

KEEP RAMS COOL NOW FOR SUCCESSFUL LATE SUMMER AND FALL BREEDING

A large and quality supply of sperm from the breeding ram is necessary for high fertility rates in his ewe mates. Sperm production in the ram takes place in the testes and is a 6 to 8 week process. Sperm production is very sensitive to the temperature of the testes. Normal body temperature of a sheep is 101 to 103 degrees F, and optimum sperm production in the testes takes place at approximately 96 degrees F. Under normal environmental conditions, the ram can maintain this desired temperature in the testes by lowering the testes during hot weather and raising the testes during cold weather. The ram also has a meshing of the blood vessels entering the testes from the body with the blood vessels returning to the body from the testes, which acts to cool the warmer blood coming from the body into the testes.

These anatomical systems work just fine in cooling the testes as long as the environmental temperature does not get too high. Once the environmental temperature reaches 90 degrees for an extended period of time, the testes cannot maintain the temperature needed for optimum sperm production. Temperatures higher than 90 degrees, especially combined with higher humidity, over a two week period can result in sterility of rams. We have experienced this type of weather in June and July in many parts of Wisconsin this year. Therefore, many of our rams who have not been especially cared for may currently be sterile or have sperm of very low quality. Once cooler weather returns, these rams will return to normal fertility in 6 to 8 weeks. However, producers who wish to breed ewes in August or September for lambs to be born in January and February may already have rams that will be sub-fertile at breeding time.

Efforts should be taken now to keep rams as cool and comfortable as possible. Rams on pasture should be provided shade under trees or a structure that is high enough for good ventilation that does not trap heat. Housed rams should be in barns with good ventilation. If possible, fans should be placed on rams. Keeping rams in a barn with fans during the day and allowing them on pastures at night when it is cooler to graze would allow for cooling of the rams while still allowing access to pasture. Access to cool water will assist in keeping core body temperature as cool as possible.

Shearing rams that are carrying 4 months or more of fleece will help cool them. Freshly sheared rams actually absorb more heat from sunlight than fleeced rams, so proper shade must be provided to rams that are sheared if shearing is to be of benefit.

Given the very hot weather we have had this summer, it is highly advisable to have a veterinarian or reproductive technician do a semen evaluation on rams just prior to the start of the breeding season in order to avoid using rams with sub-optimum semen quality. If a semen evaluation is not done, rams should at least be fitted with a marking harness when they are turned in with the ewes. If most or all of the ewes are remarked after their first heat cycle (indicating sub-fertility or sterility in the ram), the ram can be pulled and replaced with another ram to avoid a large percentage of open ewes at lambing time.

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