Published quarterly by University of Maryland Extension

Wild & Woolly

Maryland's Sheep & Goat Producer Newsletter

Volume XV Issue I Winter 2021

Solar Grazing With Sheep

By Susan Schoenian

By 2030, fifty percent of the electricity in Maryland will need to come from renewable sources, such as solar. Other states have similar mandates. Solar panels capture sunlight and turn it into electricity. The panels can be mounted on rooftops or ground-mounted, (common for larger systems and utility scale).

One of the biggest criticisms of solar is the loss of farmland or other valued lands. Another complaint is how the vegetation under and around the panels is maintained, usually with mowing and spraying, which seems contradictory to clean energy. Still others do not like how the arrays disrupt rural landscapes. The obvious solution is to combine solar with agricultural production: called agrovoltaics.

While solar may eventually be compatible with many more types of agriculture, sheep are currently the favored enterprise. Sheep are economical and eco-friendly lawnmowers and weed eaters. They fit under the panels. They don't block sunshine. They don't damage the infrastructure. The panels provide shade and shelter. Solar sites are usually enclosed in chain link (or other secure) fences, which keeps predators out, so there's usually no need for livestock guardians. Watering needs to be considered when the sites are prepared for grazing. Portable fencing can be used for rotational grazing.

It's not uncommon for solar companies to pay landscapers "big bucks" to maintain solar sites. Sheep are a better option: less expensive, more environmentally - friendly, and more socially-acceptable. Solar offers sheep producers a way to add

Continued on page 5

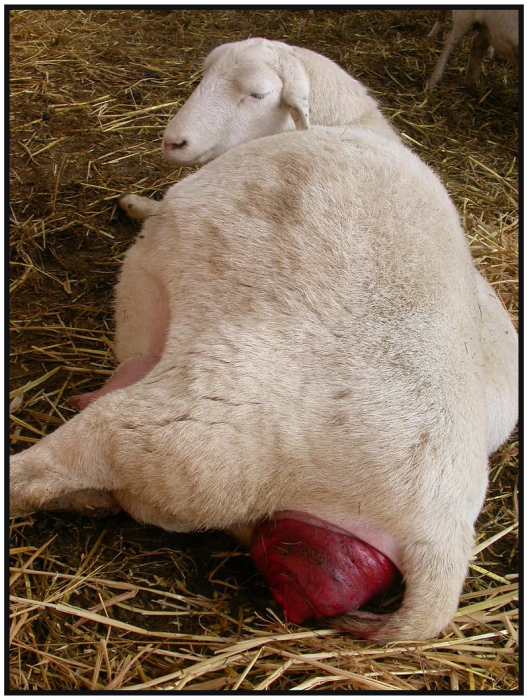
Image courtesy of the American Solar Grazing Association.

In This Issue

- Vaginal Prolapse: Risk Factors
- Dealing With Difficult Births
- Dewormer Resistance: In a Nutshell
- Treatment To Prevent Parasites
- Backyard Farming
- WVU Texel Project
- 2021 MD Sheep & Wool Festival Will Be Virtual
- Virtual Sheep & Goat Skillathon
- 2021 MD Sheep Shearing School
- Raising Sheep/Goats In Obsolete Poultry Houses
- Recommended Online Resources
- Small Ruminant Research At WMREC
- Update on Ivermectin and Covid

Vagina Prolapse: What are the Risk Factors?

A vaginal prolapse is when the vagina is pushed outside the vulva. It usually occurs in the month prior to parturition. It is more common in sheep than goats. There is no single cause of vaginal prolapse, but there are many factors which may increase the risk.



- **Obesity (BCS: ≥4)**
  Excessive body condition and abdominal fat are considered risk factors for vaginal prolapse. as well as other reproductive problems. It's usually best to aim for a body condition score of 3 to 3.5 at the time of parturition, less for more extensively managed ewes/does.

- **Age**
  Vaginal prolapse is more common in older females.

- **Nutrition**
  Factors which slow down digestion or cause digestive upsets can predispose females to vaginal prolapse. High fiber diets (poor quality forage), as well as excessive feeding of concentrates have been implicated as risk factors.

