Livestock News

Transylvania County, NC

Summer 2016

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The Cost of Artificial Insemination in Cattle

Often producers perceive the cost of A.I. to be exorbitant; however, if a producer has a structured artificial insemination breeding program, A.I. may be more economical than natural service. Costs associated with A.I. are fairly obvious: semen, labor, and synchronization medications; also, a clean-up bull is required considering the average A.I. conception rate is 65% (if protocols are followed correctly). Costs associated with a natural service breeding program may not be as evident. Natural service requires the initial purchase of a bull (or multiple bulls depending on herd size); a risk factor of 10% should be calculated with the cost of the bull in the event the bull is injured. Therefore, if the cost of the bull is $4,500, another $450 should be calculated in total costs. Other expenses of natural service consist of veterinary assistance (such as a Breeding Soundness Exam), feed, and maintenance.

In a study completed by Patrick Jacobsen of the University of Wyoming, the cost per pregnancy for natural breeding based on a 500 head herd with bulls covering 25 cows was $47.41. This cost includes an average bull cost of $2,500, feed, mineral supplement, vaccinations, and labor. The cost per pregnancy for artificial insemination with a 70% conception rate was $47.77, which includes semen, equipment, technician fees, medications, and miscellaneous costs. Based solely on the monetary cost, natural service is preferred. However, artificial insemination delivers long-term benefits which are not calculated in the aforementioned study.

Artificial insemination allows producers to select superior genetic traits to enrich the entire herd. Producers have the option to evaluate Expected Progeny Differences in multiple bulls to improve any deficiencies within the herd. A further benefit of A.I. is increased calf crop uniformity and performance, as the calving season will be shorter. A.I. also permits producers to sell calves in a value-added market, which increases revenue for the producer.

Ultimately, it is dependent on the operation as to which breeding program is most advantageous. Producers should consider their own production costs, need for genetic improvements, and management capabilities.

"My grandfather used to say that once in your life you need a doctor, a lawyer, a policeman and a preacher, but every day, three times a day, you need a farmer."

Brenda Schoepp

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Consider Breeding Your Does to Target Ethnic Holidays Where Goat Meat Is Part of the Traditional Holiday Feast

As our major meat goat market is ethnic-based, the following calendar should help producers make decisions on their farms, such as breeding and finishing schedules, to better target theses different ethnic populations and the class and type of animals they most desire (age, weight, sex, etc). By paying attention to these holidays where goat meat is part of the traditional feast, goat producers should be able to increase their returns, as it is well known that goat prices increase around these holidays because of increased demand for goat meat.

Western or Roman Easter

Type of goat wanted - Fleshy, milk fed kids with relatively light colored meat, 3 months old or younger. Kids weighing less than 20 lbs. are generally disappointing to buyers due to low meat to bone ratios and high carcass drying losses. Kids gaining less than 10 lbs. per month or 1/3rd pound per day after accounting for birth weight are generally not fleshy enough to be considered prime. There generally is a slight price (per lb. of live weight) penalty for kids weighing over 40 lbs. Acceptable weights generally range from 20 to 50 lbs. with 30 lbs. considered optimum by most buyers.

Eastern or Greek Easter

Type of goat wanted - Similar to Western Easter kids. A slightly larger milk fed kid (i.e. around 35 lbs.) is considered optimum.

Cinco (5) de Mayo - Mexican Celebration

Type of goat wanted - Cabrito and larger goats

Start of Ramadan (Muslim) - can vary by a day depending on the actual sighting of the moon over the United States that year

Type of goat wanted - male and female kids with all their milk teeth (i.e. not older than 12 months). Males can be whole or castrated. Overly fat kids are discriminated against. Optimum live weight is about 60 lbs. but weaned kids from 45 - 120 lbs. are accepted by different buyers.

Id al Fitr (Muslim) - The Festival of the Breaking of the Ramadan Fast.

Type of goat wanted - same as for Ramadan.

Id al Adha (Muslim) - The Islamic Festival of Sacrifice.

Type of goat wanted - Prefer yearlings (i.e. animals with one set of adult teeth) that are blemish free. Animals with broken horns, open wounds, torn ears or physically unsound generally do not meet the criteria. In some cases, castrated animals or lambs with docked tails are frowned upon.

