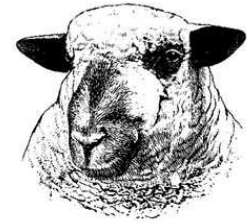




# Maryland Sheep & Goat Producer



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## Inside this issue

IPM Workshops . . . . .	1
Genetics Conference . . . . .	1
Nutrient Management Training . . . . .	2
Nutrition Short Course . . . . .	2
Small Ruminant Expo . . . . .	2
Ewe Lamb Program . . . . .	3
Lamb Checkoff . . . . .	3-4
Research Update . . . . .	4-5
Comparison of Sire Breeds . . . . .	4
Western Maryland Update . . . . .	5
SARE Grants . . . . .	5-6
Disease In-Depth: Bloat . . . . .	7-8
Novel Endophyte in Tall Fescue . . . . .	8-9
Calendar of Events . . . . .	9-10

## Producers Learn IPM Techniques

**S**o far, approximately 150 sheep and goat producers have participated in Integrated Parasite Management (IPM) workshops held in Frederick, Baltimore, Loudoun (VA), Columbia (PA), St. Mary's, and Somerset Counties. Additional workshops have been scheduled for Anne Arundel (Aug. 18), Scott (VA) (Aug. 31), and Washington (Sept. 7 & 8) Counties.

The four-hour workshops teach the basics of internal parasites (gastro-intestinal worms, especially the barber pole worm) and their control. Producers learn proper anthelmintic use, how to conduct their own fecal tests, and how to use the FAMACHA© eye

anemia chart to determine the need for deworming individual animals. Workshop participants receive a laminated FAMACHA© eye anemia chart, available only to persons who complete an approved training.

Contact an extension agent in your county or region if you're interested in having an IPM workshop in your area. Organizations and clubs may host workshops. Workshops need to be scheduled during "worm season," May-September, so that worm eggs can be found in fecal samples and varying degrees of anemia can be observed in live animals.

## A Focus on Genetics

**A** Genetics Conference for sheep and goat producers will be held on Saturday, October 30, 9:00 a.m. to 4:00 p.m., at the Western Maryland Research & Education Center in Keedysville (9 miles south of Hagerstown). All presentations will focus on the genetic improvement of sheep and goats raised for meat, fiber, or milk. The conference will combine lecture presentations with hands-on workshops. A program brochure is included with this newsletter. Pre-registration (\$25 per person) is required by October 25. Late registrants cannot be guaranteed lunch, which will feature lamb and/or goat. Contact Susan for more information, tel. (301) 432-2767 x343 or [sschoen@umd.edu](mailto:sschoen@umd.edu).

Educating People to Help Themselves

Local Governments • U.S. Department of Agriculture Cooperating

## **Nutrient Management Training for Pasture-Based Operations**

University of Maryland Cooperative Extension in cooperation with the Maryland Department of Agriculture is offering a training and certification workshop for farmers who have pasture-based operations and are interested in becoming certified to write nutrient management plans for their farms. The process will require a non-consecutive two-day commitment. The first day of training will be offered from 9:00 a.m. to 4:30 p.m. on November 5 at the Montgomery County Extension Office.

The second day of training is scheduled for November 19 at the Montgomery County Extension Office. This day will consist of a short certification exam followed by a plan writing session. You must pass the exam and complete a Nutrient Management Plan for the 2005 season in order to become certified. Maryland Cooperative Extension Nutrient Management Specialists will assist with the plan writing session.

In order to be prepared to participate in this program you will need current soil analysis for each management unit on your farm. "Current" is defined as less than three years old. Since you will be writing a plan for the 2005 season, your soil samples must have been taken in 2002 or later. Soil sampled prior to 2002 must be re-sampled.

If you are interested in attending the training and would like to receive registration information, or if you have any questions about sampling procedures or determining management units please contact Heather Hutchinson at (301) 432-2767 ext 339 or [hhutchin@umd.edu](mailto:hhutchin@umd.edu).

