



## FDA Proposes Banning Over-the Counter Antibiotic Sales

By Susan Schoenian

As a follow-up to the Veterinary Feed Directive which requires antibiotics put in feed or water to be prescribed by a veterinarian, the Food & Drug Administration (FDA) is proposing banning the sale of over-the-counter antibiotics, as part of its 5-year antimicrobial stewardship program.

FDA is proposing banning the over-the-counter (OTC) sale of more than 100 animal drugs considered to be medically-important for human medicine. An OTC drug is one that can be purchased at a feed or farm supply store or from a mail order catalog. It includes injectable and other forms of antibiotics. An antibiotic is a medicine that kills or prevents the growth of bacteria.

While most of the antibiotics on FDA's list are "old" drugs, they are still commonly used by sheep and goat producers to treat common disease conditions, such as pneumonia, mastitis, scours, and footrot. The drug list includes penicillin, cephalixin, sulfas, tetracyclines, and spectinomycin. In addition, it is possible that manufacturers may pull some drugs from the market as a result of the new regulations.

FDA is proposing a 2-year implementation period. Once in effect, livestock producers will be required to get a veterinary prescription (Rx) in order to administer an antibiotic to their livestock. They will need to have a valid veterinarian-client-patient-relationship (VPCR) to do so.

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A VCPR means that the veterinarian has familiarity with the animals being treated, including farm visitations.

Hopefully, the regulations will have minimal effect on most sheep and goat producers, who should already be working with veterinarians to address animal health issues and use drugs extra-label. With few drugs FDA-approved, extra label drug use is often necessary to treat sick sheep and goats. For example, of the drugs listed in the paragraph above, only penicillin is FDA-approved and for sheep only (and only for treatment of pneumonia). Only veterinarians have the legal right to use or prescribe drugs extra-label.



Giving a sub-cutaneous injection

It is probable that the regulations will increase the cost of using antibiotics, as producers will need to engage veterinarians in order to use antibiotics and they will need to purchase the antibiotics from veterinarians. On the other hand, the new regulations may also decrease the use of antibiotics, as producers better understand the need to place more emphasis on preventative health care practices, including better facilities, nutrition, and biosecurity and hardier animals. Easy access to drugs sometimes causes their use to supplant better management practices.

The regulations will pose the greatest challenge to producers who do not have access to local, affordable, knowledgeable veterinary care. While USDA has identified veterinary shortages in many counties, an even greater challenge can be finding a veterinarian who is willing to treat small ruminants and has specific knowledge about them. Small ruminant producers who do not currently have a valid veterinarian-client relationship are encouraged to develop such relationships in advance of the probable implementation of the new regulations,

Draft regulations were published in the Federal Register on September 25, 2019. The comment period ended on December 24, 2019. Hopefully, producers took advantage of the opportunity to comment on the proposed regulations.

Comments submitted by the American Sheep Industry Association (ASI) brought up many important points, including the severe shortage of large animal veterinarians, the limited availability of products for use in sheep, and the importance of extra label drug use. ASI also addressed the potential loss of products (due to regulations) and posed the question as to whether prescriptions would be per animal or flock.

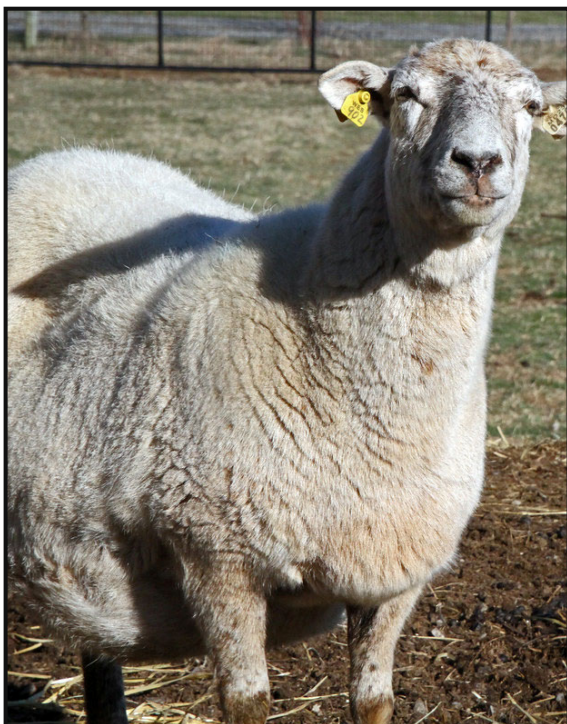
You can read ASI's comments at [https://sheepusa.org/wp-content/uploads/2020/01/ASI-Comments\\_FDA-Recom-OTC-Antimicrobials-to-Prescriptions-Draft-Guidance-for-Industry.pdf](https://sheepusa.org/wp-content/uploads/2020/01/ASI-Comments_FDA-Recom-OTC-Antimicrobials-to-Prescriptions-Draft-Guidance-for-Industry.pdf). ASI represents the interests of over 100,000 sheep and wool producers in the US.

