



Shepherd of the year is Nancy Starkey



Nancy with MSBA Vice President Emily Chamelin, and below at a 2022 Milkhouse Brewery herding demo.



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Our awardee this year is Nancy Starkey, whom almost everyone knows. As chairman of the Sheepdog Demonstrations committee at the Maryland Sheep & Wool Festival, she hosts one of the most enjoyed activities at the Festival. She deserves extra kudos for always being able to find sponsors to fully offset the cost of her committee every year.

Nancy has always stepped up to be a volunteer of the highest regard, doing her job quietly and completely. Not only does she volunteer at the festival but she has stepped up numerous times to serve on our board of directors, frequently filling in when directors drop off. Nancy doesn't just fill in, she steps up, and is currently in charge of our awards committee, which made presenting her with this award particularly difficult as it took quite a lot of sneaking around to give an award to our awards committee chair!

But speaking of awards, Nancy is someone we'd assumed had already earned this award a hundred times over. Then we realized her name was not yet on the prestigious list of recipients. She is recognized regionally for her ability to train sheepdogs and is very devoted to her dogs and their training. In addition to her skill with dog training, she has long been known for her beautiful flock of Blue-Faced Leicester sheep.

Guiding the flock to the home farm. [Image by Leo Tammi]

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President's Message

Steve Breeding
is President of MSBA

As the days grow shorter and the temperature drops, we find ourselves in that unique window of the shepherd's calendar: the quiet before the storm of lambing season. (Acknowledging that some of our members with polyestrous flocks may be weaning now following a fall lambing period.)

Winter wellness: Preparing your flock (and yourself) for the season ahead

While the grazing season winds down, the work in the barn—and the office—is just beginning. Now is the perfect time to embrace the slower pace of winter to catch up on paperwork, expand your knowledge, and ensure your flock is primed for a successful spring.

The business of shepherding

Winter offers a rare opportunity to get organized without the pressure of fieldwork or show schedules. Use these darker evenings to catch up on your flock records and registration paperwork. Reviewing your genetics and production data now can help you make harder culling decisions and smarter breeding plans for the year ahead. A few hours of administrative work this month can save you days of headache when the busy season hits full swing.

Winterfest 2026: Sharpen your skills

This season also brings premier learning opportunities right to your living room. The Maryland Sheep & Wool Festival Winterfest is returning January 24–25, 2026. This virtual event is an excellent way to continue your education without leaving the farm.

While Winterfest is famous for its fiber arts focus, it also hosts vital Shepherd Seminars. Look out for sessions on essential topics like balancing feed rations and wool testing—knowledge that directly impacts your bottom line. Whether you are a veteran producer or a new shepherd, there is always something new to learn from the community's experts.



Preparing for a successful lambing season

Most importantly, use this time to evaluate your flock's condition. As we approach the final weeks of gestation, nutrition is paramount. Assess your ewes' body condition scores now; they should be entering lambing in optimal shape, neither too thin nor too fat, to prevent metabolic issues like pregnancy toxemia.

Now is also the time to inventory your lambing kit. Do you have enough colostrum replacer, iodine, and fresh bulbs for your heat lamps? Are your lambing jugs clean, bedded, and ready for occupants? Preparation is the best insurance policy against the unpredictability of lambing.

Take this season to rest where you can, learn what you can, and prepare for new life on the farm. Here is to a safe, productive, and prosperous 2026 for all Maryland (and all our member) shepherds!

— Steve



Maryland Sheep News is published three times a year by the Maryland Sheep Breeders Association, Inc., and is sent to MSBA members. See back page for membership application.

Ads and article submissions

Article ideas and submissions are welcome. If you have an event or topic you would like to see covered, or if you would like to write an article for an issue, please contact the editor.

The Maryland Shepherd accepts advertising; inquire for rates and sizes. Acceptable formats are PDFs, Word docs or jpegs.

Issue deadlines for ads and copy:

- Spring, April 7
- Summer, June 30
- Fall/Winter, Oct. 30

Send inquiries/ads to :
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In late October 2025, the American Sheep Industry Association (ASI) took a historic step to defend the livelihoods of American shepherds.

After months of intense data collection and legal preparation, ASI formally requested that the U.S. Trade Representative initiate a global safeguard investigation under Section 201 of the Trade Act of 1974.

For many Maryland producers, international trade disputes can feel distant—a problem for the large western ranges, not the farm flocks of the Mid-Atlantic. However, the economic reality is that this "lawsuit" (technically a trade petition) is critical for the stability of every sheep operation in the country, including ours.

The problem: a surge in imports. The numbers included in the ASI petition are stark. Between 2020 and 2024, lamb imports surged by nearly 45%. Today, imported lamb captures roughly 70% of the U.S. market, leaving domestic producers fighting for the remaining 30%. Perhaps most damaging is the pricing disparity; imported product, particularly square-cut shoulders, is consistently undercutting American lamb by double-digit percentages.

When the commercial market is flooded with cheap imports, it lowers the "price floor" for everyone. Even if you sell direct-to-consumer or focus on club lambs, your prices are eventually tethered to the national commodity value. If commercial packers cannot compete, the infrastructure we all rely on—transportation, processing, and shearing support—begins to crumble.

What is Section 201? Unlike a standard lawsuit, a Section 201 investigation is a "safeguard" action. It doesn't require proving that foreign competitors are breaking the law (like dumping), but simply that a surge in imports is causing "serious injury" to the domestic industry. If the U.S. International Trade Commission agrees with ASI's findings, the President can authorize temporary relief measures, such as tariffs or quotas, to give our industry breathing room to recover and adjust.

Why it matters for Maryland. Maryland has a vibrant, diverse sheep sector, but we are not an island. When western producers lose their market, those lambs don't disappear—they look for new homes, potentially flooding local auctions and depressing prices in the East. Furthermore, ASI's ability to fight for us in Washington depends on a viable national industry.

This petition is about leveling the playing field. As we watch this case progress through 2026, it



serves as a reminder that a threat to one part of our industry is a threat to us all. ASI is fighting to ensure there is still a profitable future for American lamb, and that is a fight worth supporting.

Although this video, [ASI Decides Against Lamb Import Trade Case](#), is from late 2023 when ASI initially paused the trade case, it provides essential context on the "Section 201" investigation process and the long-term strategy that led to the actual filing in late 2025.

ASI requests
lamb imports
investigation

PLEASE CONTACT YOUR
LEGISLATORS BEFORE
JANUARY 7 TO SUPPORT
THIS EFFORT: [CLICK
HERE FOR RESOURCES](#)

Understanding the Section 201 process

Under Section 201, domestic industries seriously injured or threatened with serious injury by increased imports may petition the USITC for import relief. [The U.S. International Trade Commission](#) (USITC) determines whether an article is being imported in such increased quantities that it is a substantial cause of serious injury, or threat thereof, to the U.S. industry producing an article like or directly competitive with the imported article. If the Commission makes an affirmative determination, it recommends to the President relief that would prevent or remedy the injury and facilitate industry adjustment to import competition. The President makes the final decision whether to provide relief and the amount of relief.