## **Nutrient Management Regulations**

According to the Water Quality Improvement Act of 1998, Maryland agricultural operations are required to have (and implement) a nutrient management plan (by specific deadlines) if they have 8 or more animal units on their farm or their gross farm income is \$2,500 or more. An animal unit is defined as 1,000 lbs. of live animal weight. According to a Maryland Department of Agri-

culture nutrient management fact sheet, 8 animal units is equivalent to 80 sheep, 90 goats, 75 alpacas, 25 llamas, 4 horses, 6 dairy cattle, 8 cows/beef animals, or combinations thereof.

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## **Nutrition and Feeding Short Course to be held in Frederick**

A Small Ruminant Nutrition and Feeding Short Course will be held on October 28, November 4, and November 18 (all Thursday evenings) at the Frederick County Extension Office. The short course will combine lectures with hands-on activities and will stress practical information which producers can use to feed and manage their flocks. The primary instructor will be Susan Schoenian. To register, contact Terry Poole at (301) 694-1594 x13577 or [tepoole@umd.edu](mailto:tepoole@umd.edu).

### Part I - October 28

Presentation - Nutrient Requirements

Hands-on Activity - Feed Identification

### Part II - November 4

Presentation - Life Cycle Feeding

Hands-on Activity - Ration balancing

### Part III - November 18

Presentation - Nutritional Disorders

Hands-on Activity - Forage quality

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## **2004 Small Ruminant Expo**

Virginia State University will be hosting a Fall Small Ruminant Expo on Saturday, September 11. Similar programs will be held at other locations in Virginia (Bedford and Emporia). The morning program will feature a VSU/SARE Marketing Symposium as well as research updates from VSU animal scientists. The afternoon program will consist of a FAMACHA® Parasite Control Workshop.

The Expo will be held at VSU's Randolph Farm. Pre-registration for the morning program (with lunch) is \$8 per person; late registration is \$10. The afternoon program is limited to 30 people. Pre-registration is \$8; no late registration. For information, contact Dr. Joe Tritschler at (804) 524-5957 [jtritsch@vsu.edu](mailto:jtritsch@vsu.edu).

## Ewe Lamb Program Sign-up Delayed until Early Fall

Sign-up for the 2004 Ewe Lamb Retention Program will begin in mid-September at the earliest, according to ASI<sup>1</sup> Executive Director Peter Orwick. An earlier sign-up deadline (of July or August) had been expected, but has been delayed due to the time it has taken USDA to complete the paperwork and application process. The base period of ewe-lamb program eligibility is August 1, 2003, to July 31, 2004. Ewe lambs must have “qualified” at some point during this period.

On January 27, 2004, Agriculture Secretary Ann M. Venemen announced that USDA would provide the U.S. lamb industry with \$18 million in payments to sheep and lamb producers to encourage the replacement and retention of ewe-lamb breeding stock. Producers should contact their local FSA offices for sign-up information.

<sup>1</sup> American Sheep Industry Association

Source: ASI Press Release (7/15/04)

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## Complying with the Lamb Checkoff

The Lamb Check-off was established by the Lamb Promotion, Research, and Information Order and became effective on April 11, 2002. Collection of Assessments began on July 1, 2002. All sheep (feeder lambs, market lambs, cull animals, and breeding stock) are subject to assessment which is one half cent per pound of live lamb sold by producers, seedstock producers, exporters, and feeders and 30 cents per head of lamb purchased for slaughter by first handlers. A first handler is defined as the entity that takes possession of the lambs for slaughter (including custom or ethnic slaughter) or sale directly to the consumer.

Marketing agencies (sale barns) are not assessed but will be required to collect assessments from the producer, feeder, or seedstock producer and pass it on to the subsequent purchaser. Assessments for direct marketers – persons who are both producer and first handler (one who processes

lamb or lamb products of their own production and markets the products) – will be assessed one-half cent per pound on the live weight at the time of slaughter and will be required to pay an additional assessment of \$.30 per head.

