



Winter 2023 Newsletter



Letter from the President

Hello,

We've been enjoying a very mild winter season so far, which has made lambing prep quite a bit more bearable than a typical year. Our sheep have been happy about their winter grazing accommodations, and rather than rushing through chores to get back in the house as quickly as possible, we've been spending time walking the pastures and keeping tabs on flock health.

While making plans for the upcoming year, take note of the upcoming events we have taking place in 2024. The EAPK Symposium and Sale will be held in Cookeville, Tennessee at the Hyder-Burks Agricultural Pavilion, a venue many of you may be familiar with from past KHSI Expos. If you're a real planner, also take note that we have our date and location for the 2025 Symposium, in Elizabethtown, Kentucky. For those of us who can't wait until summer for good in-person educational content, the ASI Convention is coming up in January, and the Appalachian Grazing Conference is in March.

It's also the time of year to renew your membership and consider running for the Board of Directors. We will have three spots up for election. I would like to encourage everyone to please consider. If you have any questions do not hesitate to reach out to me. All candidates must email me a short bio with their intention to run by June 13th.

It has been another wonderful year for EAPK full of great education and offerings of elite Katahdin genetics. The future is bright and we are looking forward to another great year ahead.

We would like to wish everyone Happy Holidays and good luck lambing!

Brad Carothers
President

New on the EAPK Website

- [Winter Grazing for Livestock: Enhancing Animal Performance, Health and Farm Profitability](#)
- [Producer Profile: Alex Caskey from Barred Owl Brook Farm, NY](#)
- [The Nuts and Bolts of EBVs](#)
- [Marketing Tips](#)
- [Lambing Interventions](#)



Our newsletters contain a lot of useful information and tips, but it can be difficult to find them. **To make it easier, selected Timely Topics and articles are now available as blogs.** Use the tags on the Blog webpage to locate and view topics of interest. You can also find these articles by scrolling through the blog archive; the articles were inserted on the dates that they appeared in the newsletters. **We also added a “featured blog” to the home page where revolving blog posts will be featured.**

Time to Renew your Membership!

[Click HERE to Renew](#)

Your membership dues help us sponsor events and promote the use of production oriented Katahdins.

Three membership types are available:

- **Farm membership** - \$50 NSIP members only; two votes per paid membership
- **Individual/Corporate membership** - \$30 NSIP members only; one vote per paid membership
- **Associate membership** - \$30 Non-NSIP members; unfortunately non-NSIP members are not eligible to vote.



Timely Topic: Hay and Water

Considerations for Winter Feeding

By: Isabel Richards

We all know that we need to calculate how much hay to put out for our sheep to make sure that they have adequate nutrition over the winter. Remember that sheep like to do things at the same time, so make sure you put out hay in a manner that allows everyone to eat at the same time. Our flock of 160 ewes require two 4x5 round bales of hay per day to meet their nutritional needs, we put out eight bales at a time though and only feed every four days. This way everyone has access to feed all the time and there is not too much pushing and shoving when all the ewes want to be the first to get fresh hay. This is especially important because we breed our ewe lambs and do not feed them separately, so they need to be able to access feed without too much competition from the big girls.

Sheep on pasture do not require a lot of water but you will notice that their water needs increase when they start eating hay. You might have to change to a larger water container or refill water more frequently than when you are on pasture. Be mindful of where you place your waterers in the barn, how will you empty it if one of the sheep steps in it, or deposit a few manure pellets in the water? You cannot dump the water out in the middle of the barn.



In areas with continued below freezing temperatures watering your animals can be challenging. Automatic waterers with the water supply buried below the frost line is a sleek solution but expensive to add. For those of us without this luxury, there are a few things you can do.

- In general, the larger the water tank, the longer it will take to freeze, so one larger container will be easier to keep defrosted when compared to multiple smaller tanks. Share a water container between animals in adjacent pens, if possible. Ideally your tank is sized so that the sheep almost empty it twice a day, so you do not have a lot of ice building up in the tank.
- Use plastic tanks rather than metal.
- Remove sheets of ice on the surface, rather than just breaking the ice to add more water. Just like your drink stays cooler with added ice, your water will freeze sooner the more ice you leave in the container. My dogs love to play with the pieces of ice we throw out of the barn.