Section 201 does not require a finding of an unfair trade practice, as do the antidumping and countervailing duty laws and section 337 of the Tariff Act of 1930. But the injury requirement under section 201 is considered to be more difficult than those of the unfair trade statutes. Section 201 requires that the injury or threatened injury be "serious" and that the increased imports must be a "substantial cause" (important and not less than any other cause) of the serious injury or threat of serious injury.

When: The USITC conducts an investigation under section 201 upon receipt of a petition from a trade association, firm, certified or recognized union, or group of workers which is representative of a domestic industry; upon receipt of a request from the President or the USTR; upon receipt of a resolution of the House Committee on Ways and Means or Senate Committee on Finance; or upon its own motion.

Duration: The USITC generally must make its injury finding within 120 days (150 days in more complicated cases) of receipt of the petition, request, resolution, or institution on its own motion and must transmit its report to the President, together with any relief recommendations, within 180 days after receipt of the petition, request, resolution, or institution on its own motion.

Finding: If the USITC finding is affirmative, it must recommend a remedy to the President, who determines what relief, if any, will be imposed. Such relief may be in the form of a tariff increase, quantitative restrictions, or orderly marketing agreements.

Follow-up: If import relief is provided, the USITC periodically reports on developments within the industry during the period of relief. Upon request, the USITC advises the President of the probable economic effect on the industry of the reduction, modification, or termination of the relief in effect. At the conclusion of any relief period, the USITC is required to report to the President and Congress on the effectiveness of the relief action in facilitating the positive adjustment of the domestic industry to import competition. (For further information, see section 201 of the Trade Act of 1974, 19 U.S.C. 2251.)

Past and current investigations the USITC has taken on include importation of photovoltaic cells, fine-denier polyester fiber, and quartz products.

Our Far-Flung Shepherds



To Iceland for the autumn roundup

Susan Withnell

raises Wensleydale sheep on her farm in Westminster.

On Aug. 8, 2025, while mindlessly scrolling through Facebook, I came across an advertisement for "Islandhester." It is a Icelandic horse farm, an hour from Reyjavik, Iceland, that offers many different multi-day horseback riding tours.

Just out of curiosity, I ran through the offerings, until I came to a description of the 4-day ride to participate in the annual, traditional "rettir." This is the centuries old custom of riding up into the Highlands to gather the Icelandic sheep, which had spent the summer in mixed farm groups, and herding them on horseback down to the lowlands.

There, they rest in a pasture overnight, and on the following day, groups of several hundreds at a time are crowded into a large round stone pen, to be caught and sorted into farm groups.

The thought of combining my love of sheep and fiber with my passion for horseback riding was too good to pass up! So, I booked plane tickets and lodging, for before and after the riding tour, right away. Exactly one month later, I flew to Iceland, riding clothes and boots packed ready for an exciting new experience!

It was my birthday present to myself and the perfect way to celebrate my 70th birthday—to prove to myself that I am still an active, capable senior citizen! I highly recommend this experience—and in particular the host farm "Islandhester," who provided us with lovely furnished cabin accommodations, homecooked meals, and wonderful horses, matched to our riding comfort level.

Being in the country and terrain where

both the Icelandic horse and Icelandic sheep were developed was one of the most exciting experiences of my life, and one that I will never forget.

Both the Icelandic sheep and Icelandic horse have been bred true to breed for centuries. Neither live animals nor semen are allowed to be imported into Iceland. This has protected the genetic integrity of both species for hundreds of years. The opportunity to be an active participant in the September Rettir, and be able to ride an Icelandic horse and get my hands on many Icelandic sheep, was an amazing experience.

The Icelandic horse is a five-gaited horse. Walk, trot, canter, and gallop are the ones Americans are familiar with. The fifth gait of Icelandic horses is the "tolt" ("pacing" is the American term—a very comfortable, but quick, lateral four-beat gait), that took some getting used to, for me, a hunt-seat-trained English style rider. But, was a very comfortable and relaxed way to cover ground quickly! The small, pony sized horses, are sturdy enough to carry up to 275 pounds with thick legs and hooves that can handle the sometimes-uneven volcanic rocky terrain.

After being matched up to a lovely mare named Garun (who was perfect for me), I joined my group to set off and meet up with the flocks as they were being brought down from the Highlands. The first sight of almost 4,000 sheep, surrounded by mounted farmers, was exciting.

The Icelandic sheep come in many different colors and markings. There were solids in many shades, two and even three colored sheep, badger faced, and mottled. Most of the sheep were ewes and their lambs, but there were some rams scattered among them. The sheep belonged to several different farms.

Once we had them all herded into a large pasture near the sorting pens, the first part was finished, and the sheep, horses and riders rested overnight for the excitement of the next day.....SORTING!

Susan wrangles a sheep in the round pen, below. At right, Icelandics prepare for the move south.





Our traditional Icelandic sorting pen was a large round pen, made of stone walls built in 1881. Atop the thick stone walls was an 18-inch flat, turf covered area, where crowds walked around to get a good view of the action.

All around the stone walls, there were small gates which opened into pie piece shaped smaller stone walled sections. Each farm was assigned one, two, or three gated sections, into which their sheep were gathered, as they were caught. Groups of several hundred sheep were herded into the center pen (quite tightly as you see in the image below).

Then the fun began, as people jumped off the walls and entered from the gated end to push their way in among the sheep. Happily, our riding group had been invited to get right in and help sort, and I was in heaven!

The rettir is very much a family affair. Youngsters (as young as 4 or 5 and up to much more experienced grandparents) all were jumping off the walls and squeezing in through a small gate at one end of the circle. Our host said that many farm children look forward to the rettir more than Christmas!

Our job was to grab a sheep by the horns, check the number on the ear tag and take the sheep to the gate which was signed with the same number. I found that even the adult sheep, were smaller than the Icelandic sheep in the United States, which was a good thing because moving the sheep was accomplished by straddling the sheep at its shoulders, holding the horns and guiding them to the proper gate. It soon became obvious to me, that I would do best, moving just this year's lambs! But, I jumped right in.

Although I checked tag numbers of about a hundred lambs, I actually only found 8 of the ones belonging to the farmers for whom I was "working." However, as a hand spinner, the chance to have my hands on SO many Icelandic fleeces was wonderful!

Once the sheep have all been sorted and loaded onto farm trucks, we participated in another rettir tradition. We rode about 8 miles to a local pub where two big kettles of rettir soup, kjotsupa (translated it means meat soup) and plates of hard bread rolls and butter awaited us. The soup was a meat broth with lamb and vegetables. Our host told us that in days gone by, every farmhouse would have a pot of kjotsupa on the stove during rettir for anyone who stopped by.