*Adapted from article in Delmarva Farmer and Lancaster Farming.*

# Periparturient Egg Rise

By Susan Schoenian

The periparturient egg rise (PPER) is a natural phenomenon whereby the ewe/doe suffers a temporary loss of immunity (to parasites) around the time of lambing/kidding. The result is an elevated fecal egg count, which serves as the primary source of infection for susceptible lambs/kids. The impact is amplified if lambing/kidding coincides with hypobiotic (arrested) worms resuming their life cycle in the spring. Though it varies by breed and other factors, the PPER can start as early as two weeks before parturition and last for up to 8 weeks after. Thirty days post-partum is typically the peak.



All sheep and goat producers need to have a strategy for managing the PPER. Traditionally, it was recommended that all ewes/does be dewormed prior to (or around the time) of parturition. This strategy worked well until the worms started developing resistance to the drugs. As a result, it is now recommended that only animals that require treatment or would benefit most from treatment be dewormed. This is called “targeted selective treatment (TST).”

TST works so long as those animals needing treatment are accurately identified. There are various criteria that can be used to make decisions. FAMACHA® is commonly used to identify sheep/goats that need deworming. In the case of the periparturient female, only ewes/does with FAMACHA® scores of 4 or 5 usually need dewormed. Sheep/goats with poor body condition are more susceptible to worm infection. Periparturient ewes/does with body condition scores of 2 or less need dewormed.

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## Mountains-to-Bay Grazing Alliance Regional Grazing Conference

A Regional Grazing Conference will be held February 20 at the Washington County Agricultural Education Center in Boonsboro, Maryland. It is the 4<sup>th</sup> event in this series. The theme of this year's regional conference is *Soil and Animal Health on Pasture, Two Sides of the Same Coin*.

Featured speakers are Guy Jordaski, DVM, who will discuss animal health benefits that grazing provides and key health issues to be aware of when grazing; and Mark Kopecky, who will discuss a holistic approach to grazing and improving your soils.

Mark is a soil ecologist whose experience in soil management began on his family's dairy farm but quickly developed as he amassed professional training and field experience. Dr. Jodarski is a staff veterinarian for Organic Valley, CROPP Cooperative and is based in Neillsville, Wisconsin.

Registration costs \$15 and includes lunch. Pre-register by February 12. For more information, contact Michael Heller at [mheller@cbf.org](mailto:mheller@cbf.org) or Jeff Semler at [jsemler@umd.edu](mailto:jsemler@umd.edu).



# Periparturient Egg Rise (continued from page 3)

Higher producing animals are usually more susceptible to worm infection. High producing dairy goats (or sheep) or those freshening for the first time should be dewormed. Ewes/does carrying or nursing three or more offspring should be dewormed. First-time mothers, especially yearlings and/or those nursing twins or more will benefit from treatment. When deworming, it is important to give an effective treatment. Sometimes, a combination treatment (more than one drug at the same time) is needed. In fact, combination treatments are now recommended for clinically-parasitized animals.

There are other strategies besides deworming that can be used to manage the PPER. Increasing the protein content (above NRC requirements) of late gestation rations may negate the effects of the PPER. By-pass protein is especially beneficial. If ewes/does are kept in confinement or dry lot during the periparturient period, the effect of the PPER is minimal. Lambing/kidding certain times of the year (winter, fall) will lessen the impact. If lambing/kidding occurs on pasture or in the spring, the new product BioWorma® can be fed to ewes/does to reduce contamination of pasture caused by elevated fecal egg counts.