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Producer Message Board

To advertise any animals, equipment or other agricultural products in future publications, please email or call:
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Hay Testing and Evaluation

A hay sample is only as good as the sampling technique. Best results are obtained when a core sampler is used to sample the hay. These are available at the Transylvania County Extension office. Regardless of the sampling technique, you will want to obtain a sample from each unique lot of hay. A lot is considered hay from the same field and the same cutting that was cured and stored under the same conditions.

If a core sampler is used, take cores from 10-15 bales or enough cores to fill a quart-sized plastic bag. Always sample from the end of square bales or the sides of round bales.

After obtaining the sample, ship or deliver to the forage lab along with payment, if applicable.

For the submission form and mailing address, visit http://www.ncagr.gov/fooddrug/forms/documents/ForageForm.pdf

Nitrate Poisoning in Cattle

Nitrate poisoning in cattle is a noninfectious conditions that can kill livestock. Although uncommon in normal years, poisoning occurs when cattle eat forages stressed from severe environmental conditions such as drought. The stress disrupts normal plant growth and may cause the plants to accumulate too much nitrate. Knowing the causes, symptoms and treatments for this disease can help producers prevent losses. Sampling and testing can indicate when forages pose a danger to livestock.

Nitrate poisoning can occur when: Forage consumed contains high levels of nitrate; The diet changes rapidly or suddenly; Parasitism or other conditions causing anemia; Livestock consume supplements of urea or high-protein feeds along with forage containing moderate levels of nitrate; and/or Livestock directly consume nitrite.

Acute nitrate toxicity symptoms generally include death, blue mucous membranes (lack of oxygen), fast breathing, high pulse rate, weakness, uneasiness, excessive salivation, frequent urination and dilated and bloodshot eyes. Animals treated with methylene blue may recover. But by the time an animal "goes down," it is often too late to treat and rescue. A veterinarian should be called to verify the cause of death.

Plants need nitrogen for growth and development. However, when drought prevents them from converting the nitrogen they absorb into new growth, nitrate levels may rise. Many kinds of plants can accumulate nitrate. Plants in the sorghum family — Johnson grass, sudan grass, forage sorghum and sorghum hybrids — are generally implicated first. "Oat-hay" poisoning is caused by high nitrate levels. Corn, small grains, careless weed or pigweed, sunflower and leafy vegetables that are highly fertilized can accumulate toxic levels. Turning cattle into holding pens or corrals full of manure with careless weeds or grasses can result in immediate poisoning. Nitrates do not accumulate when there is normal rainfall or irrigation. Under those conditions, nitrate nitrogen absorbed by roots and moved into the plant is rapidly transformed into plant proteins. However, under dry conditions, plant roots continue to absorb small amounts of nitrogen, but the plant has too little water to keep growing. Nitrate accumulates and is stored in lower leaves and stems, ready for the plant to mobilize and use when rapid growth resumes. Nitrate levels can change from day to day and even from morning until evening. Small grains can accumulate toxic levels of nitrate on overcast days. In cloudy periods, plants continue to absorb nitrogen from the soil but lack the photosynthetic activity to convert the nitrogen into proteins.

Producers can take steps to help prevent nitrate poisoning: Never turn hungry animals into possibly high nitrate forages. During drought, producers sometimes "turn onto" temporary forages to help animals in poor condition. The combination of poor body condition, high nitrate levels in the forage and high consumption can be deadly. Have hay tested before feeding if you suspect that it is high in nitrate. Nitrate levels remain constant in hay. If hay is high in nitrate, feed carefully with an energy supplement or in combination with low protein forages, or other hay low in nitrates. Never feed high-nitrate hay free choice.

Upcoming Events:

Meat and Greet

Tuesday, June 28, 2016
6:30 P.M. in the Community Service Building Conference Room
98 East Morgan Street Brevard, N.C. 28712

Join fellow small meat livestock producers (meat goats, sheep, swine, and poultry) for a round table discussion addressing marketing locally produced meat.

2016 Mountain Research Station Field Day

Thursday, June 30, 2016
1:30 P.M. to 6:00 P.M. at the Mountain Research Station in Waynesville.

This year's program will include topics such as: summer annual forages, a pollinator update, tomato variety trial, and frequency of supplementation in calves.

The Asheville Area Wool Pool

Tuesday, July 12, 2016
8:00 A.M. to 11:00 A.M. at the Western North Carolina Regional Livestock Center in Canton

Contact Addison Bradley at the Transylvania County Extension Office for further information: (828) 884-3109

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