We untacked our horse and turned them out into the field by the pub. The parking lot for the pub, which was packed with people, only had about 8 vehicles. However, by the time we left, there were more than 30 horses grazing in the pasture next to the pub, with saddles and bridles surrounding tree trunks, as their riders had arrived to enjoy a meal and of course, a beer—or two!

The horses, sheep, and dogs on the trek from the highlands.

Prying sheep out of the scrum.



National news ▶

Southern U.S. ports of entry remain closed to the livestock trade, as the effort began in May to combat the northward movement of the New World screwworm fly into Mexico.



The parasitic fly, *Cochliomyia hominivorax*, lays eggs in wounds, umbilical cord stumps, or mucous membranes, with hatched larvae then feeding on live healthy tissue, “screwing” themselves in deeper if the area is disturbed. It can infest livestock, pets, wildlife, occasionally birds, and in rare cases, people. Mortality can be high in untreated animals.

New world screwworm update

should a NWS detection be made in the southern United States. Simultaneously, USDA is moving forward with plans to build a domestic sterile fly production facility.

In early December USDA conditionally approved a topical drug to treat screwworm in cattle: Exzolt Cattle-CA1 (fluralaner) is a topical solution for the prevention and

treatment of New World screwworm (NWS) larval infestations, and the treatment and control of cattle fever tick in beef cattle 2 months of age and older and replacement dairy heifers less than 20 months of age.



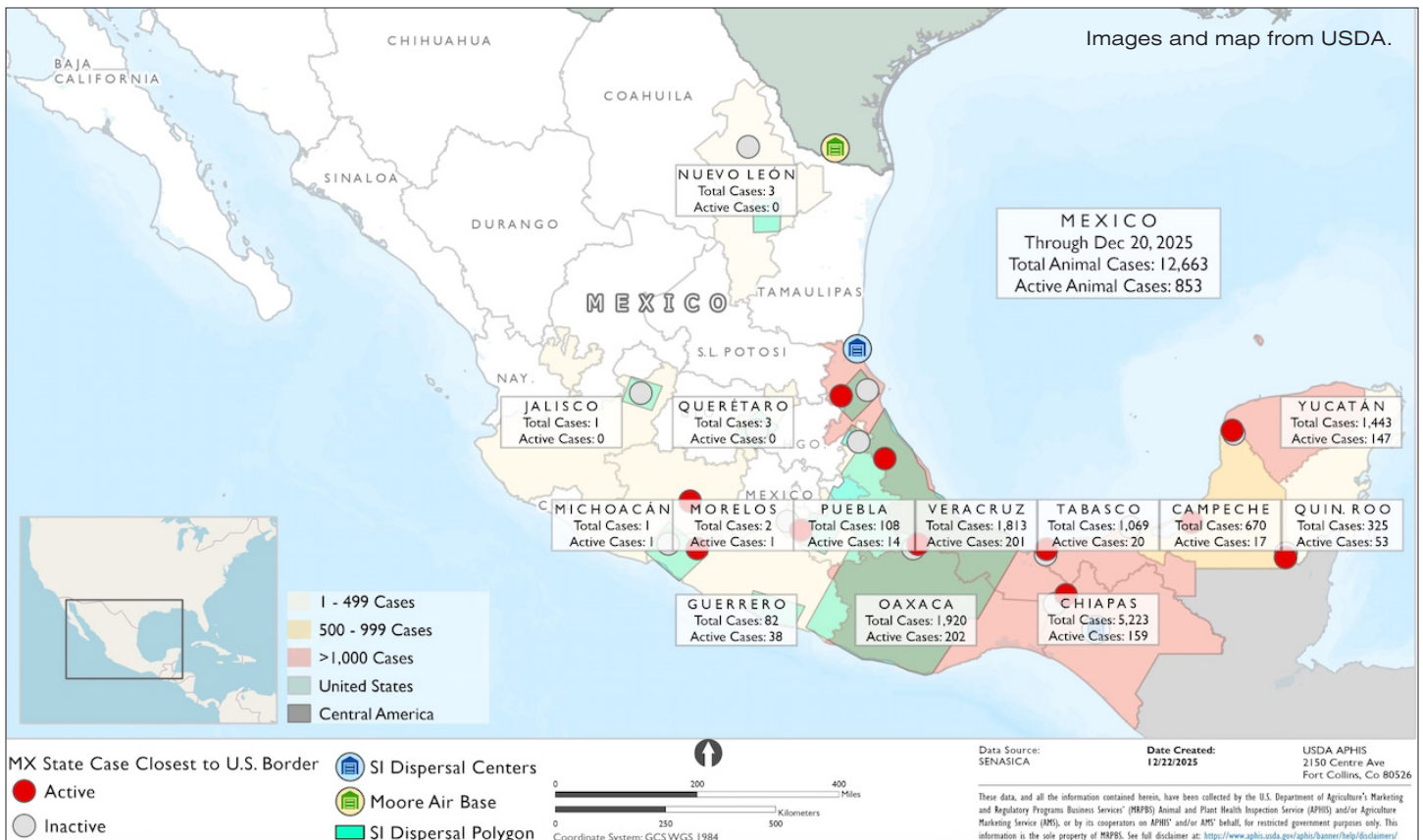
No cases have been diagnosed in the United States so far from this new northward advance. USDA launched a screwworm.gov website in November to aggregate all information and data related to the threat.

A coordinated proactive strategy between U.S. and Mexican animal health staff aims to keep pushing the screwworm-free barrier further south, employing stringent animal movement controls, surveillance, and trapping. Construction of a new sterile fly dispersal facility in south Texas began last summer, to provide a critical contingency capability to disperse sterile flies

In mid-December the Food and Drug Administration conditionally approved Credelio Quattro-CA1 (lotilaner, moxidectin, praziquantel, pyrantel) chewable tablets for the treatment of infestations caused by screwworm larvae (myiasis) in dogs and puppies at least eight weeks of age and weighing at least 3.3 pounds. “Most dogs in the United States are at low risk of screwworm exposure due to their geographic location; however, dogs near the U.S.-Mexico border and dogs that have traveled to countries with active infestations are more likely to be exposed to the parasite,” the FDA states.



At left: Screwworm infections in a goat leg and lamb umbilical area. Right: a larva.



Several recent studies are showing the importance and potential of soil organisms for plant health, and better understanding of how specific microbes can influence the nutritional content of plants.

Soil bacteria boost protein in grains

The Green Revolution of 1950-1970 helped agriculture flourish around the world.

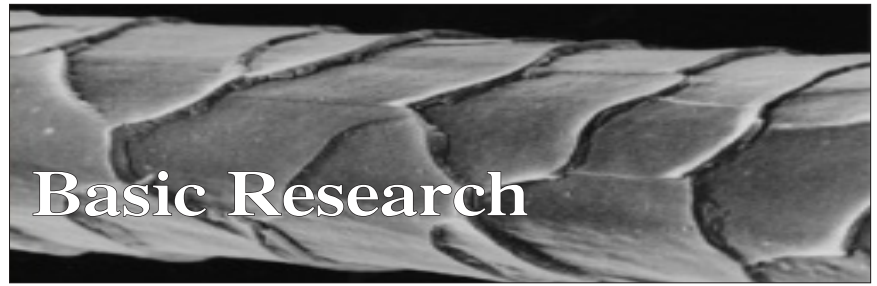
Advances in technology enabled farmers to scale up production, improving the way they watered and fertilized their crops.

