely a thing of the past because of the great losses which followed. The average feedlot death loss from shipping diseases, coccidiosis, pneumonia, overeating, and all other causes is about 2 to 3 percent.

The fat lambs are usually sorted out after a sixty day feeding period and shipped to market. This "sorting out" of the fat lambs is continued throughout the entire feeding period with the small or "cull lambs" going to market after 120 to 130 days. The average gain during such a feeding period is from 30 to 35 pounds per head on a market basis.