- **Estrogen**
  Hay or pasture containing a high percentage of alfalfa or other legumes may be a contributing factor to vaginal prolapse due to plant estrogens.

- **Housing**
  As pregnancy progresses, female get bigger and so does their requirements for space: trough space and lying down space.

- **Litter size**
  The increased size of the pregnant uterus is definitely a risk factor for vaginal prolapse. According to a New Zealand study (2014), there is a 5x increase risk of vaginal prolapse in ewes with twins and a 11-12x increased risk in those with triplets compared with those carrying singles. This also makes breed a risk factor, with highly prolific breeds usually at greater risk for prolapse.

- **Other Health Issues**
  Prolonged lying down due to lameness or subclinical hypocalcemia or acidosis can predispose females to vaginal prolapse.

- **Shearing**
  According to the New Zealand study, ewes that were sheared during pregnancy experienced fewer vaginal prolapses.

- **Exercise**
  Too much or too little exercise is often cited as a risk factor for vaginal prolapse. It is recommended that heavily pregnant females not be fed in large fields where they have to run a distance for feed. At the same time, housed females may be more prone to prolapse due to limited exercise.

- **Gravity**
  Gravity may cause females facing uphill while lying down to be more prone to vaginal prolapse. It is recommended that heavily pregnant females not be kept on steep slopes. It has also been suggested that females that stand on their hind legs to feed (out of a hay rack) may be more prone to prolapse.

- **History**
  Once a female suffers a vaginal prolapse, she is very likely to prolapse again in future years. In the New Zealand study, 35-40 percent of ewes that prolapsed had previously prolapsed.

- **Genetics**
  Replacement females should not be retained from females that experience vaginal prolapse, as there is a genetic component.

Continued on page 9

Dealing with Difficult Births

By Susan Schoenian

Dystocia means difficult birth. The official definition is when birth takes more than an hour after the rupture of the fetal membranes (water bag). Dystocia could be a prolonged unassisted birth or a birth in which assistance was provided. Dystocia causes the death of many ewes/does and lambs/kids.

There are three primary causes of dystocia: fetopelvic disproportion, malpresentations, and complications. Fetopelvic disproportion is when the lamb/kid is too big to get through the pelvic opening. It is most common with singletons and large birthweights. The head, shoulders, hips are the most difficult parts to get through the birth canal. Some big lambs/kids just need a little traction. Others require patience and perseverance and in extreme cases, extreme measures.

A malpresentation is an abnormal presentation of the fetus at the time of birth. You can find various diagrams of abnormal presentations with explanations on how to correct them. Some are easy to correct. Others require more manipulation (and patience). Normal presentation is “diving”: two front feet with the head resting on the front legs. Unless there’s something else going on, the ewe/doe should be able to deliver the baby on her own. Backwards (hind legs first) can also result in a normal birth, though there is some risk of suffocation if the umbilical cord breaks before the head is out. Whenever you observe a baby coming backwards, it’s best to pull it out.

Backwards is different from breech. In a breech birth, the rear is coming first, but the legs are still in the uterus, tucked under. Only the tail may be present in the birth canal. The ewe/doe cannot deliver a breech baby on her own. In fact, sometimes it is hard to notice know long she’s been “in labor.” Assistance is required with breech births. The baby should not be turned around. It should be delivered backwards after the hind legs are extended into the birth canal. You’ll need to push the baby back into the uterus to do this. Breech births are a little tricky but can be handled with a little experience (and confidence).

Elbow locks and one or more legs back are the most common malpresentations and the easiest to correct. Heads can present more difficult challenges, especially when the head is twisted back in the birth canal, in which case it must be righted before the baby can be delivered (easier said than done). If just the head is sticking out of the vulva, it is usually necessary to return the head to the birth canal, unless there is one leg out and the baby can be pulled out without extending the other leg. Swollen heads can present some challenges, as they can be difficult to push back in. Fortunately, those swollen, gross-looking heads can survive for quite long periods of time in the “hung” position.

Various complications can cause difficult births. The most troublesome is ringworm. Ringworm is when the cervix fails to dilate. A successful outcome is usually only achieved with a caesarian section (done by a veterinarian). If the cervix is partially dilated (“false” ringworm), it may be possible to manually stretch the cervix to get the baby out. The female may also respond to drugs. False ringworm is sometimes caused by premature intervention. True ringwomb is not fully understood, though there may be a genetic component.

