DECEMBER 23, 2019 VOL. 3

THE BLEAT

A UGA Extension Newsletter for Georgia Sheep and Goat Producers

Winter is (or might be) coming...

By Caitlin Jackson
County Extension Coorinator/ANR Agent
Monroe County

What a wacky summer and fall we have had! Many middle Georgia counties experienced a serious summer drought and triggered D3 relief from Farm Service Agency. Then fall hits and we have several heavy soaking rains that created flash floods. What does this mean for winter? Potentially #struggleville. Winter grazing was planted late, if at all, and many producers have already made a dent in their hay or baleage reserves. If you have a chance to purchase more hay and have the ability to properly store it, I would highly encourage you to stock up. What weather can we expect for winter? Well it is Georgia so you never can tell and conflicting reports from various weather predictors range from "mild, with soakers" to "brisk and wet winter lasting into April". No matter what the weather does, "an ounce of prevention is worth a pound of cure" so it is best to be prepared for whatever may come our way.

UNIVERSITY OF GEORGIA EXTENSION

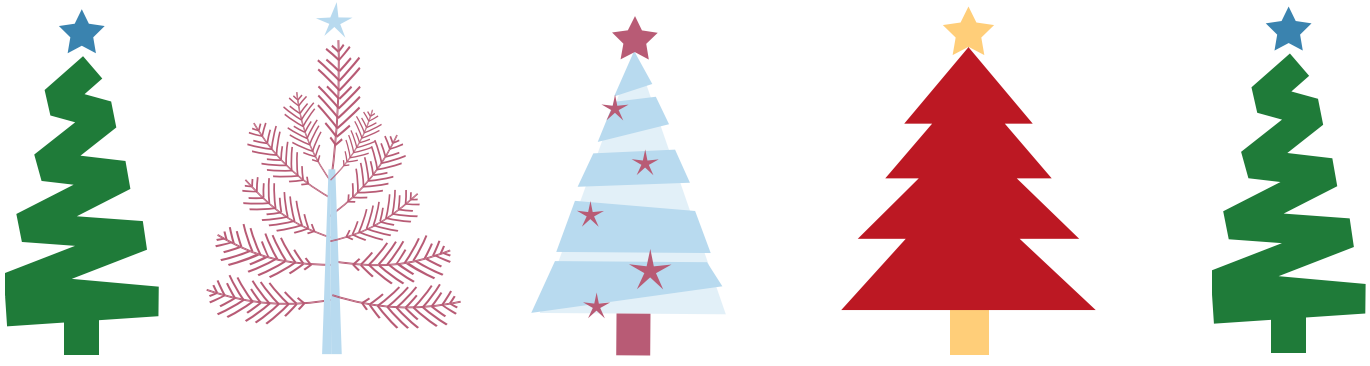
IN THIS ISSUE

DON'T FORGET

COUNTY EXTENSION OFFICES ARE CLOSED

DECEMBER 24 TO JANUARY 1

Offices will reopen for business January 2, 2020 at 8 am



American Consortium for Small Ruminant Parasite Control (ACSRPC) Meeting

by Dr. Niki Whitley, Fort Valley State University

An electronic meeting of the ACSRPC was held on December 9, 2019 with Fort Valley State University (FVSU) organizing the meeting as the coordinating institution for this group. Members from Arkansas, Wyoming, Texas, Delaware, Louisiana, West Virginia, Maryland and Georgia, among others, participated.

This group conducts research and develops educational materials (posted at www.wormx.info) focused on helping to manage small ruminant (sheep and goat) internal parasites (worms). At the meetings, current, planned and new ideas for research and education are discussed.

For this meeting, Dr. Jim Miller (Professer Emeritus, Louisiana State University) gave a brief update on the National Animal Health Monitoring System goat study/survey going on right now related to the use use of anthelmintics on U.S. goat operations and prevalence of deworming drug resistance/immunity in parasites. The initial collection is two-thirds completed. Producers needed to have goats with a minimum of 200 eggs per gram of feces (which is still very low for goats) to qualify for a second sample for purpose of testing for resistance using fecal egg count reduction testing after deworming. So far, 75% of farms met that minimum and there will be 200-300 farms included. The study will near completion by August 2020.

