KSU Sheep and Meat Goat News

Department of Animal Sciences and Industry



Summer Issue - 2014 KSU Sheep and Meat Goat News

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We Need Your Help!

Please send questions, comments or ideas for future newsletter topics to Brian Faris at <u>brfaris@ksu.edu</u> or 785-532-1255.



Brian's Bleats...

I hope your lambing and kidding seasons went well. The lamb and kid markets have been strong for most of the first half of this year. I think they will remain fairly strong this summer considering this is the time we usually see a drop in our markets. Many of you may be weaning your late spring born lambs and kids. Be sure you are vaccinating for CD/T and deworming as necessary. The rains we have been receiving coupled with the warmer weather make an ideal environment for internal parasite levels to increase.

We have a very exciting event coming to Kansas for those interested in sheep. The All-American Junior Sheep Show will be held July 3-6, 2014, in Hutchinson, Kansas. This event rotates throughout the Midwest and has numerous activities for youth. The show includes many breeds such as Cheviot, Columbia, Dorper, Polled Dorset, Dorset Advantage, Horned Dorset, Hampshire, Montadale, Oxford, Lincoln, Shetland, Shropshire, Tunis, Southdown and Natural Colored. If you are interested in any of these breeds or would like to see some of these sheep, feel free to make the trip. You may find the complete schedule and more information at the following website: http://www.countrylovin.com/AAJSS/index.html. You may also contact Jeff Ebert, KS rep on the Executive Committee, for more information at 785-494-2436 (home), 785-458-9174 (cell), or ebertj@wamego.net.

The K-State Sheep & Meat Goat Center continues to evolve. As many of you know, the buildings were completed in December 2011 followed by most of the penning completed in September 2012. We officially moved in and have operated out of the new facility since October 2012. The pasture fences were finished in October 2013, and we have been working diligently this Spring to complete the water lines to our water troughs that will service these pastures. This has been a long process but I have not met anyone who has not been impressed with the facility. Since the grand opening in March 2012, we have held numerous labs for ASI 524 Sheep & Meat Goat Science, judging practices for our K-State Wool Team, hosted 3 K-State Sheep Producer Days, hosted a Meat Goat Artificial Insemination Clinic, conducted several research projects, hosted a Kansas Sheep Association Tour, conducted numerous Spring tours for local schools, provided animals for judging camps and classes, and the list goes on and on. K-Staters can truly be proud of this facility and we look forward to continuing educational opportunities for producers and students as well as building a research program.

Mark your calendars for the next K-State Sheep Day on March 7, 2015, which will again be the Saturday following Cattlemen's Day.

Sincerely,

Binan R. Faris

Brian R. Faris, Ph.D. Extension Sheep and Meat Goat Specialist

Summer Management of Replacement Ewe Lambs Reprinted from Premier Newsletter May 2014

By Scott P. Greiner Department of Animal & Poultry Sciences, Virginia Tech

Successful development, breeding, and lambing of ewe lambs is one of most important tasks of the shepherd. Summer is a critical time for the development of replacement ewe lambs as they make the transition from weaning to members of the breeding flock. Proper management of replacement ewe lambs during this time is critical to their future productivity and profitability.

In most breeding systems, replacement ewe lambs will be generated from within the flock. Therefore, attention to maternal traits in the rams siring potential replacements is critical. Additionally, preference should be given to crossbred ewe lambs. Crossbred animals have two major advantages over straightbred animals: 1) Crossbred animals exhibit heterosis (hybrid vigor), and 2) Crossbred animals combine the strengths of the breeds used to form the cross (breed complimentarity). Crossbred females are superior to straightbreds for reproductive performance due to advantages received from heterosis. Crossbred ewes exhibit significant advantages in fertility, prolificacy, and lamb survival resulting in advantages of up to 18% in pounds of lamb weaned per ewe exposed compared to straightbred ewes. From the existing pool of potential replacements, the following are important considerations for selection:

1) Performance Record: Ewe lambs should be retained from highly productive dams. Identifying these dams through a record-keeping system is therefore the first step in identifying potential replacements. Dams that lamb early in the lambing season, produce multiple births, and excel in pounds of lamb weaned (reflective of milking ability) are the best candidates to produce replacements. In the absence of such records, identifying maternal potential in ewe lambs based solely on visual appraisal is difficult.

2) Age: Preference should be given to ewe lambs born early in the lambing season (first 50 days). These ewe lambs are more likely to reach puberty earlier, breed, and lamb in a timely fashion as yearlings. Older ewe lambs are also more likely to reach target body weight by their first breeding season than young ewe lambs, and this coupled with age enhance their ability to breed as ewe lambs.

3) Conformation/Soundness: Structural soundness and mouth soundness are critical for longevity. Additionally, ewes with adequate body capacity and muscling, and those which tend to be "easy keepers" are preferred.