Most sheep and goat producers can get comfortable dealing with difficult births. At the same time, it is important to have a veterinarian on-call that can assist with more complicated situations. Mentors can also be valuable, especially to new shepherds. When dealing with difficult births, one of the most important things is knowing when to get help. It is never acceptable to let a ewe/doe endure prolonged suffering.

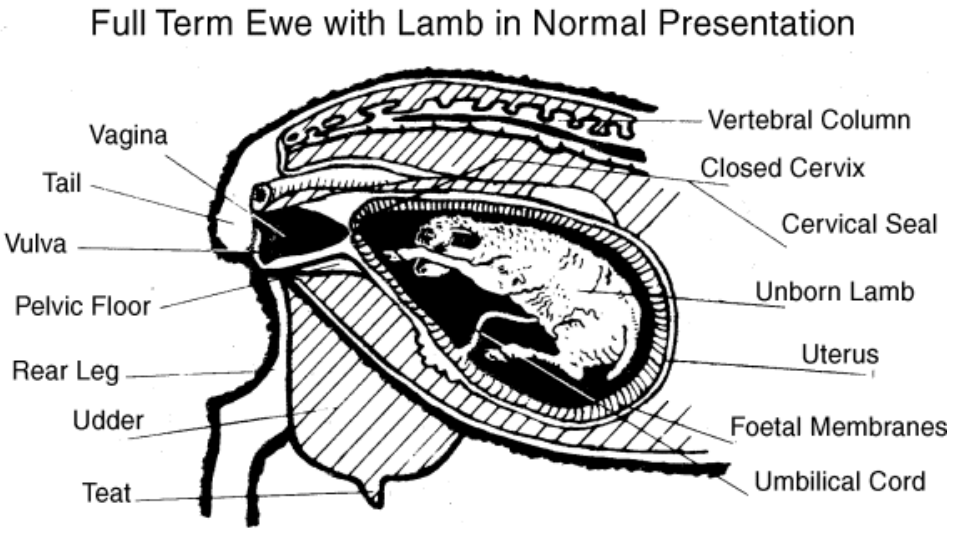
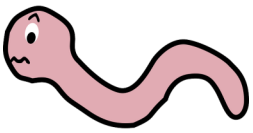


Image credit: Queen’s Printer for Ontario

Dewormer Resistance: in a Nutshell



Dr. Ray Kaplan from the University of Georgia recently authored a publication on dewormer (anthelmintic) resistance: *Biology, Epidemiology ,Diagnosis, and Management of Anthelmintic Resistance in Gastrointestinal Nematodes of Livestock*. The key points of his article are:

1. Dewormer resistance is a severe and worsening problem worldwide.
2. Dewormer resistance is natural evolutionary process that is impossible to prevent, but the rate can be substantially reduced by modifying strategies of dewormer use.
3. The further development and spread of dewormer resistance will outpace the development of new dewormer classes; active measures must be implemented to reduce the development of resistance.
4. Fecal egg count reduction tests should be performed on every farm to determine the efficacy of dewormers being used.
5. Refugia-based strategies and dewormer combinations must be implemented immediately across the livestock industry to reduce the development of resistance and preserve the efficacy of the few existing dewormers that remain effective.

Dr. Kaplan's review article was published in the March 2020 issue of Veterinary Clinics of North America: Food Animal Practice. Source: https://doi.org/10.1016/j.cvfa.2019.12.001

USDA-ARS Researchers Introduce Treatment to Prevent Parasites in Sheep

The U.S. Department of Agriculture's Agriculture Research Service (ARS) announced a groundbreaking treatment that prevents anemia, weight loss, poor wool and meat production, and even death in sheep.

ARS researchers partnered with Virginia Tech and the University of Massachusetts' Medical School to solve *H. contortus* parasite infection, which also happens to be the number one health problem in the U.S. sheep industry. The parasite infects the stomach of ruminant mammals, feeding and interfering with digestion, before ultimately affecting the animal's overall health and stability.