Continued on page 4

UPCOMING EVENTS

Jan 22-25 - **American Sheep Industry Association Annual Convention** in Scottsdale, AZ

Feb 21-22 - **State 4-H/FFA Breeding Doe and Breeding Ewe Shows** in Perry, GA

Feb 26-27 - **West Georgia Small Farm Conference** in Waco, GA. Registration is FREE for the first 120. Contact Paula Burke for registration (770)836-8546

Feb. 29 - **Wool Cleaning and Spinning Class** at FVSU with the Sheep and Wool Grower's Association. Class starts at 9 am, at the Meat Technology Center, $20 registration fee

March 14 - **FAMACHA and Small Ruminant Hands-on Training** in Tifton, GA. Contact Kim Post for Registration (715)572-5391

Cont. from page 3-

Some of the research discussed included a project at FVSU in collaboration with the United States Department of Agriculture Research Station in Booneville, Arkansas. The project was designed to compare how well goat and sheep parasite (worm) larvae migrate up diverse native forages/plants compared with bermudagrass. So far, there were not enough larvae available on the plants to tell if there may be differences, so more research is needed.

There was a report on research related to the fungus, Duddingtonia flagrans, which is available in "Bioworma®" products. This fungus has been shown to reduce pasture contamination by parasites which should reduce parasite infection in the animals if fed correctly. The fungus spores are fed to animals daily and they mature in the manure of the animal, trapping worm larvae inside the manure where they will die. Current research planned includes how to more economically use this potential parasite management tool such as feeding it free choice minerals (or just salt), or feeding every day (recommended by the manufacturer) vs every 2 or 3 days. There was also interest in looking at use of the product only during prime parasite issues/situations such as around the time of kidding/lambing when parasites really hit the female hard and then the female can infect pastures their offspring are grazing.

There is currently a vaccine for Haemonchus contortus (barberpole worm) called Barbervax® available in other countries. The U.S. goat industry is especially interested in this vaccine, especially since Canada is trying to obtain it for use. However, the company is not likely to release the vaccine in the U.S., so researchers in the ACSRPC are looking at developing one for our country in the future. This may take a while because parts of the vaccine needed are not FDA approved for use in the U.S. yet and then the vaccine itself would have to be approved. These steps generally take a few years and the vaccine is not yet developed/proven to work.

FVSU extension
Knowledge for Inspiring Lives!

Although the Southeastern region of the U.S. is known as a 'hot spot' for parasite problems, the barberpole worm causes problems all over the country. Therefore, members of the ACSRPC have developed programs in various areas of the U.S. to educate producers and other educators. For example, in the Western U.S., the USDA SARE (Sustainable Agriculture Research and Education) program funded projects to educate producers and determine the extent of dewormer resistance (immunity) in that area of the country. So far, 9 sheep flocks tested their animals and there was 80% resistance to the benzimidazoles (white drenches) and 58% resistance to ivermectin. The results for levamisole (i.e. Prohibit) were inconclusive. In the Northeast Region, an online FAMACHA© /integrated parasite management course was developed a few years ago (https://web.uri.edu/sheepngoat/famacha/) with videos and the process for obtaining a FAMACHA© card if desired.

Haemonchus contorrtus **(barber pole worm)**

There was discussion at this meeting about creating podcasts to go with our facts sheets on best management practices for parasite management (https://www.wormx.info/bmps). Infographics and other types of educational dissemination were also discussed. If you have ideas on how to get information out to people interested in goat and sheep production and parasite control methods, please let me know – you can reach me at whitleyn@fvsu.edu, 478-825-6577 or find me at my Facebook page: https://www.facebook.com/NikiWhitleyFVSU or https://www.facebook.com/FVSUAnimalScienceExtension/. If you would like to be included on the list for an electronic newsletter related to the ACSRPC (wormx.info), you can ask to be included by emailing: listserv@listserv.umd.edu and in the body of the message, write subscribe WORMINFO.

REDUCE LOSSES WHEN FEEDING HAY THIS WINTER

Caitlin B. Jackson
CEC/ANR Agent
Monroe County

While we may not be dealing with blizzards and plowing snow paths to get to livestock, winter in Georgia does come with its own set of challenges. Over the last couple of weeks, we have been dealing with a lot of cold and wet weather. During these wet and cold conditions sheep and goats burn more calories trying to stay warm, so hay consumption is key in winter feeding rations.