The technology advancements—particularly in using chemical fertilizers—paved the way for taller plants, richer soils, and greater crop yields. All of these are known as “above-ground” traits.

University of Delaware plant biology professor Harsh Bais says “below-ground” traits have been overlooked. “As far as food security, we will have significant challenges by 2050 when the world’s population doubles,” Bais said. “We incentivize our farmers for crop yield; we don’t incentivize them for growing nutrient-dense crops. Growing nutrient-dense plants will enable the population to be fed better and avoid any potential nutrient deficiencies.”

Bais and a team of researchers from the University of Delaware, Stroud Water Research Center and the Rodale Institute investigated how a bacteria naturally found in the soil that is beneficial to human health can enhance the levels of the amino acid and antioxidant ergothioneine in spring wheat. The findings offer insight into improving the nutritional value of crops in the future. The study was funded by the U.S. Department of Agriculture and the Foundation for Food and Agriculture Research.

The researchers grew spring wheat—one of the most widely consumed cereal crops—in a laboratory. After letting the seeds germinate



and grow for seven days, they added a strain of bacteria called *Streptomyces coelicolor* M145 to the spring wheat roots. The bacteria was able to inhabit the plant’s roots and produce ergothioneine. The findings suggest that an alternative plant breeding approach could be utilized to associate plants with benign microbes to increase protein content in staple crops, particularly grains that are low in protein.

“Establishing a partnership with the appropriate types of microbes or microbial consortia for plants represents a method of engineering the rhizosphere—the region of the soil near plant roots—to foster a more favorable environment for either microbial associations that stimulate plant growth traits or enhance nutrient availability, which is the path forward,” Bais said.

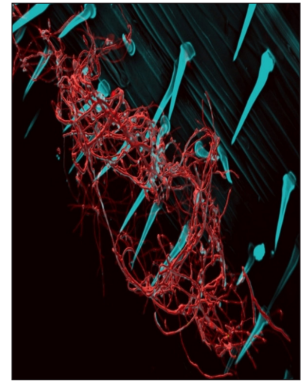
Scientists have become more interested in soil bacteria as a means to solve issues with malnutrition and nutrient deficiencies. Alex Pipinos, the lead author and a UD Class of 2025 graduate with a master’s in microbiology, said changing environmental conditions are a factor diminishing protein content in plants.

“Essentially, crops are becoming less nutrient-dense,” Pipinos said. “The more nutrients in crops, the more healthy humans can be.”

Higher protein grains also of course could boost livestock nutrition.

Adapted from [an article](#) in the University of Delaware Daily.

*Wheat roots inoculated with benign bacteria *Streptomyces coelicolor* show the presence of bacteria (in red) on the leaf trichomes. The image shows that the bacteria may adapt to an endophytic lifestyle in plants, meaning they could live inside plants.*



A [new study](#) analyzes soils sampled across Kansas to determine the importance of ecological memory—how soils from a specific location are influenced by microbes that have evolved in response to the climate at that site.

Drought alters soil microbiota by selecting for traits that preserve fitness in dry conditions. “Legacy effects” or ecological memory refers to how past stress exposure influences microbiota responses to future environmental challenges.

“The bacteria and fungi and other organisms living in the soil can actually end up having

important effects on things that matter, like carbon sequestration, nutrient movement and what we’re particularly interested in—the legacy effects on plants,” said co-author Maggie Wagner, associate professor of ecology and evolutionary biology at the University of Kansas and associate scientist at the Kansas Biological Survey and Center for Ecological Research.

“We got interested in this because other researchers, for years, have been describing this type of ecological memory of soil microbes

Microbial 'memory' aids plants in drought

continued on page 10 ►

Image courtesy
Leo Tammi



Management

Ewes with
parasite-
resistant
traits make
colostrum
higher in
IgG

A two-year [study of Katahdin ewes](#) published in *Small Ruminant Research* showed that those with greater parasite resistance (lower fecal egg counts measured at three periods post-lambing) produced a darker, yellower colostrum 2.5-fold higher in immunoglobulin (IgG), and retained elevated IgG levels for 60 days post parturition.

The study at Virginia Tech's Southwest Agricultural Research and Extension Center (SWAREC) followed previous work showing that lambs with low post-weaning fecal egg counts (PFEC) had higher survivability, and also in response to clostridial vaccination, generated a more robust and rapid antibody response.

The ewes were age 3-6 years and selected for twinning. Fecal egg counts were taken within 24 hours of lambing, at 30 and 60 days post-

lambing. In the first year the ewes were divided into low-PFEC (<50) and high-PFEC (>50+) groups, and low-, mid- and high-PFEC groups in the second. Colostrum samples were collected from each udder (10cc each within 6 hours of lambing). Total IgG within colostrum and milk was measured using an ovine-specific enzyme-linked immunosorbent assay (ELISA).

These findings prompted curiosity of the maternal influence underpinning differences observed in lamb survivability based upon PFEC genotype. Thus, this study aimed to assess the impact of dam PFEC EBV on IgG concentration, Brix values (a measure of sugar content), and color in colostrum.

These data indicate that Low-PFEC Katahdin ewes generate colostrum with greater antibody concentration and more yellow color. Lambs born to these ewes would have a significant advantage in passive immunity from their dams, which may explain some component of the enhanced lamb survivability observed pre-weaning.

The capacity to choose particular producer-driven traits can be realized by utilizing estimated breeding values (EBVs) provided through data submission to the National Sheep Improvement Program. The EBV for post-weaning fecal egg count (PFEC) is expressed as a percent reduction and evaluates an animal's genetic merit for parasite resistance based on worm egg counts taken postweaning (Notter and Lewis, 2018).

Pennsylvania Farm Show Sheep and Wool Events

The 2026 Pennsylvania Farm Show takes place January 10-17 at the Farm Show Complex in Harrisburg. See the website for complete details and schedules. <https://www.pa.gov/agencies/farmshow/pa-farm-show>

Some events of interest to shepherds are below.