"The *H. contortus* parasite has developed resistance to virtually all known classes of anti-parasitic drugs," said ARS Researcher Dr. Joseph Urban, who lead the research team in testing and implementation of a para-probiotic treatment to kill the parasite that causes *H. contortus*.

The worm parasite mates within the animal and its fertilized eggs pass through the animal's waste into the soil. The larvae then develop to re-infect other unsuspecting animals, spreading the infection throughout a pasture and creating a cycle of infection that hinders animal growth, development and production.

"This is a major problem and the newly-developed treatment is derived from bacteria normally found in the soil that can produce a protein that binds to receptors in the intestine of the parasite," said Dr. Urban. "The treatment will then kill the parasites and reduce debilitating infection in adult sheep."

"When the treatment was given to infected sheep at Virginia Tech there was a rapid and dramatic reduction of parasite reproduction and survival, without any negative effect observed in the sheep." said Dr. Anne Zajac, professor of parasitology at Virginia Tech's Virginia-Maryland College of Veterinary Medicine.

Para-probiotics are "inactive probiotics," or good bacteria that can still provide health benefits. Despite the growing interest in para-probiotic use, these types of treatments are not commercially available. The treatments are currently under review by the U.S. Food and Drug Administration and will likely be commercially produced in large amounts once approved. This will help to protect an even larger population of animals across the country.

"Para-probiotics represent a new evolution and hope in dealing with a malignant and pervasive parasite," said Dr. Raffi Aroian, a professor in the Molecular Medicine program at the University of Massachusetts' Medical School. "The development of new therapeutics for this issue has been extremely difficult to come by and I look forward to watching this new advancement unfold in the global and domestic industry."

This project was supported by the National Institutes of Health/National Institute of Allergy and Infectious Diseases; and the Agriculture and Food Research Initiative Competitive Grant from the USDA's National Institute of Food and Agriculture.

Source: USDA ARS news release, 12,09.20

Solar Grazing with Sheep (continued from 1)

value to their sheep enterprises. The income from grazing solar sites would be in addition to the income derived from the sale of lambs and other products, as well as the nutritional value of the forage. In fact, with solar grazing income, it might be possible to justify just raising sheep for grazing.

For optimal solar grazing, it's important that solar site developers plant the right kind of vegetation under and around the panels. Pasture mixes which are suitable for sheep grazing and beneficial for the environment (e.g. pollinator-friendly plants) are needed. A Pennsylvania seed company has already developed a seed mixture (Fuzz & Buzz) that is suitable for grazing at solar sites. There need to be amenities such as on-site wells and power outlets to reduce investment costs for sheep farmers. Multi-year contracts are important to encourage investments in sheep production.

To learn more about solar grazing, visit the web site of the American Solar Grazing Association at https://solargrazing.org.

What about goats and cattle?
Goats are usually not suitable for solar grazing because they are more likely to chew on wires, climb on panels, and cause more mischief. Cattle are not suitable unless the panels are raised or vertically-installed (east-west).

Are You Interested in Backyard Farming?

By Maegan Perdue and Jon Moyle

Raising your own food can be a rewarding experience. It provides physical activity and a source of fresh food. Raising plants and animals in order to produce food is a great activity for the entire family and can be excellent for mental health. To assist small producers, novice livestock owners and gardeners and those thinking of trying their hands at backyard farming, University of Maryland Extension has put together a series of educational webinars on various livestock and gardening topics.

In 2020, Backyard Farming webinars were held on small ruminants, beef, small scale poultry, and hay. More webinars are planned for 2021. For more information, visit https://go.umd.edu/backyardfarming.

Be sure to like and follow Backyard Farming on Facebook: https://www.facebook.com/UMEBackyardFarming.

WVU Texel Project

West Virginia University (WVU) has established a Texel flock for research purposes. Preliminary research conducted at WVU showed that Texels have some level of resistance to internal parasites. Enhanced resistance to internal parasites would make Texel rams the ideal choice to sire grass-fed market lambs.

The Texel breed originated in the Netherlands and is known for its high degree of muscling. It is one of the most popular terminal sire breeds in the world. US producers are increasingly using Texels to sire crossbred market lambs with more muscling. Enhanced parasite resistance would be another advantage to the crossbred lambs.