Some breeds of sheep and goat are simply more resistant to internal parasites, including the periparturient egg rise. In sheep, breeds of Caribbean origin or native to the southeastern US are most resistant. In goats, Myotonic, Kiko, and Spanish goats may be more resistant to worms than Boers. If raising one of these breeds or crosses isn't an option, selection within any breed can be successful. Parasite resistance (FEC) is a moderately heritable trait, though periparturient FEC may be somewhat less heritable.

*This article was originally published in the Delmarva Farmer and Lancaster Farming.*

## 2020 Junior Sheep & Goat Skillathon

The 2020 Junior Sheep & Goat Skillathon will be held Sunday, May 3, 9 am to 2 pm, at the Maryland Sheep & Wool Festival. The festival is always held the first full weekend at the Howard County Fairgrounds in West Friendship, Maryland. Parking is free, but there is \$5 admission fee for adults.

A skillathon consists of a series of learning stations where youth are tested on their knowledge of a specific subject. In the sheep and goat skillathon, all stations will obviously pertain to sheep and goats; meat, dairy, and fiber. In 2019, the stations were wool judging, hay judging, meat ID, feedstuff ID, equipment ID, breed ID, predators (seniors and intermediates), and internal parasites (seniors only). Sheep judging had to be cancelled due to the rainy weather.

The skillathon is open to any youth between the ages of 8 and 18. Youth compete according to their ages,

as of January 1, 2020: junior, 8-10; intermediate, 11-13; and senior, 14-18. There is competition for individuals, as well as teams of 3 to 4 youth from the same county or skillathon program.

The top 10 individuals in each age category will receive ribbons and premiums from the Maryland Sheep Breeders Association. Members of the top 3 teams in each age category receive festival t-shirts. Additional awards are often given for top placers.

Pre-registration is requested by April 30. Register online at <https://2020skillathon.eventbrite.com>. The \$5 registration fee will help defray the cost of providing lunch (pizza + sodas). For more information, contact Susan Schoenian at [sschoen@umd.edu](mailto:sschoen@umd.edu) or (301) 432-2767 x343 or visit the skillathon web page at <https://www.sheepandgoat.com/skillathon>

# Separating The Sheep From The Goats

## 2019 Pasture, Grazing & Browsing Conference

*By Joan Kasura*

During the recent Small Ruminant Pasture Conference, held at the Western Maryland Research and Education Center on Oct. 19 and co-sponsored by University of Maryland and Future Harvest CASA, Jeff Semler, principal agent and Extension educator for Washington County, discussed the importance of “separating the sheep from the goats.”

Semler began with a brief history of both animals, reminding the conference attendees that both animals have domesticated origins in what we now know as the Middle East. Of the two, Semler said, “goats get a bad rap.”



Jeff Semler bringing the goats in.

“They’re often dismissed as the ‘poor man’s cow,’” Semler continued, “thanks to their ability to thrive on meager fodder and cope with harsh environments.” And yet, because of those characteristics, goats provide a crucial economic underpinning that supports the many needs of small farmers, “particularly in developing countries,” Semler said.

Moving on to their common uses, both animals are known for their meat, milk and fiber.

While both sheep and goats are used to tackle vegetation issues, sheep are more of an ecologically-sound choice for longstanding vegetation management, such as solar panel fields, whereas goats are a better choice for vegetation control. “It’s both a good thing and a bad thing,” Semler noted, “because if a goat eats his way through a job, they’re out of a job.”

Sheep, of course, tend to be more flock oriented, whereas goat herds have a dominant female who gets the best of everything, and whose kids are considered royalty by birth. And, if she is a dairy goat, then she gets to be milked first.

In a discussion of the positives and negatives of meat goats versus hair sheep versus wool sheep, the issue of fencing, which had been raised several times during an earlier session on planning and implementing rotational grazing, surfaced once again.

Sheep, particularly hair sheep, are “much less likely to locate fence weaknesses than goats,” said Semler. Semler then related an incident when they lost power to the farm, including, of course, the electric charged wire fence that contained their sheep flock. Fortunately, the sheep never noticed that the fence was no longer charged before they were able to get the electricity back on.

Goats, however, would not have been quite so accommodating. In fact, Semler said, “goats are constantly testing the fence.” “An old goat will push a kid against the fence,” explained Semler, “and if the kid doesn’t squeal, they’re off to the store.”

If that weren’t enough, goats require that you seriously consider the spacing on your fence, because “goats aren’t jumpers, they’re snakes,” perfectly willing to wiggle their way through any available opening.