- Water tank placement: Ideally your tank is close to a door (for ease of removing ice or emptying the tank), gets direct sunshine at least part of the day and is out of the wind.
- Place a sheet of foam insulation or a rubber mat underneath your tank to add some insulation between the ground and the tank.
- You can build an insulated box that your water tank sits in.
- If the above does not keep your water in liquid form, then add a tank heater, but...
 - 1.They are expensive to run and you need electricity.
 - 2.Make sure that your heater will switch off if it gets too hot (remember the idea is to keep the water from freezing, not making warm water) and use a caged heater in plastic tanks.
 3. Beware of stray voltage if you have an energizer running nearby. You will see sheep going to the water, but pulling away as soon as their lips touch the water.

[Click here for additional information on keeping water from freezing](#) on the EAPK blog.

Timely Tips

Head Tilt

Is this just a cute, inquisitive lamb? Maybe, but anytime a sheep spontaneously presents with a head tilted to one side, especially with an unsteady gait, a serious, possibly life-threatening condition should be ruled out. Rapid therapeutic intervention may be necessary; a veterinarian consult can help diagnose the cause so that the appropriate treatment path is taken. Common causes of head tilt include:

- Listeria monocytogenes
- Vestibular (middle ear) disease
- Polioencephalomalacia (Polio, PEM)).
- Brain abscess
- Trauma
- Meningitis
- Hepatic encephalopathy



Winter Watering

Clean water is essential to the health and performance of your sheep. A lack of water may limit feed intake which can be a concern for ewes with multiple lambs in late gestation and lactation. Cold, icy water can increase the animal's maintenance needs as the ewe needs to spend her already limited energy to heat the water to body temperature.

2023 UF Ram Test Sale and Small Ruminant Short Course Recap

Dr. Brittany Diehl, DVM, MS

Clinical Assistant Professor & Small Ruminant Extension Specialist
University of Florida College of Veterinary Medicine

The second annual UF/IFAS Small Ruminant Short Course was hosted Friday, September 29th and Saturday, September 30th in Gainesville, FL. The two-day conference and trade show was a great success! Producers, extension specialists and agents, researchers, students, and allied industry members attended this in-person, educational event. The program included lectures, FAMACHA certification training, lamb carcass evaluation, lamb cooking demonstration, and facilitated networking amongst industry professionals and producers. The attendance for this year's event was amazing, with 233 attendees. We look forward to making this event bigger and better each year. We hope that you will join us for the event in September 2024 in Gainesville, FL!



In addition to the short course, the 2023 UF Ram Test Sale (via Willoughby Sales online auction) was also held during the event. There were 17 rams sold for an average of \$922/ram and the highest selling ram sold for \$5,350. NSIP enrolled rams, average sale price was \$3,575/ram. This program just completed its 3rd year and has grown in popularity amongst sheep producers. In response to the small ruminant industry's desire for expansion of these programs, we will be launching our inaugural UF Buck Test & Sale in 2024. This Buck Test will run parallel but separately from our UF Ram Test. The online sale of the top performing rams and bucks will take place at the 2024 UF/IFAS Small Ruminant Short Course.

Clay Whitehead and Dr. Brittany Diehl lead the coordination of these events. Please be sure to check our website or social media page (Facebook, Instagram – UF Small Ruminant Extension) for updated information as it relates to all these upcoming events. 2024 dates for these programs will be released this winter. We welcome participation from producers nationwide and hope that you might consider being a part of our program(s) in the future!

Please feel free to contact us with any questions: Clay Whitehead at (904) 796-0441, e-mail jacobcwhitehead@ufl.edu, or Dr. Brittany Diehl at (352) 294-4387, e-mail bn.diehl@ufl.edu.

Timely Tips

Vaccinating Pregnant Ewes

As lambing nears, remember to give your ewes an annual CDT booster 4 weeks before lambing. This provides tetanus protection for ewes in case of any internal bruising or injury related to lambing, as well as ensuring high antibody levels in the colostrum to protect young lambs against both tetanus and clostridial disease.