A terminal sire is a male (of any livestock species) that is used to produce high quality market animals. Daughters are not usually kept for replacement. In fact, it is recommended that all offspring in a terminal sire mating go to slaughter. Terminal sire breeds should excel in growth and carcass traits. They should be bred to females with good maternal traits: milk production, prolificacy, and mothering ability.

You can learn more about WVU's Texel Project at https://bowdridge.davis.wvu.edu/wvu-texel-project.

Staying Home and Staying Safe Until 2022

For the second year in a row, the Maryland Sheep & Wool Festival will be held virtually. The 48th annual festival will be held on May 1st and 2nd, 2021, with most events happening online. The Festival theme will be "Staying Home and Staying Safe until 2022".

"Because we usually bring tens of thousands of people together from across the country and around the globe for one weekend, holding the festival as a virtual event in 2021 is the only responsible decision we could make", said Festival Chairman Gwen Handler and Maryland Sheep Breeders Association President Jeff White in announcing the decision.

According to General Manager Kris Thorne, "We will build upon what we did for the 2020 virtual festival by incorporating more of our contests, competitions, and educational events than time permitted us to do last year. The vendor marketplace and virtual fleece sale will be back; we will have new artwork and will produce our printed catalog, which has become a cherished keepsake for many; and we will again have t-shirts, tote bags and other festival memorabilia for sale in our online store."

For more information, visit the Festival website at www.sheepandwool.org or connect with the festival on social media at https://www.facebook.com/MarylandSheepandWoolFestival and https://www.facebook.com/groups/mswfOnlineCommunity.

About the Festival

Now in its 48th year, the Maryland Sheep & Wool Festival is an annual celebration of all things sheep, from hoof to handwoven. Held during the first full weekend in May, attendees discover the beauty and diversity of sheep, the versatility of wool and the delicious taste of lamb. In a normal year, the Festival features over 800 sheep, sheep shows, sheep breeds display, parade of breeds, working sheepdog and sheep shearing demonstrations, sheep to shawl contest, fleece show and sale, workshops and seminars, special activities for kids, cooking demonstrations, food booths, musical entertainment, over 275 vendors… and much, much more. Hopefully, the festival will be back in May of 2022 with a full schedule of events.

2021 VIRTUAL Sheep & Goat Skillathon

The Sheep & Goat Skillathon will also go virtual in 2021. It was not held in 2020 due to Covid. The skillathon has always been held in conjunction with the Maryland Sheep & Wool Festival. Besides hosting the competition, the festival committee of the Maryland Sheep Breeders Association provides ribbons, premiums, and t-shirts to top-placing individuals and winning teams.

Information about this year's virtual skillathon will be provided in the Festival's printed catalog, as well on the Maryland Small Ruminant Page at https://www.sheepandgoat.com/skillathon. Details will be provided in the next newsletter. This year's competition will be open to youth (8-18) as well as adults.

2021 Maryland Sheep Shearing School Cancelled

Though originally planned for March 2021, the Maryland Sheep Shearing School has been canceled. Hopefully, the school can be held in 2022. For more information, send an email to mdsheepshearingschool@gmail.com.

Raising Sheep/Goats In Obsolete Poultry Houses

By Susan Schoenian

The Delmarva Peninsula has many obsolete poultry houses. While these houses can no longer be used for contract poultry production, they have many other potential uses, including raising sheep/goats. Years ago, Rocco Turkey Company (in Virginia) used old poultry houses to feed out lambs.

It's not uncommon to repurpose other farm buildings for sheep/goat production. Poultry houses have numerous advantages over other structures. Poultry houses provide a lot of square footage. A 40 ft. x 500 ft. poultry house has enough space to house 1000 ewes and lambs (20,000 square feet).

Poultry houses are big enough that you can use one part of the house for lambing/kidding and another part for growing out lambs/kids. There is plenty of room to set up permanent jugs for lambing/kidding. Ample feed storage facilitates bulk feed purchases.