To make the most out of your hay resources, University of Missouri Extension Agronomist has three ways to reduce loss when feeding hay.

Feed hay in small amounts or in a feeder to minimize waste. When fed a limited amount of hay at a time, sheep and goats have less opportunity to trample and soil the hay. Feeding hay in a rack or feeder also limits the opportunity that animals have to trample or soil hay, and will reduce waste substantially if you intend to provide more than a day's worth of hay at one time.

Feed hay in well-drained areas. If you intend to feed hay in a single location all winter, then providing a footing such as crushed gravel or even concrete can help minimize problems with mud. Perhaps more cost effective is to move hay-feeding areas around the farm to minimize the damage to any one area of the pasture.

Feed hay stored outside before hay stored inside. Hay stored outside usually has more spoilage during storage and lower palatability than hay stored inside. Sheep and goats will waste a greater percentage of poor-quality hay than they will of good-quality hay. Animals fed high-quality hay early in the season will often refuse poor-quality hay when it is offered later.

LAMB: THE UNDERUTILIZED PROTEIN

By Hailey Robinson

ANR - Upson/Lamar Counties

Around the winter months, most tend to focus their meals toward soups and stews or try to stay with more traditional comfort foods. In our area those traditional protein choices tend to be beef, pork, or poultry. You see very little lamb and goat options in restaurants, let alone the grocery stores. Because of the lack in availability and demand, most do not know how to prepare lamb or may have never even tried it before.

I know in my home a staple winter meal was always shepherd's pie, made out of ground or shredded beef, mashed potatoes, carrots, corn, peas, gravy and whatever else my mother may have gotten her hands on. We all love those family favorites but why not mix it up a little, add in some minced lamb breast to change up the flavor profile or incorporate some lamb to your already ground or shredded beef.

The hardest thing about trying out new proteins is figuring out how to cook them. Here are some lamb tips to get started:

- Breast- Mince and add as a substitute to common ground recipes
- Leg- Slow roast your lamb leg with chopped herbs, olive oil, and notes of citrus
- Loin- Debone and roll loin roast, cook with olive oil, garlic, butter and herbs
- Shoulder- Slow cook with garlic, salt, herbs, and notes of citrus; could even add capers and anchovies for a more unique flavor

KIDS KORNER

Don't tell my lambs but I really like lamb chops! Showing lambs is really fun. My favorite part is during the shows. When anyone shows, they have to have good sportsmanship. This is because some people don't win and it isn't nice to rub it in their faces, or even get mad when you lose. At pretty much every show you will learn new tips. For example, my family and I went to this one show and the judge said that our lambs were not "fresh." We eventually asked someone, and they said that means that their skin is rough so it needs to be softer. She told us about special soap to use when we bathe them. It turns out, it worked!

When anyone shows they have to do hard, hard work. Every day you have to feed, water, and walk your lamb. Also, the night before the show you have to shear the lamb. It is just a rough shear. You do that so you won't have to work so hard to shear at the show. At the show the lambs have to look pearly white and just to add something, you can also make their feet really fluffy. After the show you have to bathe them with anti-fungal soap. After everything I have said, if you think that you can handle this, maybe you would want to show a lamb or two. If so, please contact Hailey Robinson (who is our agriculture agent) at the 4-H office in Lamar County or the agriculture agent in your county! I know they will be glad to tell you more.

By: Evie McEvers, Lamar County 4-H'er

COLD WEATHER CARE FOR SMALL RUMINANTS

By: Caitlin Jackson, ANR Agent - Monroe County

Middle Georgia doesn't often experience super cold weather but when we do, it's cold. Because of our more mild climate, sometimes the cold snaps can take us back a bit and throw off our game. As the old saying goes "an ounce of prevention is worth a pound of cure" comes in handy when preparing for cold weather. Basic needs for sheep and goats in cold weather is simple. By ensuring they have adequate water, extra feed, and shelter from rain and wind, they will survive just fine. However, if you have stock that are young, sick, or old, they may need a little TLC and require more than the rest of the herd.

