

# Increasing Successful Reproduction Among Goats and Sheep

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## Introduction

Reproductive options among small ruminants may vary from natural breeding to artificial insemination to embryo flush and transfer, or may involve a combination of the three. No matter what reproductive method a farmer chooses to use on a farm, there are management practices that should be followed to ensure a herd of prolific animals. The primary influence on successful reproduction is a set of healthy animals. Proper nutrition is a major factor in a healthy reproductive herd, but there are some general practices a farmer can implement to ensure the likelihood of successful reproduction among the animals.

Nutritional requirements are based on meeting daily nutritional needs. In order to sufficiently feed them, group the animals according to nutritional needs. In barn feeding situations such as during the winter months, animals should be provided with high quality hay and supplemented with properly balanced grain feed. Total digestible nutrients (TDN) are a measure of energy and quality of feeds. Low quality forages contain 40 to 50

percent TDN, good quality forages contain from 55 to 70 percent TDN, and concentrate feeds contain from 70 to 90 percent TDN. Inadequate provision of nutrition can affect growth rate, milk production, reproduction, and disease resistance.

## Factors to Consider

As mentioned earlier, providing proper nutrition year-round is a major factor affecting the health and fertility of a herd of animals. Allowing goats to browse and graze, giving them access to hay, and feeding them supplemental grain will keep them in good breeding condition. Other options such as "flushing" breeding animals will increase their abilities to reproduce at certain times. Flushing consists of a farmer providing additional high-protein grain feed for a month before the breeding period. This increases egg production among the does and sperm count among the bucks. While such a practice is very effective, it is still important to avoid overfeeding these animals. Obese animals are less likely to conceive, and obese does may be prone to kidding difficulties.



Proper health care is another factor in successful reproduction. This may involve deworming, vaccinations, and preventative healthcare practices. If your animals need deworming, you should deworm them 30 days prior to breeding. This will prevent them from being stressed or "pulled down" because of a heavy worm burden and will increase the likelihood of conception. Vaccinations are available to prevent such illnesses as overeating disorders, tetanus, or pneumonia and can be administered at the same time. As always, consult a veterinarian before medicating any animals.

Adequate availability of macro and micro minerals is important for a successful reproduction program among breeding stock. Trace minerals such as selenium and

magnesium increase the potency of bucks and the fertility of does. A good mineral block specifically made for goats will provide the trace minerals needed as well as adequate amounts of copper to enhance the immune system of a herd. Provision of mineral blocks is a good idea.

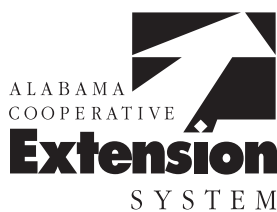
During breeding time, does and bucks spend extra time on their feet, so proper foot care is crucial. Healthy, properly trimmed feet will ensure they can stand for breeding. Gather up all breeding stock a month or two before breeding season to check their feet for disease or overgrown hooves. Foot rot, weak pasterns, and overgrown hooves can affect an animal's ability to walk, run, and stand. Examine each animal's feet, making sure their hooves are well trimmed, their weight is evenly distributed, and they are able to stand level. Look for small rocks, thorns, or other debris that might be lodged between their toes. Also, check for hoof rot and treat as necessary.

Fresh water is also important during breeding season. Water troughs free of algae, feces, and rotting vegetation ensure healthy water for breeding stock, and will decrease the chance of illness. Water containers should be checked daily and cleaned weekly to ensure such conditions. Healthy water increases the likelihood of a healthy herd.

Finally, consult a veterinarian and other producers for further advice. Remember, what works on one farm may or may not be practical or effective on another farm. More importantly, a healthy herd of animals is more likely to be very prolific, and ongoing health care management and maintenance of animals are more effective and less stressful than last-minute or emergency health care. Goat farmers must understand the impact of efficient farm management, as well as the consequences of mismanagement.



In closing, a well-informed producer can increase his or her success in meat goat and sheep production. Issues such as diet, nutrition, health care, foot care, and water quality are crucial in raising healthy, productive animals. By following such practices, producers should minimize the occurrence of nonproductive animals and increase farm income.



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