Poultry houses have an open floor plan, making it easy to set up pens any way you want. A good configuration is pens on either side of the house, with an aisle down the middle. The aisle should be wide enough to accommodate a truck, tractor, or feed cart. The more pens you make the more flexibility you have in managing animals. An easy way to move animals to different areas of the house is important. A handling system is a must.

Poultry houses have water and feed lines, but they won't work for small ruminants. I favor fence line feeding, on either side of the aisle and/or between pens. Self-feeders are an option for feeding lambs/kids, but you'll want an auger system to fill the feeders. Animals tend to arrange themselves better around circular self-feeders than rectangular ones. Automatic waterers will reduce labor and provide continuous clean, frost-free water.

Poultry houses already have electricity, light, and ventilation. All are necessities for sheep/goat production. The importance of proper ventilation cannot be overstated. The mechanical ventilation systems in poultry houses can help manage ventilation for sheep/goats. Sheep/goats don't require warm housing, but they need protection from moisture and drafts, especially during birthing.

The whole sheep/goat production system can take place inside the chicken house or it can be combined with outside lots and/or pasture. Dry ewes/does can be pastured. They can be moved into the chicken house for late gestation and lactation. Lambs/kids never have to leave the chicken house. They can be sold at weaning or fed out to heavier weights inside the house. It's probably a good idea to keep rams/bucks outside, so they don't get too fat and lazy. Plus, distance from the females will facilitate the ram/buck effect for breeding.

Raising sheep/goats in complete confinement has many advantages. Confinement eliminates two of the biggest production obstacles: predators and worm parasites. Welfare is often superior in deep-bedded pens and environmentally-controlled buildings. In confinement, you can more easily control the variables of production. While feed and bedding costs are substantially higher, so is productivity (usually).

<u>Another option to consider</u>
Combine rearing of sheep in poultry houses with solar grazing. Lamb in the poultry house. Sell the lambs off or finish them in the house. Move the ewes to solar sites for grazing. You don't need to own much land in this scenario and you'll make additional income from the solar grazing.

Recommended Online Resources

YOUTUBE CHANNEL: Sez the Vet
https://www.youtube.com//SeztheVet/

SEZ THE VET is a YouTube channel with videos by Dr. Sarah Crews (aka Dr. Sez), a lifestyle block veterinarian near Auckland, New Zealand. Topics of Dr. Sez's videos have included resuscitation of newborns, effects of early age castration (in goats), and diatomaceous earth.

NEWSLETTER: Sheep Trails
https://www.sheepusa.org/wp-content/uploads/2020/12/Sheep-Trails-USDA-ARS-December-2020.pdf

Sheep Trails is a new newsletter published by the US Meat Animal Research Center (in Clay Center, Nebraska). The newsletter is intended to update stakeholders on activities at USMARC and other USDA sheep research facilities: US Sheep Experiment Station (Dubois, Idaho) and the Dale Bumpers Center for Small Farm Research (Booneville, Arkansas). Newsletters will be uploaded to the web site of the American Sheep Industry Association at sheepusa.org.

VLOG: Sheepishly Me: Adventures of a Sheep Farmer
https://www.youtube.com/channel/UCmVMNXTsmxr1wkaQ5sExJ9A

Sandi Brock's Video Blog (VLOG) or YouTube channel is very popular. It has more than 218,000 subscribers. Videos have been viewed more than 41.5 million times. Sandi is an Ontario sheep farmer. She has been raising sheep (indoors) since 2012. She shares per experiences candidly and shows videos of her farm and sheep.

FACEBOOK GROUP: Goat Vet Corner
https://www.facebook.com/groups/goatvetcorner/

Goat Vet Corner is a place to ask questions of veterinarians and get a veterinary perspective on your goats' medical and health needs. Only vets answer questions, not members.

WEB SITE: American Solar Grazing Association
https://solargrazing.org/

The American Solar Grazing Association is a non-profit founded by sheep producers to advocate for solar grazing, to educate solar developers and grazers, and conduct research on the practice of solar grazing. The association also helps to connect its members with solar developers. Anyone interested in solar grazing is encouraged to join the association.