Each producer, feeder, or seedstock producer is obligated to pay that portion of the assessment that is his share and to pass it on to the subsequent purchaser, ultimately reaching the first handler or exporter, who will remit the total assessment. If a producer is both producer and first handler, he will be responsible for remittance. The following records must be kept:

- Name and address of the person collecting the assessment
- Name of the person who paid the assessment
- Number of head of lambs sold
- Total weight in pounds of lambs sold
- Total assessments paid by producer, seedstock producers, or feeder
- Date of sale

### Assessments must be remitted to:

American Lamb Board  
23029 Network Place  
Chicago, IL 60673-1230

Assessments must be sent with Form LS-81, the Monthly Remittance Report. Remittances are due no later than the 15<sup>th</sup> day of the following month in which lambs or lamb products were purchased for slaughter or export. For example, the assessment for a lamb sold for slaughter in July would be due August 15.

#### Rate of Assessment

- ✓ **One-half cent per lb. of live lamb sold**
- ✓ **30 cents per head of lamb purchased for slaughter**

The order that established the Lamb Checkoff calls for a delayed referendum to be conducted no later than July 2005. It also provides the right for any producer, seedstock producer, feeder, first handler, or exporter to receive a refund (or pro rate share, thereof) of their assessments paid during the pre-refer-

endum period. Refunds will be made within 90 days after the results of the referendum are announced.

The American Lamb Board (ALB) was created by the U.S. Secretary of Agriculture to administer the Lamb Promotion, Research, and Information Order. The board works to strengthen the domestic lamb industry's position in the marketplace through advertising, publication relations, culinary education, and retail promotions. The 13-member volunteer board represents all segments of the industry. ALB's annual budget for 2004 is \$2.3 million. The majority of the funds (75%) are spent on promotions. In 2004, \$15,000 was budgeted for grant funding. Grants require a 1:1 cash match. Non-profit organizations can submit proposals that expand or strengthen the market for American lamb, conducting promotions or consumer educational events, field days, or demonstrations to further disseminate information to lamb buyers.

Source: American Lamb Board (ALB)  
www.americanlambboard.org

## Focus on Research

### An Update: Comparison of Sire Breeds in a Low-input Pasture System

by Dr. Niki Whitley  
University of Maryland Eastern Shore

Northeast SARE<sup>2</sup> funded a grant in which UMES and Maryland Cooperative Extension (Niki Whitley and Susan Schoenian) are utilizing low-input Katahdin hair sheep females with three different sire breeds to determine which sires will economically increase carcass quality on a pasture production system. This is the half-way mark of the 3-year study. This year, we hope to breed for one more year's worth of data as well as find producers willing to use one of the three terminal sire breeds on their own farms (a ram provided free of charge). These studies are designed to help producers find which of the three sire breeds would work best on their own farms to increase their individual farm profits (to help sustain the

small farm lifestyle).

The three sires being tested include a "traditional" lamb breed – the Suffolk and two "import" types – the Texel, a wool sheep bred extensively for and excelling in muscling and carcass traits and the White Dorper, a hair sheep also bred for and excelling in muscling and growth. A Katahdin ram was also used this year as a "control" since last year, our own Katahdins not on the study seemed to grow just as well as the Dorper crosses.

Last year, in a very small preliminary study, we lambed 10-15 yearling ewes in April bred to each sire. There was no difference in birth weight or number born, but we found that just before weaning, the Suffolk crossbred lambs began to gain weight faster (on pasture only) than the other lambs. In addition, at market (in November when lambs were hard to find), though the smaller breeds brought the highest price per pound (the Texel was the highest with \$1.42/lb), the heavier Suffolk crossbred lambs brought slightly more per head.