Nutrition from birth to first lambing has an influence on the lifetime productivity of the ewe. Ewe lambs should be in production by the time they are 12 to 14 months of age, as ewes that lamb first as yearlings rather than two year-olds have higher lifetime production. As a guide, ewe lambs should be targeted to reach 70% of their mature weight at breeding. Therefore, most ewe lambs should weight 100-150 pounds at breeding. To accomplish this under most management scenarios, ewe lambs should be identified, and then managed as a separate group from the mature breeding flock as well as market lambs.

Winter born ewe lambs generally have early rapid growth resulting from creep feeding and grain diets prior to forage availability. Winter born ewe lambs that will be kept for flock replacements should be prevented from becoming excessively fat. Excess fat deposition has been shown to reduce future milk production. Development of these winter-born ewe lambs is best accomplished through pasture grazing and additional grain supplementation as needed to enhance gains.

Summer Management of Replacement Ewe Lambs (continued)

Early and late spring born lambs traditionally are developed primarily through forage-based systems. Potential replacements should be identified and weaned so they may be properly grown and managed. These ewe lambs may need to receive supplemental grain (.5-1.5 lb./head/day) to achieve daily gains needed to reach target body weight prior to breeding. The amount of supplement needed will vary with forage quality and availability, as well as anticipated breeding date. As forage quality and availability declines during the summer, supplemental grain feeding may become necessary if breeding dates are early. Shearing of replacement ewes will enhance growth rates during the hot summer months. An effective parasite management program is also crucial for optimum gains.

The following table presents nutrient requirements for growing ewe lambs. The table demonstrates the dramatic differences in requirements for ewe lambs at different body weights and stages of development (requirements assume 180 pound mature weight). Older, heavier ewe lambs grazing native pastures of adequate quality will require little supplementation to continue growth and maintain optimum body condition (condition score of 3 on 5-point scale). However, smaller ewe lambs have a higher requirement for both energy and protein. The highest quality pastures available should be utilized for development of these ewe lambs, and grain supplementation may be needed depending on forage quality, rainfall, and other factors. The anticipated breeding date is also important, as ewe lambs to be exposed in early fall need to reach puberty and be on a positive plane of nutrition going into the breeding season. This is more difficult to accomplish for early fall breeding, as typically forage quality during late summer is compromised as a result of lower rainfall and high temperatures. Conversely, as fall arrives and environmental factors change, forage growth and forage quality typically improve. Therefore, close attention to forage quality and quantity, age and weight of ewe lambs, and desired breeding date need to be considered in the construction of a proper nutrition program for developing ewe lambs.

Body Wt. (lb.)	Wt. gain or loss (lb.)	DM Intake/day (lb.)	Energy TDN (%)	Protein (%)
66	.50	2.6	65	16
88	.40	3.1	65	13
110	.26	3.3	58	9
132	.22	3.3	58	9

Daily Nutrient Requirements of Ewe Lambs (pre-breeding)^a

^aValues adopted from National Research Council for Sheep, 6th Ed.

Silage for Goats Reprinted from Premier Newsletter January 2014

By John Hibma Dairy Goat Journal

Goats are natural browsers in the wild, being very selective of what they eat. If the seasonal nutritive values of browse and other feedstuffs decline or fluctuate, silage can be a good alternative, especially in production situations that require consistent nutrition on a daily basis.

Feeding silage to goats is generally safe but does come with some risks and challenges. There is nothing inherently wrong with feeding silage to goats. Like all ruminants, goats can digest fermented feeds quite well. However, as with all forages, quality and nutritional value, as well as price, should be the deciding factors when considering feeding silage to dairy goats. While silages are an excellent way to preserve forages, improperly processing, ensiling and possible mishandling after ensiling can result in a dangerous product that will have an ill effect on goats. As with any forage, maturity and preparation at the time of harvest is critical to its quality and nutritional value.

Silage is the product formed when a forage crop such as grass, alfalfa or corn is fermented so as to preserve it in a state of high moisture while at the same time preventing it from decay. In theory, any organic material containing sugar or starch can be ensiled provided there's enough of it to justify the effort. Ensiling grass is a good alternative to baling when the weather doesn't cooperate.

The key to making good silage is to use the weight of the crop to squeeze out all of the air, arresting the natural process of oxidation and decay after the crop has been harvested. There are essentially three ways of ensiling crops: in a vertical silo (the kind visible on many dairy farms throughout the country), in horizontal bunkers (usually constructed of cement floors and walls), and in the long, plastic, tubular bags that are generically referred to as "ag bags" by those in the know. Each method, when done correctly, will yield high quality silage for animal feed.