Friday, January 9

2:30 p.m. Fleece show judging

Saturday, January 10

9:30 Junior Market Lamb Show

Sunday, January 11

2 p.m. From Switzerland to Pennsylvania: The Valais Blacknose Sheep

6 p.m. Grand Champion Junior Drive

Monday, January 12

8 a.m. Junior Market Lamb Showmanship Contest

11 a.m. Biosecurity Basics with Seth Confer, PA Dept of Agriculture

5 p.m. Sheep Herding State Finals

Tuesday, January 13

8 a.m. Sheep Herding State Finals

9:30 a.m. Junior Market Animal Sale of Champions (Lambs, Goats, Rabbits, Turkeys, Swine, Cattle)

10:30 a.m. Junior Market Animal Sale of Champions (Lambs, Goats, Rabbits, Turkeys, Swine, Cattle)

11 a.m. Trash to Treasure: Recycling and the Art of Upcycling Presentation

1 p.m. Textile Science in Agriculture

Wednesday, January 14

10 a.m. Youth Fleece to Shawl Contest

3 p.m. Sheep to Shawl Contest

6:30 p.m. Sheep to Shawl Auction

7 p.m. Youth Sheep to Shawl Auction

Thursday, January 15

2:30 Open Breeding Sheep Show: Shropshire, Southdown, AORB Wool, Merino, Natural Colored, Corriedale, followed by Supreme Champion Ram & Ewe selection

Friday, January 16

8 a.m. Open Breeding Sheep Show: Hampshire, Cheviot, AORB Meat, Montadale, Tunis, Horned Dorset, Suffolk, Dorset, followed by Supreme Champion Ram & Ewe Selection

6 p.m. Junior Breeding Sheep Showmanship & Outstanding Young Shepherd Contest

Saturday, January 17

8 a.m. Junior Breeding Sheep Show

2:30 p.m. Junior Breeding Master Showmanship Contest



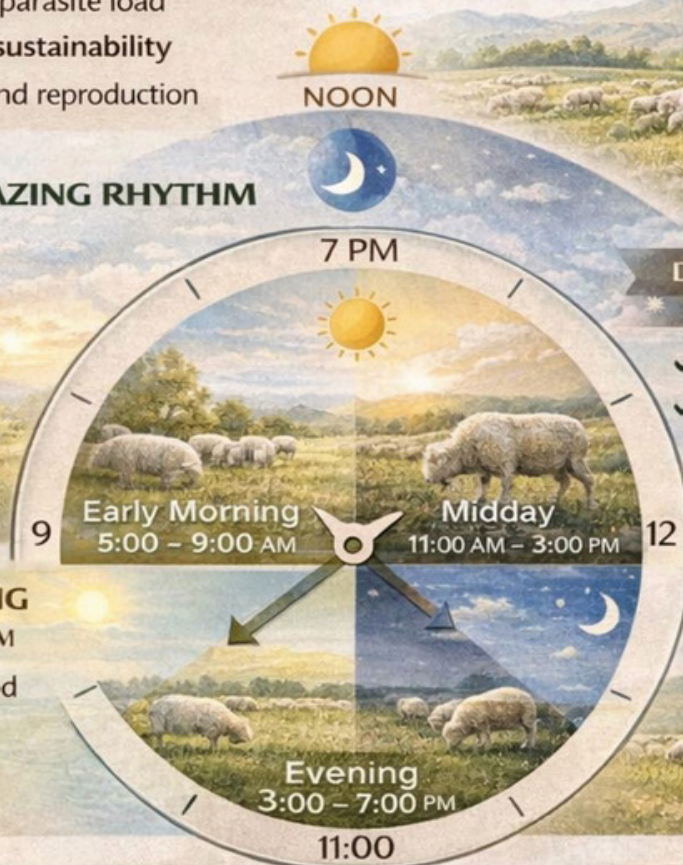
DAILY GRAZING PATTERNS OF SHEEP

WHY UNDERSTANDING GRAZING PATTERNS MATTERS

FieldvetDrMSS

- ✓ Improves feed efficiency
- ✓ Reduces disease & parasite load
- ✓ Enhances pasture sustainability
- ✓ Optimizes growth and reproduction

TYPICAL DAILY GRAZING RHYTHM OF SHEEP



DAILY TIME BUDGET OF A SHEEP

- ✓ Grazing 6-8 hours
- ✓ Rumination 6-8 hours
- Resting 4-6 hours
- Walking 2-3 hours
- Drinking 30-60 minutes

MID-MORNING 9:00 - 11:00 AM

- ✓ High appetite period
- ✓ Prefer tender, dew-covered grasses
- ✓ Low/ heat stress

GRAZING BEHAVIOUR CHARACTERISTICS

- ✓ Prefer **short**, dense grasses
- ✓ Highly selective feeders
- ✓ Graze against wind direction
- ✓ Move as a flock
- ✓ Avoid wet, muddy or contaminated areas



IMPACT OF POOR GRAZING MANAGEMENT

- ⚠ Reduced intake
- ⚠ Weight loss
- ⚠ Poor wool growth
- ⚠ Low fertility
- ⚠ Increased parasitism



FACTORS AFFECTING DAILY GRAZING PATTERN

- Temperature & humidity
- Pasture availability & quality
- Breed & physiological stage
- Water availability
- Parasite pressure
- Predation risk



GOOD GRAZING MANAGEMENT PRACTICES

- ✓ Allow early morning & evening grazing
- ✓ Avoid midday grazing in hot seasons
- ✓ Provide shade & clean water
- ✓ Use rotational grazing
- ✓ Avoid overgrazing



SEASONAL VARIATION IN GRAZING

“Right grazing time ensures healthy sheep and sustainable pastures.”

Basic research ▶

Microbial memory,
from page 7 ▶

This piece is adapted from [an article](#) published in *KU News*.

This research was funded by the National Science Foundation's Division of Integrative Organismal Systems.

having some way to remember from their ancestors' past," she said. "We thought this was really fascinating. It has a lot of important implications for how we can grow plants, including things like corn and wheat. Precipitation itself has a big influence on how plants grow, but also the memory of the microbes living in those soils could also play a role."

According to Wagner, while legacy effects previously have been reported, they aren't well characterized. A better understanding could eventually benefit farmers and agricultural biotech firms, which could build on the research.

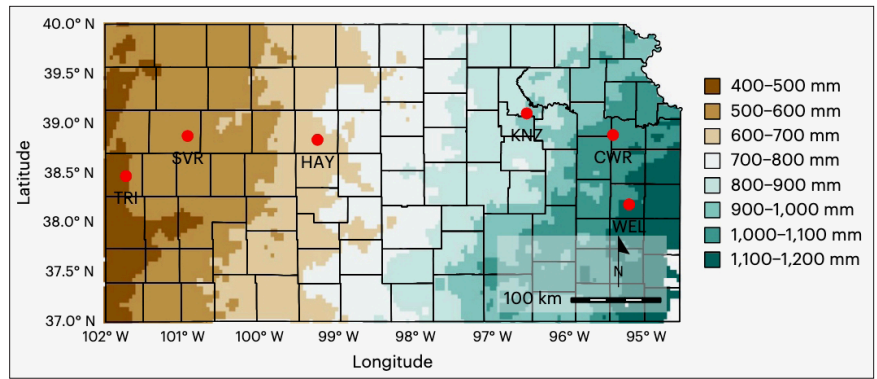
"We don't really understand how legacy effects work," she said. "Like, which microbes are involved at the genetic level, and how does that work? Which bacterial genes are being influenced? We also don't understand how that legacy of climate moves through the soil to the microbes, and then eventually to the plant."