Fecal egg counts were not different (remember they are all half Katahdin), though we discovered a new tapeworm issue that we did not previously have and that has gotten out of hand this summer (nothing seems to get rid of it). Tenderness was not different (measured by machine) and an informal taste



Dorper x Katahdin Lambs



Texel x Katahdin Lambs



Suffolk x Katahdin Lambs

test conducted at the University of Missouri indicated no differences in tenderness, juiciness or flavor.

This year, we lambled 25-30 Katahdin ewes in February bred to each of the three terminal sires and 18-20 bred to a Katahdin ram. Well over 200 lambs were born, but only approximately 200 were used on the study (based on age). So far, this is the information that we have analyzed: number born was not different and birth weights were equal for Dorper and Katahdin (approximately 8.5 lb) and similar for the Suffolk (10.2 lb) and Texel (9.9 lb). The Suffolk and Texel were both statistically greater than the Dorper and Katahdin. Weights taken at an average of 19 and 71 (weaning) days of age were adjusted for 30 and 90 days of age as well as for age of dam and sex of lamb.

This year, at as early as 30 days of age, the Suffolk-sired lambs were heavier (38 lb) than all other breeds (Dorper, Katahdin and Texel were equal at 33 lb) but by weaning, while Suffolk (60 lb) were still the heaviest, the Dorper (55 lb) and Texel (52 lb) were heavier than the Katahdin (49 lb) sired lambs. More weight data was collected but not reported until analysis can be completed. So far, fecal egg counts do not appear to be different and are deceptively low (animals with low fecal egg counts still show signs of heavy parasitism).

Fifteen lambs per breed (raised on pasture) were slaughtered for taste tests so far. Some terminal-sired lambs were pulled off of pasture at weaning (randomly chosen) for feedlot finishing and slaughter so meat quality/taste tests could compare the 3 terminal sires on pasture vs feedlot as well. That data has not yet been collected.

If you are interested in using a ram for the producer part of the study and can keep track of your satisfaction with the ram compared to others you used or have used in the past, please contact Dr. Whitley (nwhitley@umes.edu) or Susan Schoenian (sschoen@umd.edu).

<sup>2</sup> Northeast Sustainable Agriculture and Research & Education

Editor's Note: Dr. Niki Whitley was recently awarded promotion and tenure from the University of Maryland Eastern Shore Department of Agriculture. Congratulations Niki!

## Research Update: Western Maryland

Very often, things do not turn out as we plan. This is what happened this year with the small ruminant research program at the Western Maryland Research & Education Center (WMREC). Meningeal worm infection prevented the collection of any data pertaining to stomach worms. The meningeal worm is an internal parasite of the whitetail deer that causes neurological problems (often-times severe) when it invades an unnatural host such as a sheep or goat. The June issue of this newsletter contained an in-depth article on the worm.

When the meningeal worm is a problem, it is recommended that small ruminants be dewormed monthly with an anthelmintic such as Ivomec® or SafeGuard®. Restricting access to certain areas of the pasture and attempting to control the snail/slug population are other preventative measures that can be taken. If a goat or sheep shows symptoms of meningeal worm, high, repetitive doses of anthelmintics have been advocated, although there is no scientific proof that standard anthelmintics will prevent meningeal worm infection or reverse the symptoms. However, such treatments appeared to reduce symptoms in animals at WMREC.

Overall, 2004 has been a "learning year" for the research program at WMREC. Plans for next year are to permanently install interior fencing and shelters, to minimize labor and prevent damage to the pasture caused by moving shelters. Depending upon availability of animals, sheep will be the focus of the research grazing program next year.

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## Grant Funds Available

The Northeast Regional Sustainable Agriculture Research & Education Program (SARE) supports producers who want to try an experiment, trial, or demonstration project on their farm by conducting a farmer-grower grant program. SARE farmer grants address a wide range of production and interest areas: marketing, agroforestry, grazing, water quality, pest control, bees, ornamentals and turf, aquaculture, processing and

adding value, soil health, tool and prototype development, and livestock projects of all kinds. SARE is seeking projects that are innovative, potentially profitable, environmentally sound, and will likely benefit the wider farm community.