Prolapse or Labor? What is going on here?

Prolapse: An early vaginal prolapse will appear as a small pinkish-red vaginal bulge, usually close to lambing. Often the ewe is seen straining while lying. The bulge often retracts back into the vagina when standing. If left untreated, it becomes more serious as more of the vagina is pushed out. Early intervention could save the life of the ewe and her unborn lambs. For more information on prolapses [click here](#).

Lambing: When lambing is imminent, a fluid filled sac appears from the vagina. The initial sac is usually filled with a pale yellow, sometimes tea colored fluid. Once this sac is visible, the ewe should be pushing and a lamb should appear shortly. After the first lamb is born more sacs will appear with very dark, bright red, yellow or tea colored fluid. For more information on when intervention might be necessary [click here](#).



Ewe with prolapse



Ewe lambing

Preparation for Lambing

Don't forget to check and restock your lambing supplies. It's especially important now that antibiotics must be obtained through your veterinarian and that some supplies and medications are backordered. The best time to establish or renew a relationship with a veterinarian is BEFORE you need them.

[Click here](#) for a list of common supplies.

Virginia Tech Southwest AREC Forage-Based Ram Test 2023 Test & Sale Update

By: Lee Wright – SWAREC, Superintendent

The VA Tech Southwest AREC Forage-Based Ram Test in Glade Spring, VA had another exceptional year in 2023. One hundred thirteen (113) rams were delivered to the testing facility May 30, from 33 flocks, representing 11 states (VA-TN-NC-GA-MO-KY-PA-IA-OH-FL-MD). Rams participating were evaluated for the 70-day test period from June thru August. Additional information, and specifics on how the test is run [can be found at our website HERE](#).

This test and sale have proven to be a successful tool for consignors and buyers alike, to identify rams with the genetic capability to effectively manage parasite burdens, and maintain acceptable, or increased post-weaning growth. Test performance is measured at 14-day intervals, with data collected for fecal egg counts (FEC), average daily gain (ADG), and FAMACHA scores. At the completion of the test period, all data are analyzed, and top performers in the test are either offered for public auction, or can be retained by consignors for use within their own breeding program.

2023 Sale structure followed the new guidelines established in 2022. Only the top 50% of rams, based solely on test performance, were eligible for the sale. Within this top tier of rams, sale order was set based on statistical analysis for weight gain, and fecal egg count evaluation for parasite resistance (50:50 credit for each attribute). Within this group, rams also had to pass a breeding soundness exam, and be acceptable for soundness and structure in order to advance to the sale held on September 22.

Animal performance data from this test has proven to be an asset in many flocks making sire selections from tested rams. Test data, coupled with estimated breeding values (EBV's) from rams enrolled in NSIP, have also proven to be in high demand at the annual sale. Utilizing these two data sets have helped both seedstock and commercial producers, and seems to be a key to success in many flocks identifying their next flock sire. This strategy helps buyers find rams that offer exceptional post-weaning gains, and a higher likelihood of parasite resistance to their future progeny.

Many rams identified through this testing program, and later enrolled in NSIP flocks as breeding sires, have shown to have progeny that either meet or exceed potential performance based on the test results shown within the data of the ram test at SWAREC. The chart below summarizes 2023 sale data for rams with data to back performance.

<u>Breakdown of Sale Categories:</u>	<u># Rams Sold</u>	<u>Average Selling Price</u>
Total Rams in Sale	50	\$1,632
Sale Rams from NSIP enrolled flocks	31	\$2,068
Sale Rams from Non-NSIP flocks	19	\$921

Sheep GEMS Update

Lambing Assistance and Udder Health Scores

Ron Lewis†, Tom Murphy‡, Brad Freking‡, and Joan Burke§

†Department of Animal Science Department, University of Nebraska-Lincoln, Lincoln, NE

