Ask A Vet: Pregnancy Diagnosis Equals Good Management

Sunday, August 21, 2016

Dear Dr. Weldy's,

I am taking my Boer goat does to get bred next week. In the past, we have not checked them to diagnose if they are pregnant or not, we just wait and see what happens. It would be nice to know what to expect this year. What ways are there to diagnose pregnancy in goats?

-A Curious Reader

Dear Reader,

Breeding season is certainly an exciting time for producers. It can be quite helpful to know if does are bred or not and also to get an idea of how many fetuses the doe is carrying. Pregnancy diagnosis allows you as the owner to identify females that are not bred and those that are carrying multiples so that appropriate nutritional and management changes can be made. Pregnant does can be grouped together as well as those with increased numbers of fetuses to improve their overall health.

Owners have often used the following signs to presume a doe is pregnant: failure of the doe to return to estrus after breeding (not showing heat), enlarging abdomen and the development of mammary glands. While these signs are often associated with pregnancy, some diseases of the uterus and ovaries and hormonal imbalances may cause a doe to not return to heat after breeding. Some does will also show heat while they are pregnant.

For a more accurate pregnancy diagnosis, your veterinarian can perform an ultrasound, radiograph or hormonal blood test. Ultrasound detection of pregnancies can be done through the goat's abdomen at 30 -90 days, but the best time for twin detection is at 45-90 days post-breeding. From 90 days until the end of gestation, determination of the number of fetuses becomes less accurate. Radiographs, or x-rays, of the goat's abdomen can be done to detect pregnancies and fetal numbers. It is best done in an individual pet goat that is brought in to the clinic if ultrasound is not available. The skeleton of the fetus can be seen as early as 58 days gestation and may be radiopaque (easily seen as bone density on an x-ray) after day 65. It would be best to do radiography after 90 days post-breeding to avoid false-negative results. Blood tests such as Estrone Sulfate, Pregnancy Specific Protein B and Progesterone are also available. Estrone sulfate is a hormone produced that is specific to pregnancy and can be found in the urine, serum or milk after the 50th day of pregnancy. It is almost 100% accurate, but very few labs perform the test and it is expensive. Pregnancy Specific Protein B is produced by cells in the placenta throughout gestation and can be used in goats 30 days or more after breeding. False positive and false negative results are possible. Progesterone assays are better used to identify non-pregnant females than pregnant ones. A low level would indicate a non-pregnant female. High levels could indicate pregnancy, hydrometra, pyometra, early death of the embryo, a fetal mummy or an irregular estrous cycle.

If you have multiple females to be checked for pregnancy and a veterinarian who is comfortable with an ultrasound machine, your best bet for pregnancy diagnosis will be real-time ultrasonography. If you have any additional questions, please contact your local small ruminant veterinarian.

-Dr. Ashley Vander Wey