There are two types of SARE grant offerings: grass roots and farm trial. Grass root grants are experimental and innovative; the goal is to test new ideas. Farm trial grants support adoption of specific practices. The goal is to field test techniques that have been previously researched and gather data about their results and effectiveness. To be eligible for grant funding, you must be a farmer in the Northeast SARE region. You need not be farming full-time, but your operation must produce an established crop or animal product that you sell on a regular basis.

All projects must have a technical advisor, such as a county extension agent, NRCS staff, a university research or extension specialist, a private crop management consultant, or other agricultural professional. Projects must include some sort of outreach component. Common outreach mechanisms are field days, demonstrations, fact sheets, handouts, or materials made available to other farmers through a producer network. You can also present your project at a meeting, develop a brochure, or seek media coverage.

SARE grants are very competitive. In 2004, Northeast SARE awarded \$219,593 to 38 farmers. Awards ranged from \$1,121 to \$10,000 and the average grant was about \$5,800. Grants are paid in two installments.

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Northeast SARE  
10 Hills Building  
105 Carrigan Drive  
University of Vermont  
Burlington, VT 05405-0082  
(802) 656-0471  
www.uvm.edu/~nesare  
farmergrants@taconic.net

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2005 proposals must be postmarked by December 7, 2004. Contact Northeast SARE for a 2005 Farmer/Grower Grant Application. A publication, "How to Write a SARE

Farmer/Grower Grant Application" is also available from SARE.

#### What SARE funds can be used for:

- To compensate you for your time and the time your employees work directly on the project.
- To buy materials specific to the project.
- To pay for project-related services like soil testing and consulting.
- To support project-related travel.
- To pay postage, printing costs, telephone, and other outreach expenses.
- To compensate advisors, collaborators, and other participants.
- To rent equipment needed specifically for the project.
- To pay other direct project costs not explicitly excluded.

#### Things that SARE **does not** fund:

- Projects where the request for SARE funds is more than \$10,000.
- Projects where grant funds will be used to cover normal operating expenses.
- Capital Expenses, including the cost of buying land, tractors, or machinery or for making long-term improvements; starting or expanding a farm, establishing a herd or orchard, or funding any comparable major farm fixture. SARE may fund up to \$500 if an equipment expenditure is truly essential to the project.
- Projects that show no link to sustainability.
- Projects where the benefit to other farmers is limited or not clear.
- Proposals from past recipients who are delinquent in their reporting.

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## **So Long, Jordan**

After more than 30 years of service to the University of Maryland (College Park), Jordan Thomas is retiring to pursue his life's ambition to be a teacher. This fall he will be teaching 7<sup>th</sup> and 8<sup>th</sup> grade social studies in Prince George's County. Jordan managed the campus farm, including the sheep flock and previously worked with the campus dairy herd. He has been a strong supporter of the Maryland sheep industry and a regular exhibitor of feeder lambs and carcass lambs at the Maryland Sheep & Wool Festival. Jordan is a member of the Maryland Sheep Breeders Association Board of Directors. We wish Jordan well in his new career!

### Bloat

**B**loat is the accumulation of either free gas or froth in the rumen, which causes rumen distention. The condition is a medical emergency. Bloat is less common in small ruminants than in cattle and less common in goats than sheep. The cause of bloat can be divided into three categories:

1. Frothy bloat - caused by diets that promote the formation of stable froth.
2. Free gas bloat - caused by diets that promote excessive free gas production.
3. Free gas bloat - caused by failure to eructate (belch).