Water is the first essential nutrient and necessary for proper digestion, but confirming that your animals are drinking enough in cold weather can be a challenge. Water intake will vary depending size, feed intake, and production status, but you should see sheep and goats consume at least one to three gallons per day. By keeping water temperatures at a minimum of 40°F animals will continue drinking. While there are heating systems for water troughs available, it may not be economical to have a heater in every water troth. It is best to choose a troth that you can easily access to either install a heater or add hot water manually and make that your herd's main water source during time of extreme cold.

Wool and hair sheep will naturally have superior insulation from the cold and goats should also develop thicker coats during winter, but they will still need extra energy to keep warm. Feed rations need to be adjusted during winter months to ensure that animals are eating enough calories, and a little extra boost in extra low temperatures is going to keep them in tip top shape.

If your animals are quickly finishing hay and have nothing left to munch on until their next feeding, you might want to put out extra, as fiber digestion produces extra body heat for ruminants. Grouping your herd by nutritional needs is best practice so you can make sure that everyone is getting what they need, not just what they want.

Most livestock are well adapted to living outside in cold weather and prefer to be outside compared to cooped up in an enclosed shelter. It is important that animals can take shelter so they can minimize their exposure to wind and rain. A wet goat in cold temperatures will require more energy to keep warm. Shelters can be as complex as you would like them to be, and can range from natural barriers to enclosed shelters. Enclosed shelters should only be utilized if you have enough resting space for each animal which for sheep and goats range between 10-15 square feet per animal. It is critical that enclosed animals have enough room to avoid trampling and clean dry bedding. Additionally, good ventilation will also minimize the spread of potential diseases.

Stock tank heaters can be added to troughs to keep water from freezing and can be purchased at many farm and ranch supply stores.

Caring for livestock in cold weather is not fun and I have yet to hear someone enthusiastically get on a pair of insulated coveralls and skip out to care for cattle in the cold. Cold weather brings on stresses for everyone on the farm, but taking a moment to evaluate your resources before the cold comes will make the cold weather a little easier to get through.

CONSIDERING CO-SPECIES GRAZING

Brooklyne Wassel
Agriculture & natural Resources Agent | Pike County

Co-species grazing consists of grazing more than one type of animal in a given system and has its fair share of benefits and challenges that should be considered by small ruminant producers. Benefits of co-species grazing include increasing pasture utilization, reducing the need for herbicides, increasing manure distribution, increasing yield per acre, diversifying markets, and parasite control. Though there are numerous benefits, maintaining several species in one area has its challenges such as different facility requirements, increased management and labor, personality disagreements, nutritional requirement differences, and feeding logistics.

Adding multiple species to one area requires an increased amount of grazing management in order to yield a desirable result. Understanding basic grazing principles is necessary for success. Effective grazing management requires constant regrowth of forage and high levels of nutrition sourced largely from leaf area. Strategies on moving animals to maximize the animal-plant-soil complex consists of options such as whether to utilize rotational, continuous, or lead and follow grazing. Producers must also consider the animal's impact on the forage system which depends on forage species, selectivity or animal preference, grazing intensity, stage of development of the forage, and weather conditions at the time of defoliation. Ultimately, the nutrient requirement of the animal must be matched to the forage type and growth to ensure the best plane of nutrition and that the animal's needs are met.

When choosing what type of animals to incorporate into a system, remember that anything that grazes will be putting pressure on the system even if it is not planned, such as wildlife. If pressure is being added to the system, the pros need to outweigh the challenges in order for it to be beneficial to producers. Consider adding cattle to a small ruminant system to diversify markets, decrease internal parasite pressure, and utilize a different type of forage within the pasture. One of the largest benefits of including cattle as a part of a co-species or multi-species program is parasite control because they are a dead-end host for numerous small ruminant internal parasites and will act as vacuum cleaners in the pasture. If cattle are a likely addition, facilities, high nutritional requirements, and larger system impacts are considerations that need to be made.

Horses can be added to systems possibly because they are already on the property or potentially for their aptitude for predator control when pastured with sheep and goats. They do utilize different parts of the pasture compared to small ruminants but they also have larger system impacts and can have very different facility requirements. Additionally, horses do have individual preferences both for pasture mates and their ability to deter predators.

To find success with co-species grazing programs, producers should match the available grazing to animal nutritional needs, have proper fencing for all animals incorporated in the system, manage based on forage height, and have an end use in mind for all animals involved.