Semler recommends lower fences with spacing that doesn’t allow them to get their heads through, “including kids.” Even though fences can be a challenge with goats they do have their positives.

For instance, returning to the issue of vegetation control, “goats are good for the control of some of the

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# Marla and Andrew Keller are 2019 Maryland Shepherds of the Year

Marla and Andrew Keller of Damascus, Maryland, were named the 2019 Maryland Shepherds of the Year during the Maryland Sheep Breeders Association's annual dinner Nov. 15, 2019.

In presenting the award with last year's winner, Jeff White, MSBA board member and Mt. Airy farmer, Nancy Cox Starkey said the Kellers are truly an asset to their fellow shepherds and the Association.

"The Kellers are always ready to assist family and friends in any way that they can. If their help is needed stacking hay in the loft, clearing snow from the lane, or assisting others with a flock management chore, Andrew and Marla are always willing to lend a hand," Starkey said.

Both Marla and Andrew grew up on their family's farms, were active in 4-H, and showed sheep.

Soon after they were married in 2014, they bought their Vista View Farm in Montgomery County, and raise production Dorsets and Bluefaced Leicester sheep. They also have a seasonal produce business



Andrew & Marla Keller receiving their award



Andrew



Marla

and sell value-added products from their flock including blankets, socks and yarn. In addition to all of their farming duties, they both have full-time jobs off of the farm.

"The Kellers main focus is on sustainable agriculture, and they raise their sheep on pasture that is supplemented with grain and hay that they produce," Nancy Starkey said.

Their Dorset flock is mainly for the meat market, but they also provide 4-Hers with club lambs and sell breeding stock. Their Bluefaced Leicester flock is primarily for the fiber market, and they produce both white and natural colored fleeces and sell breeding stock. Their combined flocks comprise about 100 ewes, in addition to a few of rams of each breed.

The Kellers have applied for and received two Northeast SARE grants. One grant was to study using rate-of-gain to determine the necessity of anthelmintic treatment for lambs, and the other was to evaluate the use of a dry lot to improve the health of lambs that were not thriving on pasture.

To assist in gathering data for these grants, they invested in a precision farming system that uses RFID tags, digital data recording, and automated weighing to collect the data and calculate gains or losses.

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## Separating The Sheep From The Goats 2019 Pasture, Grazing & Browsing Conference (continued from page 5)

more noxious and invasive woody plants, such as blackberry brambles, multiflora rose, honeysuckle and many more,” Semler said.

Sometimes, though, they can be selective about which patches of woody plants they’ll eat, such as a high nob of thistle, while totally ignoring the lowland patches hanging out in the corners of the pasture.

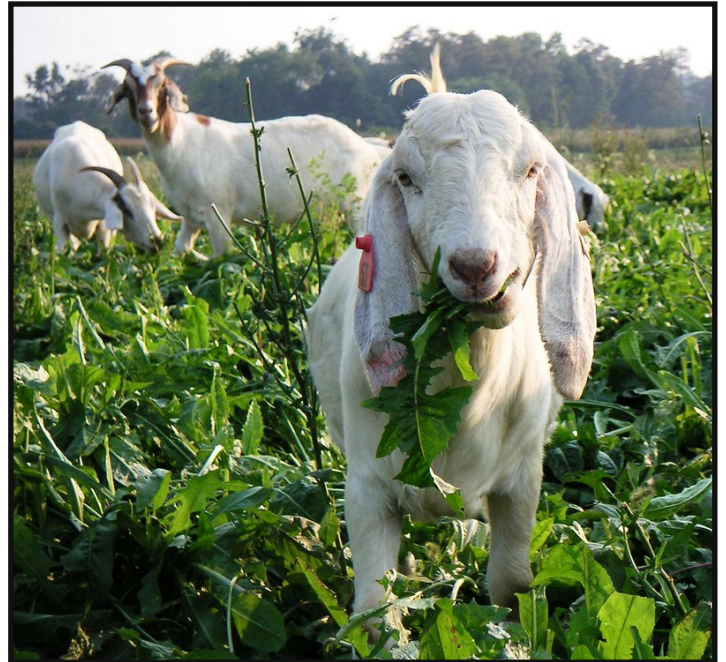
“Goats are just like Robert E. Lee,” explained Semler, “They only eat for the high ground because they’re a prey species.”