Gas production is a normal outcome of rumen fermentation. Ordinarily, it is discharged by the orderly process of rumination and eructation. Frothy bloat derives from nutritional causes. It is usually associated with the ingestion of legume forages or hay. It may also occur with grazing on lush cereal grain pastures, wet grass pastures, or high-grain diets, especially those which are too finely ground. The feeding of garden greens to animals on a dry hay diet may cause bloat.

Free gas bloat occurs with grain diets, especially if the animals are not adapted to the diet. It can also be caused by a physical obstruction in the esophagus or other conditions such as internal abscesses, hypocalcemia, pain, or peritonitis.

Frothy bloat can occur within hours of exposure to the offending feed or feeding situations. Many cases of bloat are first recognized by finding animals dead in the pasture. However, because bloat may be a normal post mortem change, it is necessary to rule out all possible causes of sudden death under the circumstances in which the animal was found. In the initial stages of the bloat, animals become anxious and uncomfortable and stop eating. The most characteristic sign of bloat is a progressive distension of the abdomen. As the distension progresses, animals become more uncomfortable, stamping their feet, vocalizing, salivating, urinating frequently, and moving with a stilted gait.

Breathing becomes labored. Left untreated, animals will die.

Timely intervention is essential to preventing losses from bloat. Simple passage of a stomach tube may be effective in relieving free gas bloat, but will not correct frothy bloat unless the foam is first broken down. Cooking oils or mineral oil given orally are effective. There are a number of commercial agents that are effective in degrading foam. Poloxalene (e.g. Bloat Guard®) and dioctyl sodium sulfosuccinate are the most effective compounds. In advanced cases of bloat, it may be necessary to insert a trocar or needle into the rumen (left paralumbar fossa). This is a life-saving procedure and should only be done as a last resort, due to the risk of peritonitis and prolonged rumen dysfunction.

Prevention of frothy bloat involves limiting access to offending pastures or feedstuffs, providing supplemental feed and poloxalene in mineral supplements, and adding ionophores to the ration or supplement. When grazing or consuming legumes as “green-chop,” animals should be introduced to the feed or pasture slowly, preferably over a 2 to 3 week period. Some legumes are designed for intensive grazing systems (e.g. Alfagraze). Feeding dry, stemmy hay for 1 to 2 hours before allowing access to the legume pasture may help to minimize bloat. Grazing legumes with high leaf tannin concentrations is usually safer because tannins help to break down rumen foam. Grass-legume pastures in which legumes comprise less than 50 percent of the forage are safer, but can pose a problem to animals that are selective grazers. When animals show a tendency to bloat, concentrates can be top-dressed with some oil, such as peanut or corn oil, to reduce the bloating potential of the feed.

Free grass bloat can be controlled by slow introduction of feeds to allow for rumen adaptation and by the inclusion of ionophores in the diet. Monensin (Rumensin®)<sup>3</sup> and lasalocid (Bovatec®)<sup>3</sup> both decrease the formation of free ruminal gas. Bloat in lambs and kids can have the same causes as in adults, but can also be caused by improper milk feeding. Over feeding, feeding of large infrequent meals, and feeding spoiled or cold milk have been associated with bloat in lambs and kids. However, once they become accustomed to cold milk in a free-choice feeding system,

lambs and kids tend to limit their intake, which helps to prevent.

<sup>3</sup> Rumensin® and Bovatec® are toxic to equines.

Source: Sheep & Goat Medicine by David Pugh (2002) and Goat Medicine by Smith and Sherman (1994).

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## Novel Endophytes in Tall Fescue - Part I

by Dr. Les Vough<sup>4</sup>

**T**all fescue is one of the most important forage grasses in the United States. Infected tall fescue contains alkaloids that reduce gain and performance of grazing animals. However, infected tall fescue is more tolerant of stress, thereby making it more persistent in pastures and hay fields. If the endophyte is removed, animal performance will be improved, but persistence will be reduced. Novel endophytes that do not cause animal toxicity, but still provide the improved persistence to the plants, have been introduced into several tall fescue varieties.