"TWO WEEKS BEFORE YOUR FIRST EWES AND/OR DOES ARE DUE TO LAMB/KID, YOU SHOULD ORGANIZE YOUR SUPPLIES AND SET UP FACILITIES"

GETTING READY FOR LAMBING AND KIDDING

Seventy (70) percent of fetal growth occurs during the last 4 to 6 weeks of pregnancy. Most of the female's mammary (udder) growth is occurring during this period. At the same time, rumen capacity is decreasing. The result is the need for increased nutrition, usually a more nutrient-dense diet.

Extra nutrition is needed to support fetal growth, especially if the female is carrying multiple fetuses. Extra feed is needed to support mammary development and ensure a plentiful milk supply. Proper nutrition will help to prevent the occurrence of pregnancy toxemia (ketosis) and milk fever. It will ensure the birth of strong, healthy offspring of moderate birth weight.Birth weight is highly correlated to lamb and kid survival, with low and high birth weight offspring usually experiencing the highest mortality.

Nutrition during late gestation

During late gestation, energy is the nutrient most likely to be deficient. The level of nutrients required will depend upon the age and weight of the pregnant female and her expected level of production, i.e. singles, twins, or triplets.

To meet the increased energy needs during this period, it is usually necessary to feed concentrates (grain). In addition, if forage quality is low, it will be necessary to provide a supplemental source of protein and calcium.

Examples of late gestation feed rations are:

- 3.5 to 4 lbs. of medium to good quality hay plus 1.25 to 1.5 lbs. of concentrate.
- 4 to 5 lbs. of medium quality hay or pasture equivalent plus 0.5 to 1 lb. of concentrate .
- Limit the roughage intake of ewe lambs and doe kids and mature females carrying 3 or more fetuses and feed 1 lb. of grain per fetus.

It is important not to underfeed or overfeed pregnant females. Inadequate nutrition may result in pregnancy toxemia, small and weak lambs/kids, higher lamb/kid mortality, reduced colostrum quality and quantity, poor milk yield, and reduced wool production (in the offspring) via fewer secondary follicles.

Fat females are more prone to pregnancy toxemia. They experience more dystocia (birthing difficulties). Overfeeding can result in oversized fetuses that the female cannot deliver on her own. It costs extra money to make ewes and does fat.

In addition to feeding the right ration, you must also practice good feed bunk management. All ewes and does should be able to eat at once. If there is inadequate feeder space, some animals, especially the small, young, old, and timid ones, will not get enough to eat.

Feeding hay in a bunk or feeder will not only space animals out but it will also aide in reducing loss due to waste.

Pregnant ewe lambs and doe kids should be fed separately from mature females. Their nutritional requirements are higher because in addition to being pregnant, they are still growing. They may also have trouble competing for feeder space. You should never feed pregnant ewes or does on the ground. This is how diseases, especially abortions, are spread.

Continued on page 10

Continued from page 9

Vaccinate for CDT
Pregnant ewes and does should be vaccinated for clostridial diseases (usually clostridium perfringins type C & D and tetanus) approximately one month prior parturition. Vaccinated females will pass antibodies in their colostrum to their newborn lambs/kids. Females that have never been vaccinated or whose vaccination status is unknown will require two vaccinations at least 2 weeks a part. Males should be vaccinated at the same time, so they are not forgotten.

Worm control
The most important time evaluate the need to deworm a ewe or doe is prior to parturition. This is because pregnant and lactating ewes/does suffer a temporary loss in immunity (as a result of hormonal changes) that results in a "periparturient rise" in worm eggs.

Deworming with an effective anthelmintic will help the ewe/doe expel the worms and will reduce the exposure of newborn lambs and kids to worm larvae. It will reduce the worm burden when the ewes/does are turned out to pasture in the spring.

Deworming can be done at the same time as CD-T vaccinations. An alternative to deworming the flock is to increase the level of protein in the diet. Protein supplementation has been shown to decrease fecal egg counts in peri-parturient ewes. Valbazen© should not be given to ewes during the first trimester of pregnancy.

Feed a Coccidiostat
It is a generally a good idea to feed a coccidiostat (Bovatec®, Rumensin®, or Deccox®) to ewes and/or does during late gestation. All sheep and goats have coccidia in their digestive systems. Feeding a coccidiostat will reduce the number of coccidia being shed into the lambing and kidding environment.