Continued on page 9

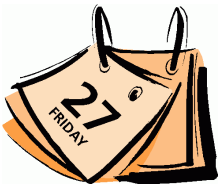
Recommended Online Resources (continued from page 8)

BLOG: OSU Sheep Team
https://u.osu.edu/sheep/

Brady Campbell manages the OSU Sheep Team Blog. The blog includes contributions from more than 25 Ohio State faculty and staff interested in sustaining the Ohio sheep industry. Recent posts have been about newborn lamb management, frost seeding, heat lamps, and ketosis.

NEW FACT SHEET: Genetic Selection for Parasite Resistance

"On-farm Selection for Resistance to Parasites" is the topic of the latest fact sheet from the American Consortium for Small Ruminant Parasite Control (ACSRPC; wormx.info). The fact sheet is part of the consortium's Best Management Practices fact sheet series. The author is Jim Morgan from Round Mountain Consulting in Arkansas. The fact sheet should be of particular interest to producers whose flocks/herds are not currently enrolled in a national genetic evaluation program, such as the National Sheep Improvement Program (NSIP; nsip.org).



UPDATE: Ethnic Calendar
https://umd.edu.go/ethnic

Ethnic holidays factor significantly in the demand for lamb and mutton and to a lesser extent goat meat. Producers should know the dates of upcoming holidays to help them effectively market their animals when there are peaks in demand. University of Maryland Extension has update its ethnic calendar for 2021-2025.

Vagina Prolapse: Risk Factors (continued from page 2)

- **Short-docked tails**
  Very short tail docking is considered a predisposing factor for both rectal and vaginal prolapses. Tails should be docked no shorter than the distal end of caudal tail fold (leave 2 to 3 coccygeal vertebrae).

If a ewe/doe prolapses her vagina, the vagina needs to be hygienically reinserted as soon as possible. Delays in treatment can lead to worse problems. The vagina can usually be retained with a plastic retainer (spoon) and/or using a rope or ready-made harness. Females can usually lamb/kid successfully with these devices in place. Sometimes, a suture is needed to retain the prolapse, and antibiotics are given. The suture must be removed before parturition.

References

Preventing prolapse in pregnant ewes (Today's Farm, 2020)
Epidemiology of vaginal prolapse in mixed-age ewes in New Zealand (NZ Vet Journal, 2014)

Small Ruminant Research At WMREC

By Susan Schoenian

Small ruminant research was initiated at the University of Maryland's Western Maryland Research & Education Center (WMREC) in Keedysville, Maryland, in 2004. For 11 years (2006-2011) the research center was the site of the popular Western Maryland Pasture-Based Meat Goat Performance Test. For six years, carcass data was collected on meat goats. For 4 years, comparison studies of pen-fed vs. pasture-raised goats were carried out.

In 2018, the research center transitioned to sheep research. The first project was a comparison study of ram, wether, and short-scrotum dairy rams. The study ran for two years. It compared the growth, carcass, and reproductive characteristics of the three different male types. In 2020, a pasture supplementation study was initiated. The effect of energy supplementation on pasture-raised lambs is being investigated. The pasture supplementation study will be repeated in 2021 with similar lambs and protocol. Energy is usually the limiting nutrient in pasture diets.

2021 Research

The 2021 research will begin in mid-June with the delivery of approximately 100 Katahdin ram lambs to the research center. After an acclimation period, the lambs will be divided into two groups on the basis of age, size (weight), birth type, and fecal egg count. One group (n=50) will graze. The other group (n=50) will graze similar pastures but receive a daily supplement of energy (whole barley, 1 lb. per head per day). Each group will have a five-acre grazing area that will be divided into four equal size paddocks using electric netting. The lambs will be rotationally grazed among the four paddocks, spending a week in each paddock. Pasture rest periods will be 28 days. The lambs will graze for approximately 90 days. Pastures are a mixture of cool season grasses, legumes, and forbs (Kings AgriSeeds). Last year's pasture quality was exceptional.

The lambs will be handled every two weeks to determine body weights, FAMACHA©, body condition, and dag (fecal soiling) scores. Deworming decisions will be made on the basis of FAMACHA© scores, the Five Point Check®, and performance (ADG). Last year, there was only one observation of a FAMACHA© score ≥4. Fecal samples will be collected several times during the grazing period. Last year, fecal egg counts were low throughout.