By sampling soils from six sites across Kansas—from its lower, rainier eastern half to its western higher and drier plains—the researchers aimed to determine differences in legacy effects.

"We grew the plant in different microbial communities with different drought memories; then measured plants' performance to understand what was beneficial and what was not."

The researchers challenged the microbial communities for five months, either with plenty of water or very little water.

"Even after many thousands of bacterial generations, the memory of drought was still detectable," Wagner said. "One of the most interesting aspects we saw is that the microbial legacy effect was much stronger with plants that were native to those exact locales than plants that were from elsewhere and planted for agricultural reasons but weren't native."



While more plant species will need to be tested to confirm this hypothesis—the researchers tested one crop (corn) and one native plant (gamagrass)—the researchers said the findings could offer important context for farmers who want to use beneficial microbes to improve yields.

"We think it has something to do with the co-evolutionary history of those plants, meaning that over very long periods, gamagrass has been living with these exact microbial communities, but corn has not," she said. "Corn has only been in this area for a few thousand years."

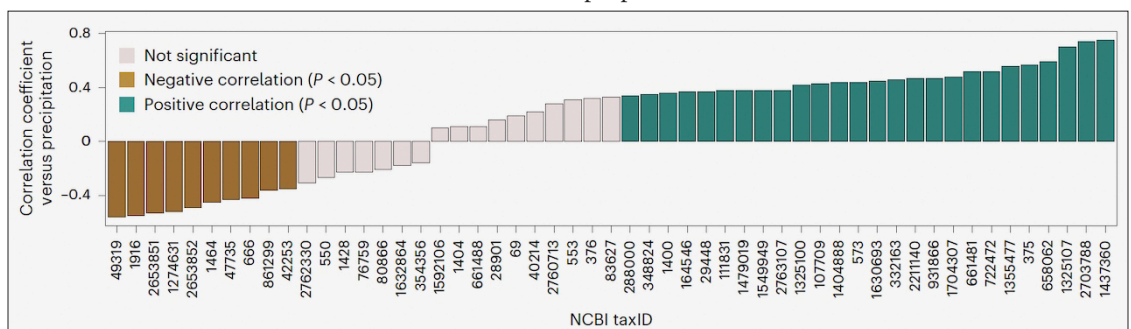
Additionally, the research team performed genetic analysis on both microbes and plants to better understand on the molecular level how legacy effects might function.

"The gene that excited us most was called nicotianamine synthase," Wagner said. "It produces a molecule mainly useful for plants to acquire iron from the soil but has also been recorded to influence drought tolerance in some species. In our analysis, the plant expressed this gene under drought conditions, but only when grown with microbes with a memory of dry conditions. The plant's response to drought depended on the memory of the microbes, which we found fascinating."

Gamagrass is being looked at as a possible source of genes to improve corn performance under challenging conditions.

"The gene I mentioned earlier could be of interest," she said. "For biotech firms focused on microbial additions to crops, it's a hint about where to look for microbes with beneficial properties."

Top right: Kansas map showing precipitation levels and sample collection locations. **At right:** Correlation coefficients between each bacterial taxon (NCBI taxID) and mean annual precipitation





In October in Randallstown, 22 contestants, aged 6 to 24, showcased their handmade woolen clothing and accessories at the Maryland Make It With Wool Contest. From classic styles to bold designs, each piece was a testament to the artistry and passion in our community. Thank you to everyone who participated and made the event so special.

Maryland MIWW winners

Congratulations to Preteen Champion Annette Clougherty, Talbot County, and also to our junior champion Brenna Chamlin, Carroll County, and senior champion Lynne Thomas, Washington County, who both will travel to Reno, Nevada at the end of January to take part in the National Make It With Wool Competition.



The 2026 Competition will be held October 10. Information and entry forms will be available at the MSWF May 2-3.



Top: Junior winner Brenna, preteen winner Annette, and senior winner Lynne. **Upper left,** junior contestants. **Above,** senior contestants. **Left,** preteen contestants.

Chesapeake Fibershed advancing natural fiber use

Watch the panel discussion and other CF recordings on [YouTube here](#); visit the Chesapeake Fibershed [website](#) to learn more about its goals, projects, and programs to expand the use of natural fibers.

Chesapeake Fibershed's annual Sustainable Cloth Challenge in November featured a panel discussion on how to advance the embrace of natural fibers, local fashion, and fair labor.

Speakers were Marcy Linton, associate professor of costume technology, Department of Drama at the University of Virginia, Katrina Orsini, program associate at the George Washington University Textile Museum, Mary Kingsley of Lady Farmer near Poolesville. Moderator was Susan Skalak, educator, shepherd, clothing designer, and incoming president of Chesapeake Fibershed. Skalak introduced the discussion thus:

"Before 1960 all of our clothing was made of wool, cotton, linen, silk, or rayon.

"Polyester was introduced in clothing in the 1960s as a miracle fabric that resisted stain, was wash and dry and no iron. From there its popularity grew, until in the 1970s when it faced a backlash. In the 1980s improvements in technology allowed blends to be made, blending polyester and other fibers together, but really took off with development of microfibers (<10 microns).

Microfibers meant softness."

The result was devastating for natural fibers. In 1960 29% of fabric was made from petroleum sources; in 2024, 88% is fossil fuel based and is projected to continue growing. The discussion centered on five questions:

- Given that 70+% of our clothing contains fossil fuel, how do we get more interest in natural fibers and locally grown fiber?
- The American textile infrastructure has largely been dismantled by global trade and lack of investment in U.S. factories. How can we begin to rebuild some of this infrastructure even at a small local scale realizing the cost of automated machinery is high and most of the machinery comes from Europe and China?
- Is local fashion a possibility?
- The biggest complaint I hear about local fiber and local goods is their high cost, can a case be made for buying locally?
- Is a coop model possible for local fiber or local fashion?

Future Harvest Conference in Silver Spring January 22-23

Every winter, farmers, educators, agriculture service providers, and foodpreneurs gather for Future Harvest's Annual Conference—two days of workshops, lectures, farmer-to-farmer sessions, and regional food. The conference takes place January 22-23, at the Silver Spring Civic Building. Find more event details and registration information here. <https://futureharvest.wildapricot.org/event-6395708>

One-day tickets are \$210/members and \$260/nonmembers; 2-day tickets are \$315/members and \$360/nonmembers.