‡USDA ARS US Meat Animal Research Center, Clay Center, NE

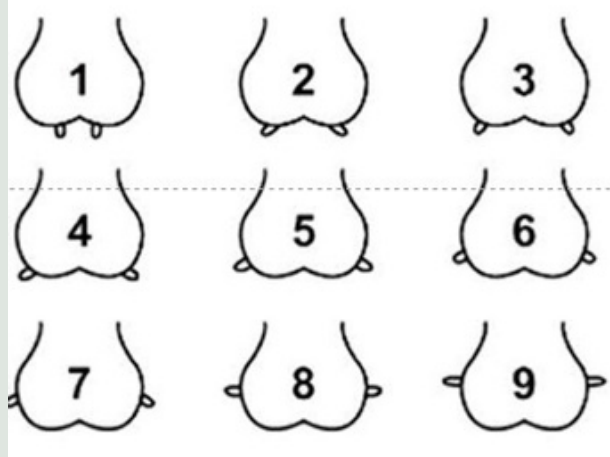
§USDA ARS Dale Bumpers Small Farms Research Center, Booneville, AR

Katahdin sheep are being raised in flocks across the U.S. that differ in climate and management. Breeding for climatic resilience and robustness across these environments is key to ensuring success. Two aspects of fitness are lamb survival and udder health. In Sheep GEMS, in collaboration with seventeen NSIP Katahdin breeders and three USDA ARS facilities with Katahdin flocks, we are exploring measurements that provide insights on genetic merit for fitness.

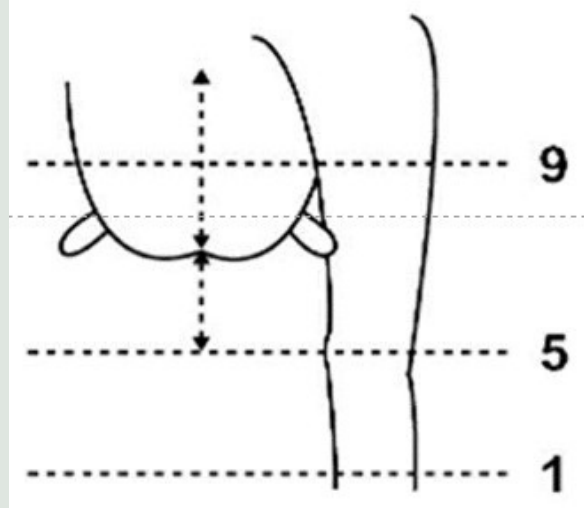
Lambing assistance, which affects survival, is being evaluated in two ways. The first is based on whether the ewe herself required assistance. When observed to lamb, ewes are being scored as not requiring assistance or, if assistance was required, due to management (to benefit the shepherd), moderate lambing difficulty, or severe lambing difficulty. Complete lambing information is available on 880 Katahdin ewes from one lambing season in Sheep GEMS so far with intriguing preliminary results. Over half (55%) of the ewes were monitored at lambing time, with most (72%) not requiring any assistance. Where assistance was provided to benefit the ewe (rather than the shepherd), in nearly all cases she only needed moderate assistance. Severe lambing difficulty was rare. Also, ewes with twin, as compared to single and triplet, litters typically required less assistance.

If a ewe was provided with assistance, her lambs were assigned their own lambing assistance code. Several of those codes relate to abnormal presentation such as one or two legs back, head back, back legs first, and breech. When moderate assistance was needed, it was almost always due to an abnormal presentation.

Teat Placement Score



Udder Depth Score



Udder health is being evaluated by assigning a 1-to-9-point score to the depth of the udder and to the placement of the teats. For udder depth, a score of 1 is an udder that hangs close to the ground while a score of 9 is an udder up close to the abdomen wall; a score of 5 is an udder hanging down to the ewe's hocks. For teat placement, a score of 1 coincides with teats pointing straight down (toward the ground) while a score of 9 coincides with teats pointing straight out to the side; a score of 5 are teats pointing outward at a 45-degree angle. Based on anecdotal evidence, an udder depth score of 7 and a teat placement score of 5 are thought to be ideal as they are associated with lower risks of mastitis and heavier weaning weights.