At the end the grazing the period, the lambs will either be scanned or slaughtered to collect carcass data. In 2020, the lambs were not slaughtered due to Covid 19. Hopefully, at least 15 lambs from each group can be slaughtered so that a meat sample can be obtained for fatty acid analysis. One of the goals of the research is see if energy supplementation has any effect on the fat content of the meat. While grassfed meat usually has a more healthful fatty acid profile than grain-fed meat, comparisons are usually made with feedlot lambs, not pasture-raised, supplemented lambs.

Editor's Note: Several of the studies conducted at WMREC, including the current one, have been funded by grants received from the Maryland Grain Producers Utilization Board (MGPUB). Their support is greatly appreciated.

Update On Ivermectin and Covid

Last spring, it was reported that ivermectin had efficacy (in a laboratory setting) against the coronavirus that causes Covid 19. Ivermectin is an anti-parasitic drug for animals. Ivomec® drench is FDA-approved for use in sheep. Ivermectin also has approved uses for humans.

After the announcement, some people started using ivermectin to self-medicate. In some countries, a "black market" emerged for ivermectin. In the US, ivermectin started disappearing from the shelves of farm stores.

Many health officials oppose the use of ivermectin to treat Covid. Others advocate for its use and have used it to treat Covid patients. The appeal of ivermectin is that it is widely available and cheap. It is also usually well tolerated as a drug.

Those who oppose it say there is not enough evidence to prove that ivermectin has efficacy against the coronavirus. Concerning the in-vivo studies that have been published since spring, critics claim they are flawed or have been published before undergoing peer review. Ivermectin continues to be evaluated as a potential treatment for Covid 19.

On January 20, 2021, the National Institutes of Health (NIH) changed its position on ivermectin. Currently, NIH neither recommends for it nor against it. Instead it leaves the decision to physicians and their patients. Previously (August 2020), NIH recommended against the use of ivermectin to treat Covid patients.

As a dewormer for small ruminants, there is significant resistance to ivermectin. The best use of ivermectin (on most sheep/goat most farms) is to treat external parasites. Ivermectin is labeled for the removal of nasal bots in sheep. It is effective against other biting/sucking external parasites: ticks, lice, mites, etc. Moxidectin (Cydectin®) is in the same drug class (Macrocyclic lactone: milbemycin) as ivermectin and is usually a better choice for treating worms, especially the barber pole worm.

***** W A R N I N G S *****

Humans should never take animal drugs, as their safety has not been evaluated. Ivermectin formulated for one animal species should not be given to another species unless a veterinarian has prescribed it. Fatalities have been reported. There is no approved ivermectin product for goats; they should be given the sheep drench (Ivomec®) at two times the sheep dosage (per ACSRPC/wormx.info; extra label).

For more information about sheep and goats, go to:

http://www.sheepandgoat.com

http://www.wormx.info or acsrpc.org

http://wmrecresearch.blogspot.com

http://www.sheep101.info and www.sheep101.info/201/

https://www.facebook.com/MDSmall Ruminant

https://www.instagram.com/umesheepgoat/

https://www.youtube.com/c/MarylandExtensionSmallRuminantProgram

https://www.youtube.com/channel/UCIxCEzE0xn4l3l98mkmdFHg

UNIVERSITY OF MARYLAND EXTENSION

Wild & Woolly is published quarterly by the University of Maryland Extension. It is written and edited by Susan Schoenian, Sheep and Goat Specialist, at the Western Maryland Research & Education Center (WMREC), 18330 Keedysville Road, Keedysville, MD, tel. (301) 432-2767 x343 or 315, fax (301) 432-4089; e-mail: sschoen@umd.edu and Pamela Thomas, Administrative Assistant, pthomas@umd.edu. The cost of receiving the newsletter by mail is $10 per year, payable to the University of Maryland. The newsletter can be accessed for free on the Internet at http://www.sheepandgoat.com/newsletter Subscribers to the newsletter listserv will receive an e-mail message when a new newsletter has been posted to the web. To subscribe, send an e-mail message to listserv@listserv.umd.edu. In the body of the message, type subscribe sheepandgoatnews.

University of Maryland
18330 Keedysville Rd
Keedysville MD 21756