In Riverdale, California, Tony Brady milks about 1,800 goats—mostly Saanens—and has been feeding them silage as part of their diet for over 10 years. He feeds both corn silage and oat silage and ensiles them in ag bags. Brady said that when he first put up silage, he tried the pit style bunker and his herd developed major health issues. Two hundred goats died. He said there was never a positive conclusion reached as to what caused the deaths, but the silage was heavily implicated. His suspicion was that something went awry with fermentation in a poorly packed bunker. He's been using ag bags ever since with no problems. Brady feels the ag bags give him much better control of the ensiling process.

The ensiling process is one of fermentation and acidification, where naturally occurring bacteria consume the starches and sugars present in the forage, eventually consuming all of the oxygen and shutting off the decaying process. Once the proper level of acidity has been reached in the pile, the organic matter will then stabilize and cool, leaving a sweet smelling, "pickled" product that will keep for many months, sometimes years, so long as it isn't disturbed and more oxygen is introduced, which will begin the decaying process all over again.

The single most important factor to consider when ensiling any forage is the moisture content at the time of harvest. The bacteria need a certain amount moisture to synthesize the fermentation acids. There are a number of fermentation acids that develop in a pile of silage. The good ones are lactic acid and acetic acid. The bad ones are propionic acid and butyric acid. Secondary by-products such as ammonia and alcohol are also formed during fermentation.

Lactic acid should be the predominant acid present in any silage. It is odorless so there is no way to tell how much is present without a laboratory test. The presence of lactic acid from 8% to 10% indicates a good fermentation and the fermentation process progressed rapidly with a minimum of total spoilage in the pile. Acetic acid will also be present in silages and should be about 1/3 the level of lactic acid. The smell of acetic acid is similar to that of vinegar. If there's a lot of acetic acid present, it indicates the pile went through a slower fermentation with a greater loss of organic matter usually due to slow packing of the bunk or the forage was too dry when harvested. There's no real danger of high acetic acid levels in a silage pile; it only indicates that the pile took longer to stabilize and more organic matter vanished into thin air before the oxidation process came to an end. The longer a pile takes to stabilize, the greater the chance of undesirable bacteria getting into the silage such as clostridiums. *(Read More)*

Updates

LRP-Lamb Moves to Next Phase

During its meeting on May 6-7, the Federal Crop Insurance Corporation's board of directors approved expert review for the proposed modifications to the Livestock Risk Protection-Lamb (LRP-Lamb) program. It also directed that the manager of the corporation be authorized to take such action as necessary to enter into and execute contracts to review the submission prior to board action.

According to people close to this issue, this action is the next step in the process for the LRP-Lamb plan of insurance to be operational again.

Reprinted from American Sheep Industry Weekly May 9, 2014

American Sheep Industry – Fast Facts

A 15-page snapshot of the changes that have occurred in the US sheep industry over the past decades. A fascinating series of charts, tables and graphs. *Premier Sheep Newsletter May 2014*

UPCOMING EVENTS.....

<u>August 25-26, 2014: K-State Sheep & Meat Goat Center hosting Embryo Transfer Opportunity</u> Kansas State University Sheep & Meat Goat Center will host an embryo transfer opportunity on both August 25 & 26, 2014. If there is enough demand, August 27th may be available as well. We have a couple of technicians coming in to perform embryo transfer on a couple of ewes and does here at K-State. I visited with a few of you in the past who have mentioned you would be interested in the technology if it became available "closer to home." If you have a ewe or doe from which you would be interested in harvesting embryos, please contact Dr. Brian Faris at 785-532-1255 or <u>brfaris@ksu.edu</u>. Pricing information and availability will be available upon request. Space will be limited so please contact me as soon as possible to reserve your spot.

Kansas State Sheep & Meat Goat Center prepapring to host a Sheep AI Opportunity

Kansas State University Sheep & Meat Goat Center has been approached by New Horizon Genetics about hosting a Sheep AI date for Kansas producers. If you are interested in this opportunity, please contact Dr. Brian Faris at 785-532-1255 or <u>brfaris@ksu.edu</u>. <u>At this time a date has not been set</u>. I need to know how many producers are interested, possible numbers of animals from each producer, and the producer's target date for breeding.

March 28, 2015: Kansas State Junior Meat Goat Producer Day

Kansas State University will host a Junior Meat Goat Producer Day on March 28, 2015. The program will be held in Weber Hall on the K-State campus. A tour of the new K-State Sheep & Meat Goat Center will be available at the end of the event. This biennial event consists of topics related to selection, nutrition, health, showmanship, and management practices for goat project participants. If you have any questions or would like to participate as an attendee or sponsor, please contact Dr. Brian Faris, K-State Extension Sheep & Meat Goat Specialist, at 785-532-1255 or brfaris@ksu.edu.



Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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