Some Future Harvest sessions relevant to shepherds are:

THURSDAY, JANUARY 22

8 a.m. Registration opens

Session I

8:30-9:45 a.m. From Soil to Human Health: findings from the Rodale Vegetable Systems Trial

8:30-9:45 a.m. Let's Talk about Farmer Cooperatives

8:30-9:45 a.m. Cultivating Community: The Agrovillage Model

10-11:30 a.m. Land Acknowledgment & Keynote Session: Origins of Regenerative Agriculture Panel;

Session II

12:45-2 p.m. Pasa Soil Health Benchmark Study: Insights from 7+ Years of Data from Mid-Atlantic Farms

12:45-2 p.m. The Happy CSA Farmer - Build a Profitable CSA

12:45-2 p.m. Raising Hair Sheep Holistically

12:45-2 p.m. What is Care Farming? Utilizing Farming for Therapeutic Purposes

Session III

2:15-3:30 p.m. Farm HR: How to hire and Manage Employees

2:15-3:30 p.m. Intro to Soil Health

2:15-3:30 p.m. Statewide Guidance to Navigate the Complexities of Value-Added Agriculture

Session IV

3:45-5 p.m. Poultry, Sheep and Goats: Protecting your Small Livestock from Predators

FRIDAY, JANUARY 23

7:30 a.m. Registration Open & Exhibits

8:15-9:30 a.m. Annual Membership Meeting

Session V

9:30-10:45 a.m. CSA Design and Administration

9:30-10:45 a.m. Small Farm Investments for a Climate-Resilient Future

9:30-10:45 a.m. Alternative Fertility Sources for Forage Systems

11 a.m. to 12:15 p.m. Keynote: Lisa Held, Civil Eats

Session VI

1:45-3 p.m. Wool in the Soil

1:45-3 p.m. Small Farm Meets Big Institutional Partner

1:45-3 p.m. Native Habitat Design for Regenerative Agriculture

Session VII

3:15-4:30 p.m. USDA Reorganization, Changes in Food and Agriculture Policy, and Grassroots Advocacy in a Tumultuous Year

3:15-4:30 p.m. Deciding if Organic Certification is Right for Your Operation

3:15-4:30 p.m. You've Got to Be Kidding Me - Mitigating Risk on the Farm

3:15-4:30 p.m. NRCS Customer Service (What to Expect)

3:15-4:30 p.m. Growing for Diversity: Meeting the Needs of a Changing Community

3:15-4:30 p.m. Farming with Care: When Farming Promotes Physical & Emotional Resilience

Steve Breeding and **Emily Chamelin** will continue as MSBA president and vice president in 2026, with board member **Michael Berlanger** stepping up to be secretary and **Colleen Histon** continuing her long service as treasurer.

A bylaws change approved at the November annual meeting reduced the new positions for directors from four to two individuals serving 3-year terms. The two new directors, serving through 2028, are also familiar faces.

Glenn Stunkel has been farming his whole life on a 125-acre Frederick County homestead that has been in the family since the 1800s. The farm currently runs about 200 head of registered polled Dorset brood ewes, a breed he's raised for more than 30 years. Along with the flock are a herd of 25 Angus cattle.

Glenn has two grown children, Tim and Katie, and three grandchildren. He and his wife Cheryl have been married for 23 years.

A past eastern district representative for and vice president of the Continental Dorset Club, Glenn and family show their Dorsets throughout Maryland and Pennsylvania. At the North American International Livestock Exposition in

Kentucky, Stunkel's sheep have been awarded National Champion Dorset ewe and ram at different times. He also takes sheep to the Ohio Dorset Sale in Illinois and the Midwest Stud Ram Sale. Registered and commercial stock and freezer lamb are offered at the farm.

Glenn is the current President of the Board of Directors of Farmers Co-Op in Frederick Maryland. His past service includes terms on the boards of the Frederick County Farm Bureau and MSBA, and president of the Frederick County Farm Museum.

A.J. Hesketh-Tutton runs a flock of Katahdin Sheep in West Friendship. "Of all the types livestock I've worked with, which is most of them, sheep have always been my favorite. They are quirky, intelligent (they don't want you to know it), individual (again...secretly) and affectionate (but only if no one is looking)," she says.

"There is something quite wonderful about being adopted by a flock. It's a level of trust that is hard won, but all the more special for being so. Aside from loving the animals themselves, I have also always liked them for sheer sustainability. I don't think there's any other breed of livestock that can produce so much from so little."

◀ Maryland News

2026 MSBA officers, board members take office



The Maryland Sheep & Wool Festival's Winterfest takes place January 24 and 25, online. Registration is through the Lessonface portal, which you can access at <https://www.lessonface.com/sheepandwool>.

This annual winter series begins with a free keynote lecture from Jill Duarte: "A Year in the Life of an Independent Dyer and Fiber Artist," from 1 to 2 p.m. on Saturday, January 24.

Forty-one fiber arts and two shepherds' seminars are in this year's lineup. [Follow this link](#) for more information on each and to register. There are:

- 5 fiber prep classes
- 19 spinning classes (three of them offered at two different times)
- 11 crochet classes (one offered at two different times)
- 2 weaving classes
- 3 needle felting classes
- 1 visible mending class (offered at two different times)

Two shepherd's seminars are offered on Saturday the 24th. Each seminar has a \$15 fee.

"Balancing feed rations – What to feed, when

to feed it and what alternative feed sources

can you use?" In this class, from 1 to 2:30 p.m., animal nutritionist Jimmy Parker will discuss balancing rations and nutritional needs at different stages of sheep development. Parker will explain what to test for, what alternatives are available, drought year challenges, nutritional gaps you might be missing, mineral needs, and more.

"Wool testing – What to test for and how it can benefit your bottom line." In this 2:30 to 4 p.m. seminar, Dr. Russell Jessup will discuss the wool testing lab in San Angelo, Texas. Jessup will speak about some of the new (rapid, low-cost) tests their wool lab is developing that they hope will be of interest to smaller producers. To date, they have initiated two. One uses the Mark-10 force gauge to measure fiber strength – both on staples and yarn, and the second uses NIRS (near infrared spectroscopy) to assess color.

Discussion of how the Optical Fiber Diameter Analyzer (OFDA) and these two other assays can complement each other for a suite of rapid, low-cost tests. Dr. Jessup is also interested in hearing from small producers as to what other testing those producers would like to have access to.

Winterfest highlights



Parker (above) and Jessup.



Maryland News ▶ The next MSBA beginning sheep shearing school will be February 13–14 in Fairplay, Maryland. This workshop will teach shearing with electric, hand-held machines.

Sheep shearing school has openings

- Participants will learn:
- the New Zealand method of sheep shearing,
 - the care and adjustment of electric, hand-held shearing machines and blades, and
 - proper wool handling and care during and after shearing.

Each participant will receive the ASI Sheep Shearing Manual, an instructional DVD, and assorted wool literature. Shearing equipment will be provided.



Kevin Hickman, here shearing a merino, is the instructor for the school.

Shearing school is open to anyone wanting to learn commercial sheep shearing techniques and who is physically and mentally capable. (It is encouraged to have seen professional shearing in action prior to registering, so as to know the demands of commercial shearing techniques.)

