

DORSET COMMERCIAL **CONNECTION**

CULLING STRATEGIES

By Melanie Barkley

Penn State Cooperative Extension Bedford County

One of the best ways to improve the production in your flock is to remove any problem sheep as well as low performers through culling. Ewes should be able to raise lambs on their own without your assistance, maintain their body condition throughout the year, and lamb at least once each year. Developing a culling strategy for your farm will help you to promote raising these types of ewes in your flock. You might start your culling strategy by dividing your checklist into four different categories: physical characteristics, production characteristics, health and other characteristics.

Physical Characteristics

Physical characteristics involve a visual evaluation of the overall structural soundness of the sheep. Check feet for any problems that prevent the sheep from walking without limping. Those with misshapen hooves, chronic foot rot or scald or very weak pasterns can be culled from the flock. Sheep should also have sound legs that are capable of walking around pastures. Eyes should be free of cloudiness or any other conditions that would limit vision.

Udders should be evaluated for any lumps or damage to teats that would limit milk production or make nursing difficult for a lamb.

If your goal is for meat production, then evaluate the muscling of the sheep. Look at not only the amount of muscle, but the muscling design. A short hip with a round muscle design could lead to future lambing difficulties. If your goal is for wool production, then evaluate for characteristics such as uniformity from flank to flank, fiber strength, and fiber diameter.

Production Characteristics

Ewes should be evaluated for their ability to lamb at least once per year. Ewes that remain open should be culled. In addition, ewes should be able to maintain their body condition throughout pregnancy and deliver one or more live and healthy lambs. They should immediately care for their lambs with the exception of a ewe lambing for the first time. A young ewe may need some assistance at first, but should be able to manage raising her lambs by herself after the first day. Ewes will lose some weight while nursing lambs, but weight loss should not be excessive.

A great way to evaluate production traits is to weigh the lambs at various times throughout the year. Typical times to weigh lambs are at weaning, (60 or 90 days of age) 120 days, and as yearlings. Weights can be adjusted to account

for differences in days of age at weighing. You can make evaluations for weight on an individual lamb basis or better yet evaluate the weight of lambs weaned per ewe. Make weight comparisons between ewes based on the number of lambs weaned. In other words, a ewe that raised a single lamb should be compared to other ewes that raised a single lamb. Ewes that raised twins should be compared to other ewes that raised twins.

To calculate an adjusted weight, divide the weight by the age of the lamb in days and then multiply that figure by 60 for a 60 day weight, 90 for a 90 day weight or the number of days you want to adjust for.

For wool type breeds, you can evaluate both the quality and quantity of wool produced by your sheep. Grease weight, clean weight and staple length are examples.

Health Characteristics

The overall health of a sheep is a very important consideration, especially if a sheep is exhibiting a problem that could be spread to other members of the flock. Many times sheep can develop health problems that will not spread to the remainder of the flock.

Body condition is important to evaluate both at weaning and at breeding. Ewes that are very thin should be culled. Their thinness could be due to genetics, age, parasites or even disease. Ewes who are in poor body condition are less likely to breed and if they do become pregnant they are likely to have decreased milk production and thereby will raise lambs that are lighter in weight than the average of the flock. Body condition has also been shown to affect uterine efficiency. Even though thin ewes are flushed to increase the ovulation rate, only a portion of the extra eggs may become fertilized and thus be realized as lambs (Meyer, 2002).

Ewes that prolapsed either rectally or vaginally during pregnancy should be culled. This condition is most often a result of genetics, but can also be caused by large multiple lambs, tails that have been docked too short, excessive coughing, or excessive body condition (ewes are too fat). Lambs with entropion or rolled eyelids should be culled. This condition is a result of genetics. In addition, if you breed with a ram that produces a large number of lambs with rolled eyelids, he should also be culled.

Other Characteristics

Other characteristics that you can consider are breed character and temperament. Producers who are raising registered stock should pay close attention to breed characteristics as per their registration association. Refer to the Standards of Excellence produced by the Continental Dorset Club for more information on breed character.

Temperament is important not only for rams, but also for ewes. Mean rams are obviously something producers would like to avoid. However, ewes that are very flighty and tend to spook easily could be considered for culling also. These ewes can pose a hazard to young lambs as well as pregnant ewes. They also tend to get the entire flock excited when you are handling them for routine management tasks.