Research across the Southeast has indicated that using tall fescue infected with these novel endophytes can significantly improve animal performance. Studies with cattle and sheep have shown that daily gain, as well as gain per acre, is significantly higher from animals grazing tall fescue infected with a novel endophyte. Early work has also indicated that when grazing pressure is similar, tall fescue persistence is similar when infected with the toxic and novel endophyte.

One of the main agronomic characteristics that makes tall fescue such a widely used species is its ability to persist under stressful pasture conditions. In the late 1970's it was learned that "Kentucky 31" tall fescue was infected with an endophyte (*Neotyphodium coenophialum*). This "toxic" endophyte results in the poor performance of grazing livestock. Many research projects have shown that daily gains can be significantly reduced by the presence of the endophyte.

With the discovery of the toxic endophyte, several varieties of endophyte-free tall fescue were released and planted across the Southeast. It was soon learned

that these varieties were not as persistent as KY 31 toxic tall fescue. Research showed that the endophyte imparts stress tolerance to the plants it infects, resulting in a more persistent plant. Removing the endophyte removes this stress tolerance and shortens the stand life of tall fescue.



*Festuca arundinacea*

Some producers continue to use endophyte-free tall fescue varieties. But even under ideal management, summer droughts can cause significant stand loss in these fields. Because of the importance of stand persistence and the expense of replanting, most producers choose to use infected tall fescue to take advantage of the improved stress tolerance. Part of the management program is to utilize clovers to reduce the toxic effects of the endophyte.

**Novel Endophyte Technology:** In order to eliminate the toxicity but maintain persistence, several research avenues have been taken. One that has developed the fastest is the identification of naturally occurring strains of the endophyte that produce the chemicals or alkaloids needed for stress tolerance, but are not responsible for animal toxicity. These endophytes are known generically as "novel" endophytes. Inserting a novel endophyte into an adapted tall fescue plant should allow for the plant to be just as persistent as KY 31 infected tall fescue without producing fescue toxicosis. Since the endophyte is not found in pollen and does not produce spores, it is only transferred through seed of the "mother" plant. The endophyte found in the seed will be genetically identical to the endophyte of the mother plant. This allows for variety development without losing the non-toxic characteristic of the endophyte.

Early research with introducing high and low alkaloid producing endophytes into tall fescue indicated that there was a complicated interaction between the plant and endophyte in toxin production. In some situations, a low toxin producing endophyte in one plant genotype would produce higher alkaloid levels when inserted into another plant genotype. This observation led researchers to under-

stand that the development of a tall fescue variety with a non-toxic endophyte that produced no fescue toxicosis would need careful evaluation before being released. The agronomic characteristics and grazing animal performance would need testing to ensure the success of the variety. As further work was done, it was shown that an endophyte that produced no ergot alkaloids could be inserted into an improved variety of tall fescue and the result would be an elite variety that was infected, but contained little or no ergot alkaloids to cause fescue toxicosis.

Several different plant/endophyte combinations have been developed and tested over the last few years. Three combinations have been released commercially. The first two were from Pennington Seed Company (Madison, GA). Their releases involved the insertion of the MaxQ™, novel endophyte into "Georgia-5" and "Jesup" tall fescue varieties. The MaxQ™/Georgia-5 combination has been developed primarily for the lower portion of the tall fescue belt, while the MaxQ™/Jesup combination is more for the mid and upper portion of the region. These combinations have been tested in several studies across the southeastern U.S. Recently, FFR Cooperative (Lafayette, IN) released "ArkPlus," a novel endophyte in combination with "Hi-Mag" tall fescue.

Source: G.E. Bates, Proceedings of 2004 Conference of the American Forage and Grassland Council. Adapted by Les Vough, Forage Crops Extension Specialist, University of Maryland.

<sup>4</sup> Dr. Lester Vough is the Extension Forage Crops Specialist for the University of Maryland. He can be reached at (301) 405-1322 or vough@umd.edu.