Twelve participants will be selected from

applications, in order to optimize the instructor-to-learner ratio. Due to overwhelming past response, applications will be prioritized based on the list below, in descending order:

- MSBA members (highest priority) (based on 2025 membership)
- Prior MSBA shearing school attendees
- Sheep owners
- Aspiring commercial shearers
- Sheep and fiber enthusiasts/non-owners (lowest priority)

After registration has closed, applications will be reviewed and participants chosen, based on priority and a first come/first served basis. Due to safety, participants under 16 years will not be accepted.

Suggested clothing: sturdy shoes, light-duty gloves, durable pants, and a durable long-sleeve shirt. Overalls and bib-overalls encouraged. Lunch is NOT provided. Please bring water and/or sports drinks to stay hydrated.

Registration must be made in advance; if accepted applicants will have 72 hours to pay \$275 electronically per registrant (or the slot will be made available to the next applicant in line). The fee includes ASI materials. Complete and submit [this registration form](#) by January 1, 2026, to mdsheepshearingschool@gmail.com.

Within one week following the deadline, accepted and rejected applicants will be notified via email and/or postal mail. Cancellation by a participant within two weeks (ten business days) of the event, will result in forfeiture of registration fee.



MSBA scholarship applications accepted

The Maryland Sheep Breeders Association, in conjunction with the Maryland Sheep & Wool Festival, is offering a \$1,000 scholarship 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 agriculture or agriculture-related majors (such as food science, veterinarian, ag education, 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 documentation of acceptance or enrollment.

The application window is open until April 15. Applications must include the completed application form (which can be downloaded [here](#)), a 500-word essay, two letters of

recommendation, and a recent high school or college transcript.

Criteria for selection are:

- experience and involvement with sheep and or sheep-related activities (4-H, FFA, Make It With Wool, etc.)
- agriculture or agriculture-related education/career goals
- Community service activities
- leadership and/or extra-curricular involvement
- high school/college academic achievement

The scholarship presentation will be made at the Maryland Sheep & Wool Festival and the winner will be honored at the Maryland Sheep Breeders annual dinner. For more information contact Michael Berlander, michaelberlander@gmail.com.

Maryland Sheep Breeders Association, Inc.

Officers & Directors

Executive Committee

President Steve Breeding 4602 Stein Highway Seaford DE 19973 302-381-6129 spbreeding@gmail.com	Vice President Emily Chamelin Hickman 3230 Eckard Rd. Westminster, MD 21157 443-244-2702 aeri dairy@yahoo.com	Secretary Michael Berlander 2136 Woodbine Road Woodbine, MD 21797 240-381-2183 michaelberlander@gmail.com	Treasurer Colleen Histon 3038 Brightwell Drive Finksburg, Md. 21048 240-388-6633 shepherdsmanorcreamery@verizon.net	Past President Jeffrey White 3610 Baker Road Westminster, MD 21157 410-746-5768 chestnutcreekfarm@gmail.com
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Ex Officio

American Sheep Industry Association Representative	Steve Breeding	34602 Stein Highway Seaford DE 1997	302-381-61298	spbreeding@gmail.com
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Sheep & Wool Festival	Lee Langstaff Jeff White	See addresses below (Langstaff) and above (White)	301-908-9332 410-746-5768	shepherdsheyfarm@gmail.com- chestnutcreekfarm@gmail.com
Make It With Wool	Judy Williamson	6924 Girl Scout Road Boonsboro, MD 21713	301-432-0281	judy10503@aol.com
Maryland Shearing School	Aaron Geiman/ Naveed Malik*	429 Hook Road Westminster, MD 21157	443-340-2322	mdsheepshearingschool@gmail.com

Board Members

2026 Directors	Sarah Campbell	4956 Muddy Creek Road West River, MD. 20778	443-994-4864	sarah@newroots.farm
	Ollie King	23477 Path Valley Road Doylesburg, PA 17219	717-414-8553	rivertonfarmsllc@gmail.com
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	Glen Stunkel	6105e Dickerson Rod P.O. Box 10 Tuscarora, MD 21790	301-639-7257	a55twister@aol.com
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Website Coordinator	Kris Thorne	15218 Frederick Road Woodbine, MD 21797	410-598-2459	office@sheepandwool.org

The Maryland Sheep Breeders Association exists to promote sheep, lamb, and wool in Maryland and the region, and to increase public knowledge of the healthful and useful qualities of sheep, lamb, and the many sheep & wool related products. MSBA seeks to enhance and encourage the knowledge, enjoyment, growth, and profitability of member shepherds by providing educational, networking and marketing opportunities through a range of events and activities.



3038 Brightwell Drive • Finksburg, MD 21048



Maryland Sheep Breeders Association:
marylandsheepbreeders.org

Maryland Sheep & Wool Festival:
sheepandwool.org

like us!



Join *the*

MARYLAND SHEEP BREEDERS ASSOCIATION

...and become part of an active organization that sponsors the Maryland Sheep & Wool Festival (the premier event of its kind in the nation), Sheep Shearing School, various youth activities, and a variety of educational functions.

You can join and pay online at <https://marylandsheepbreeders.org>, and fill out your member profile page. If you prefer to register by mail, fill out the form at left and mail with your \$25 check.

The Maryland Sheep Breeders Association Board of Directors meets every other month. Meetings are open to members. For minutes of meetings, contact the MSBA Secretary (see p. 15).

Here are sponsored events and activities for 2025

- January 24-25: Maryland Sheep & Wool Festival Winterfest
- February 13-14: Beginning Shearing School
- May 2-3: Maryland Sheep & Wool Festival
- TBD: Annual Meeting & Dinner.

As a member you will:

- Join an active and friendly community of shepherds and others
- Support the core activities of the MSBA.
- Receive the *Maryland Sheep News*, MSBA's informative newsletter, 3 times a year.
- Receive regular publications from the American Sheep Industry Association.
- Receive priority consideration for enrollment in the Maryland Shearing School (applicable only if you own sheep), and your family members will be given priority consideration for the annual MSBA scholarship.
- Receive free admission to the Maryland Sheep & Wool Festival and be mailed a free copy of the catalog.
- Pay a reduced commission on all fleeces sold at the Maryland Sheep & Wool Festival Fleece Show & Sale.
- Be able to promote your farm or business through a free profile page on the MSBA website.

Annual membership/subscription fee: \$25. The membership year runs from October through September. Dues for membership received prior to June 1, 2025, will be accepted as paid through September 30, 2025. Dues received on or after June 1 will be accepted as paid through September 30, 2026.

Membership application

MARYLAND SHEEP BREEDERS ASSOCIATION

Name: _____

Farm Name: _____

Address: _____

City, State, Zip: _____

Phone: _____

Email: _____

Please include me in the MSBA Breeders Directory.

Web URL: _____

Breed(s): _____ No. Ewes: _____

Send form and \$25 check made payable to MSBA to Kate Warner, Membership Chair, 5241 South Mill Street, Lineboro, MD 21102. She will contact you for additional information for the breeders directory and online profile.