An additional positive is coyotes tend to avoid goats. “Perhaps it’s due to their horns,” Semler mused.

Semler also urged the conference attendees to not invite trouble. “If you have an alpha coyote that won’t eat goats,” he said, “then don’t make a problem by shooting the coyotes because the alpha who replaces the one you shot may decide he likes goats.”

“If you don’t have a problem,” Semler emphasized, “don’t make a problem. And, if you have an alpha who likes ground hogs, please send him our way.”

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## Shepherds Of The Year (continued from page 6)

“They may be the first shepherds in Maryland to utilize Precision Farming technology,” Starkey said.

Starkey said the Kellers are intent on sharing what they learn and have welcomed other shepherds to their farm to share their experiences on many occasions. They have held several open houses on shearing days at their farm and two precision farming workshops in conjunction with University of Maryland Extension sheep specialist Susan Schoenian’s FAMACHA classes.

Andrew was a presenter at the 2017 Maryland Sheep Breeders Association’s Fall Seminar Day, and Marla was a member of the Producer Panel at the 2019 MD Small Ruminant Pasture Grazing and Browsing Conference.

“The Kellers enjoy sharing their knowledge and experiences with the younger generation, too, and their two young daughters are already quite familiar with most of the daily chores around the farm,” Starkey said. “In addition to their own daughters, Marla and Andrew help their nieces and nephews learn about sheep management and showing.”

Andrew has been a MSBA board member of the Maryland Sheep Breeders Association and was just elected vice president at the annual meeting.

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# Sheep Pelts

## The Basics For Entrepreneurship Project

By Caroline Clark

A new program created by the University of Maryland Extension Program could be starting point for 4-H youth. The 4-H Entrepreneurship Program began under the advisement of the Washington County Extension Agents Ashley Travis and Jesse Ketterman.

This program was focused on learning the ins and outs of a small business, with a goal of preparing and marketing sheep pelts. The pelts were obtained through a sheep research project occurring at the Western Maryland Research & Education Center in Keedysville, MD.

This research program was focused on the growth patterns of lambs. Once the lambs complete the study protocol, they will be measured and harvested, with the hides then prepared for use in the entrepreneurship program.

The 4-H youth who participated in this program first completed an essay stating why they would like to participate. Once selected, the participated in a series of meetings that were focused on subjects relevant to starting a business. The participants learned how to write a marketing plan, manage their finances, obtain a loan, use record keeping tools, and also how to give a presentation to pitch their business.

The 4-Hers were educated on what input costs would be required to prepare the pelts, in addition to all costs associated with marketing. Once the pelts were harvested, the students, parents, and educators prepared them prior to sending them to a tanner. This preparation took all day and everyone learned a new skill that can be used to prepare virtually any kind of pelt.

The program allowed 4-Hers to gain in-depth knowledge on end-to-end management of an animal project in the market place. The 4-hers in the program now have the pelts available for purchase in various locations Maryland and Virginia. You may see them at your local farmers' market, feed supply store, or online.

*Editor's note: Caroline Clark, 13, is a 4-H member in Frederick County*

*This article was originally published in the 4-H in Action section of the Delmarva Farmer and is reprinted with permission.*



Caroline Clark (center)

### Scholarship Opportunity For Youth!

The Maryland Sheep Breeders Association in conjunction with the Maryland Sheep and Wool Festival is offering a scholarship in the amount of \$1,000 to a student who has been accepted or is in the process of applying for continuing education at a college or university, technical school, or vocational school. All academic majors will be considered, but priority will be given to agricultural or agriculture-related majors (such as food science, veterinarian, ag teaching, etc.).

Preference will be given to those applicants who are members or whose families are members of the Maryland Sheep Breeders Association. Payment will be made upon provision of school acceptance documentation and/or evidence of attendance. The application window will be open from November 1 through April 15, 2020. Applications are available on the MSBA web site.

<https://marylandsheepbreeders.org/awards/scholarships/>



4-Hers salting pelts



# Mid-Atlantic Nutrition Conference

## First ever small ruminant program

The Mid-Atlantic Nutrition Conference is a premier event for the animal nutrition industry. The program has historically focused on poultry, dairy, and equine nutrition. A sheep/goat session will be piloted in 2020.