Conclusion

While following strict culling practices is sometimes difficult, the end result should be a more productive flock with fewer management issues that you need to address. Good culling practices help to produce sheep that will work well not only on your operation, but should also work well for other producers in their breeding programs.

(Literature Cited: Meyer, H.H. 2002. Genetic and Environmental Impacts on Prenatal Lamb Loss. Sheep and Goat Research Journal, Volume 17, No. 3, 2002.)

DORSET WINS 2006 DAKOTA TERMINAL RAM TEST

A Polled Dorset ram from Curtis Stanley of Bismark, ND won the 2006 Dakota Terminal Ram Test overall breeds. There were 36 rams on test of which 7 were either Polled or Horned Dorsets. The test ended August 15th and eligible rams were offered for sale September 13, 2006.

The ribeye area (REA) and fat thickness (FT) was adjusted to 150 pounds. These adjusted values and overall average daily gain were used in the following formula to determine the final rankings: $(0.6 \times \text{ADG Ranking}) + (0.3 \times \text{ADJ REA Ranking}) + (1 - (0.1 \times \text{ADJ FT Ranking}))$. The first, middle and final placing rams were selected to enter a progeny testing project. Semen from each of these rams will be collected and used to artificially inseminate 10 ewes. The respective progeny will be evaluated for ADG and carcass yield.

Stanley's winning ram had a final index of 5.3, his final weight was 147 lbs., ADG was .99 lb, ADJ REA was 2.58" and ADJ FT was .12". Congratulations to Curtis on his winning ram!. If you would like more information on this ram test go to: www.ndlwpa.com

2006 PENNSYLVANIA RAM TEST RESULTS

The 2006 Pennsylvania Ram Test had another successful test and sale with a total of 47 sheep on test of which 18 of them were Dorset senior and junior ram lambs. Dorsets outnumber any other breed on test. A Senior Dorset ram from Roger Bowman of Lenhartsville PA had an index of 109, this ram tied for the second highest index over all breeds. Dorsets also had the third highest indexing ram on test with a junior ram lamb from Dr. & Mrs. Robert Herr, Narvon, PA at 108. The fourth highest indexing ram on test at 107 was also a Dorset. This was a senior ram from Katie Powers, Townsend DE.

The sale was held on Saturday, August 5, 2006 in the sale arena of the Samuel E, Hayes, Jr. Livestock Evaluation center in Pennsylvania, Furnace, PA. The 7 Senior Dorset Ram lambs offered for sale averaged \$393. The high selling ram out of that class was a Penn State University ram that sold for \$625 to Meemie Sullivan of Huntingdon Valley, PA. Dr. & Mrs. Robert Herr, Narvon, PA sold a entry to Neal Lynn Prizer of Mifflintown, PA for \$375 and Norman & Susan Voortman sold a ram at the same price to Harry James Herron of Georgetown, PA.

The 9 Junior Ram Lambs that sold averaged \$350. High selling ram in that class was a Ken & Kathy Soder, Petersburg, PA entry that sold to John Waltz, Smithsburg, MD for \$475. Ken & Kathy Soder also sold rams for \$450 to Thomas Hopkins, Georgetown, PA and Wilmer Zook, Belleville, PA. A ram lamb from Paul & Jackie Rapp of Paxinos, PA also sold for \$450 to Samuel Smail of Mount Pleasant, PA.

There is also an invitational ewe sale held in conjunction with the ram test sale. The Kenneth Staver Family and Dr. & Mrs. Robert Herr sold a total of 6 ewes that averaged \$246. The high selling ewe was a ewe from the Herr flock that sold for \$300 to Timothy Rodman of Knoxville, MD.

This ram test is conducted annually by the Pennsylvania Department of Agriculture at their new facility in Pennsylvania Furnace. Rams are on a 77-day performance test that ends in early July. Final indexes are calculated as follows: $(.35 \times \text{average daily gain ratio}) + (3.5 \times \text{final weight per day of age ratio}) + (.15 \times \text{adjusted fat thickness value}) + (.15 \times \text{adjusted loin eye muscle area value})$. Rams need to be nominated in April of that year to be eligible for the test. For more information on the test contact: Glenn Eberly (814)238-25-27 or (814)238-207, e-mail: geberly@state.pa.us