Based on records from the one lambing season, udder depth scores decreased from 8 to 6 as ewes aged from 1 to 6 years of age and older. Teat placement scores, however, were typically 5 across ages. With the 'best' scores intermediate rather than extreme (i.e., 1 or 9), coupled with the age trend for udder depth, selection to improve udder health will be challenging. Overcoming that challenge by defining pragmatic ways to incorporate udder health into the breeding program is an aim of Sheep GEMS.

These results are preliminary with much more to do. For instance, we need to consider the impact of lambing assistance and udder health scores on ewes' lifetime performance and longevity, and on lambs' survival and weaning weights. Those evaluations depend on engagement by Katahdin breeders in Sheep GEMS providing us with high quality data. We look forward to continuing to work with you.

Acknowledgements: We thank the many U.S. sheep associations, including the Eastern Alliance for Production Katahdins, the Katahdin Hair Sheep International, the National Sheep Improvement Program, and Katahdin sheep producers, for their contributions to this research. This work is supported by the Organic Agriculture Research and Extension Initiative (grant no. 2016-51300-25723/project accession no. 1010329), and by the Agriculture and Food Research Initiative Competitive Grant (grant no. 2022-67015-36073/project accession no. 1027785), from the USDA National Institute of Food and Agriculture. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.



Quantifying the Climate Benefits of Prescribed Grazing

Dr. Andrew Weaver, NCSU Small Ruminant Specialist

Dr. Camren Maierle, American Lamb Board

The American Lamb Board recently received a USDA Climate Smart grant to explore the potential climate benefits of prescribed grazing. The Natural Resource Conservation Service defines prescribed grazing as “a planned grazing system [that] involves an orderly sequence of grazing and resting grassland.” This grant follows the completion of the Michigan State University study on the environmental footprint of the US sheep industry and associated recommendations for greenhouse gas mitigation in lamb production. These recommendations include implementing prescribed grazing practices and improved animal productivity to reduce enteric methane production per unit of lamb produced.

While previous work funded by the American Lamb Board focused on animal emissions, this new project will examine the soil, forage, and animal interactions. Franzluebbbers (2022) illustrated how conservation land management practices can improve root-zone enrichment of carbon and nitrogen concentrations and Mosier et al. (2021) suggested adaptive multi-paddock grazing may improve carbon sequestration and nitrogen retention relative to continuous grazing. The majority of this work was done using cattle in the Southeast US. The American Lamb Board Climate Smart project will be an opportunity to show the impact of sheep grazing in diversified geographical areas and production systems on soil carbon sequestration. This project will run through 2027.

Four pilot sites have been selected to quantify the impact of prescribed grazing practices on soil, forage, and animal parameters and a research team has been developed with faculty members at the associated land grant institutions and USDA. These sites are located in Texas, California, Montana, and North Carolina. The site in California focuses on the use of sheep for fire prevention and the North Carolina site uses Katahdin sheep in a solar grazing system. Data collection will begin in 2024 with comparisons of prescribed grazing areas to neighboring areas without prescribed grazing. Since changes in soil carbon and nutrient concentrations typically occur slowly, testing sites have been identified that have already been implementing prescribed grazing practices for a number of years. In addition to the pilot sites, 150 producer farms across the country will be recruited to provide data for this project. Participating farms will be required to record grazing practices and production metrics and technical consultation will be available by regional experts. Monetary incentives will be available for participants and the sign-up process will begin in 2024.

Stay tuned for more information about this project and preliminary results as the project progresses. Specifically related to solar grazing, educational workshops will be starting across the country in 2024 to address this opportunity to grow the US sheep flock while practicing climate-smart vegetation management around solar panels. For more information about this project, contact Camren Maierle at camren@americanlamb.com.





Upcoming Events

[2024 ASI Annual Convention](#), January 10-13,
2024, Denver, CO

[2024 Appalachian Grazing Conference](#),
March 7-9, 2024, Morgantown, WV

EAPK Annual Symposium
July 13, 2024, Cookeville, TN
July 12, 2025, Elizabethtown, KY

The 3rd Monday of each month at 7PM EST -
Open Forum Discussion via zoom
<https://us02web.zoom.us/j/81720266013>



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