The main speaker for the sheep/goat session will be Dr. Dan Morrical. Dr. Morrical is the retired Sheep Extension Specialist from Iowa State University. Currently, he is a nutrition consultant with Premier 1 Supplies.

The conference will be held April 7-8 at Delta Hotels Baltimore Hunt Valley. The sheep/goat session will be held Wednesday, April 8 from 8 am to 3 pm. For more information, visit the web site at <https://ansc.umd.edu/extension/mid-atlantic-nutrition-conference>. Early bird registration (by March 15) is \$110 for one day attendance.



## Small Group Tour of the Yorkshire Dales



North of England Mules

University of Maryland Extension and Edward Remsberg ([remsburg.com](http://remsburg.com)) are offering a week-long sheep and wool educational tour of the Yorkshire Dales (in England). The Yorkshire Dales were made famous by James Herriot's books, including "All Creatures Great and Small." Breeding of sheep is common to the area.

The tour will include a visit to the Great Yorkshire Show, an iconic three-day event with thousands of animals. Other tour stops will be finalized once the make-up of the group is known. It is a small group tour. Participation is limited.

Lodging will be at the University of Maryland's Study Centre at Kiplin Hall. Kiplin Hall (<https://kiplinhall.co.uk>) is the ancestral home of the Calvert family, Maryland's founding family.

The cost is \$1500 per person. It includes lodging, ground transportation, entrance fees, breakfasts, snacks, and water. Participants will be responsible for getting to Kiplin Hall (near Scorton, Richmond, North Yorkshire). Pick-up from the Northallerton train station will be available.

A \$500 deposit is due March 1. For more information, contact Susan Schoenian at [sschoen@umd.edu](mailto:sschoen@umd.edu) or by phone at (301) 432-2767 extension 343.

## 2020 Maryland Sheep Shearing School

The 2020 Maryland Sheep Shearing School will be held Friday and Saturday, March 13-14 (9:30 am to 3:30 pm each day) at Dale Lehman's farm in Fairplay, Maryland (Washington County).

The shearing school is open to anyone wanting to learn commercial sheep shearing techniques and who is physically and mentally capable. Fifteen participants will be selected from applications.

The annual shearing school is sponsored by the Maryland Sheep Breeders Association. Instructors will be Aaron Geiman and Emily Chamlin.

Request a registration form from [mdsheepshearingschool@gmail.com](mailto:mdsheepshearingschool@gmail.com). The \$100 registration fee includes a shearing manual and instructional CD from the American Sheep Industry Association (ASI). The registration deadline is February 1, 2020.

# Upcoming Events



## **February 20**

### **Regional Grazing Conference**

Washington County Agricultural Education Center,  
Boonsboro, Maryland  
Info: [jsemmler@umd.edu](mailto:jsemmler@umd.edu)

## **March 13-14,**

### **Sheep Shearing School**

Dale Lehman's farm, Fairplay, Maryland  
Info: [mdsheepshearingschool@gmail.com](mailto:mdsheepshearingschool@gmail.com)

## **April 7-8**

### **Mid-Atlantic Nutrition Conference (will include sheep/goat section)**

Hunt Valley, Maryland  
Info: <https://ansc.umd.edu/extension/mid-atlantic-nutrition-conference>

## **May 2-3**

### **Maryland Sheep & Wool Festival**

Howard County Fairgrounds  
West Friendship, Maryland  
Info: [www.sheepandwool.org](http://www.sheepandwool.org)

## **May 3**

### **Junior Sheep & Goat Skillathon**

Maryland Sheep & Wool Festival  
Info: <https://www.sheepandgoat.com/skillathon>

**For more information on sheep and goats, go to:**

<http://www.sheepandgoat.com>

<http://www.acsrpc.org> or [wormx.info](http://wormx.info)

<http://wmrecresearch..blogspot.com>

<http://www.sheep101.info>

<https://www.facebook.com/MDSmallRuminant>

<http://issuu.com/mdsheepgoat>

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

<https://www.slideshare.com/Schoenian>

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







# 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](mailto:sschoen@umd.edu) or Pamela Thomas, Administrative Assistant, [pthomas@umd.edu](mailto: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>. 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](mailto:listserv@listserv.umd.edu). In the body of the message, type `subscribe sheepgoatnews`.*

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**University of Maryland**  
18330 Keedysville Rd  
Keedysville MD 21756