You should continue feeding the coccidiostat through weaning. In addition, there is evidence to suggest that feeding a rumensin during late gestation will aid in the prevention of abortions caused by Toxoplasma gondii, which is a coccidia organism harbored by domestic cats.

Coccidiostats, especially rumensin, can be fatal to equines (horses, donkeys, mules).

Getting your supplies and equipment ready
Two weeks before your first ewes and/or does are due to lamb/kid, you should organize your supplies and set up your facilities. While the general rule of thumb is to have one lambing pen per ten females, you may need more if your lambing and kidding is tightly spaced. A lambing pen, also called a “jug,” is a enclosure (4 x 5 ft. or 5 by 5 ft) where you put the dam and her offspring together for 1 to 3 days to encourage bonding and for close observation. Even with pasture lambing/kidding, you will want a few pens in case you have some problems.

At least 14 days ahead of time, you should bring your ewes or does to the location where they will be lambing or kidding. This will enable them to manufacture antibodies specific to the environment in which their offspring will be born. Lambing and kidding can occur in a well-bedded barn or on a clean pasture. The area should be dry and protected from drafts.

This article was written in 2005 by Susan Schoenian.

Suggested Lambing and Kidding Supplies

- Propylene glycol or molasses
- Calcium borogluconate
- 50% dextrose
- Syringes and needles
- Bearing retainer (spoon) or prolapse harness
- Rubber gloves, protective sleeves, or latex gloves
- OB lubrication
- Nylon rope, snare, or leg puller
- OB S-curve needle
- Towels and rags
- Antibiotics
- Oxytocin
- Thermometer
- Gentle iodine (or other disinfectant)
- Frozen colostrum (ewe, doe, or cow)
- Esophageal feeding tube
- Milk replacer
- Bottles and nipples
- Scale and sling
- Halter
- Ear tags
- Pocket record keeping book

HOLIDAY LEG OF LAMB

YIELDS: 8 - 10
PREP TIME: 0 HOURS 15 MINS
TOTAL TIME: 2 HOURS 30 MINS

Ingredients

- 1/4 c. plus 1 tablespoon extra-virgin olive oil, plus more greasing
- 3 cloves garlic, minced
- 1 tbsp. minced rosemary, plus 2 sprigs
- 1 tbsp. minced thyme
- 1 (6 lb.) leg of lamb
- kosher salt
- Freshly ground black pepper
- 2 heads garlic, cloves peeled
- 8 oz. cipollini onions
- 2 lemons, halved

Directions

1. Heat oven to 400°. In a small bowl, combine 1/4 cup oil, garlic, chopped rosemary, and thyme.
2. Place lamb in a large roasting dish, then season all over with salt and pepper.
3. Brush herb oil all over lamb (you won't use it all right now). Roast 30 minutes.
4. Meanwhile, in a medium bowl, stir together whole garlic cloves, onions, rosemary sprigs, and lemons with 1 tablespoon oil, salt, and pepper.
5. Reduce oven to 350°. Spread garlic, onions, rosemary, and lemon halves evenly around lamb, then coat lamb in more herb oil. Add ¼ cup water to roasting dish, then roast for 1 to 1 ½ hours more, until meat thermometer inserted into the thickest part of the roast registers about 145° to 150°.
6. Let lamb rest 15 minutes before carving and serving.

SUBMITTED BY HAILEY ROBINSON

Contributing County Agents

CAITLIN JACKSON
Monroe County

CONTACT
E-mail: crbenn@uga.edu
Office: 478-994-7014

HAILEY ROBINSON
Lamar/Upson Counties

CONTACT
E-mail: hrobinson@uga.edu
Office: 706-647-8989

BROOKLYNE WASSEL
Pike County

CONTACT
E-mail: brooklyne.wassel@uga.edu
Office: 770-567-2010

DR. NIKI WHITLEY
Fort Valley State University Cooperative Extension
Contact
Phone: 478-825-6577
Cell: 478-391-4840
Email: whitleyn@fvsu.edu

UNIVERSITY OF GEORGIA
EXTENSION

FVSU extension™

Knowledge for Inspiring Lives!