Editor's note: The effect that grazing infected tall fescue has on horses, especially brood mares, and cattle is well known. Sheep appear to be less affected by the endophyte in tall fescue, but are still prone to problems, especially reduced weight gains due to reduced intake of the forage. Less is known about goats. Several universities have initiated studies to determine the effect that grazing infected tall fescue has on the performance of meat goats.

*Look for Part II of "Novel Endophytes in Tall Fescue" in the October issue of this newsletter.*

## Featured Web Site

### Cornell Sheep Program

The Cornell Sheep Program ([www.sheep.cornell.edu](http://www.sheep.cornell.edu)) is a global source of information about sheep, wool, sheep milk, and their management, production, and marketing in the Northeastern United States. The web site contains links, management information, and research updates. Several software packages are available from the site.

Cornell University is best known for developing the STAR © System, an accelerated lambing system in which ewes are managed to produce five lamb crops in three years. The Cornell sheep farm consists of 250 Dorsets, 50 Finnsheep, 150 Finn x Dorset, and 100 ¼ East Friesian x ¾ Dorset ewes. Cornell markets blankets made from the wool of its sheep.

Cornell University established the Northeast Sheep and Goat Marketing Program, whose web site is [sheepgoatmarketing.org](http://sheepgoatmarketing.org).

<http://www.sheep.cornell.edu>

## Calendar of Events

### August 27

Maryland State Fair 4-H/FFA Meat Goat Show  
Maryland State Fairgrounds, Timonium, MD.  
Info: Susan at (301) 432-2767 x343 or [sschoen@umd.edu](mailto:sschoen@umd.edu).

### August 28

Virginia Performance Tested Ram Lamb Sale  
Steeles Tavern, VA. Info: Scott Greiner at (540) 231-9163 or [sgreiner@vt.edu](mailto:sgreiner@vt.edu).

### September 11

Small Ruminant Expo at Virginia State University  
Petersburg, VA. Info: Joe Tritschler at (804) 524-5957 or [jtritsch@vsu.edu](mailto:jtritsch@vsu.edu).

### October 23

Maryland Sheep Breeders Association Annual Meeting and Banquet, Carroll County Ag Center, Westminster, MD. Info: Sam Mullen at (301) 898-7796 or [smulleniii@aol.com](mailto:smulleniii@aol.com).

### October 28, November 4 & 18

Sheep and Goat Nutrition/Feeding Short Course  
Frederick County Extension Office  
Contact: Terry Poole at (301) 694-1594 ext. 13577 or [tepoole@umd.edu](mailto:tepoole@umd.edu).

October 29-30

Pennsylvania Sheep & Wool Growers  
Fall Sheep Production Seminar. Bedford, PA.  
Info: Tom Calvert at (814) 267-3771 or  
lcalvert@wpia.net.

October 29-31

1<sup>st</sup> Annual American Black Welsh Mountain Sheep  
Association Meeting. Wye Heights Plantation,  
Easton, MD. Info: [www.blackwelsh.org](http://www.blackwelsh.org)

October 30

Sheep and Goat Genetics Conference  
Western Maryland Research & Education Center  
Keedysville, MD. Info: Susan Schoenian at (301)  
432-2767 x343 or [sschoen@umd.edu](mailto:sschoen@umd.edu)

October 30

Virginia Bred Ewe Sale  
Rockingham County Fairgrounds, Harrisburg, VA.  
Info: Corey Childs at (703) 901-2103 or  
[cchilds@vt.edu](mailto:cchilds@vt.edu).

November 5 and 19

Nutrient Management Training for Pasture-Based  
Operations, Montgomery County Extension Office  
Info: Heather Hutchinson at (301) 432-2767 x339  
or [hhutchin@umd.edu](mailto:hhutchin@umd.edu)



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Susan Schoenian  
Area Agent, Sheep and Goats  
W. MD Research & Educ. Center