



# Wild & Woolly



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VOLUME IV □ ISSUE II

FALL 2011

## 2011 Lambing & Kidding School

The 2011 Lambing & Kidding School will be held Saturday, November 19 at Chesapeake College in Wye Mills, MD. University of Maryland Extension holds a Lambing & Kidding School every other year in a different part of the state.

Each Lambing & Kidding School has featured a small ruminant veterinarian as the main speaker. This year's main speaker is Dr. Susan Kerr from Washington State University. Her participation is being sponsored by Northeast SARE.



Dr. Kerr demonstrates how to give an intraperitoneal injection at the 2009 school.

cine degree from Cornell University. She will give presentations on obstetrics and neonatal care. She will also demonstrate how to perform a basic necropsy on a neonatal lamb or kid.

While the school is appropriate for any sheep and goat producer, it is ideally suited to persons who have been raising sheep and/or goats for less than five years.

This year's Lambing & Kidding School will feature a separate educational tract for youth.

In addition to being an Extension Educator, Dr. Kerr holds a Doctor of Veterinary Medi-

Youth sessions will be mostly hands-on.

*continued on page 3*

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University of Maryland Extension programs are open to all citizens without regard to race, color, gender, disability, religion, age, sexual orientation, marital or parental status, or national origin.

## Boer Buck Tops Sale

A Full Blood Boer buck consigned by Sherrie Losch (PA) was the high-selling buck at the 2011 Western Maryland Goat Field Day & Sale held on September 24 near Boonsboro, MD.

The 11 bucks that met the 2011 Gold, Silver, or Bronze standards of performance were offered for sale via silent auction.

The Losch buck met the Gold standards of performance for parasite resistance and parasite resilience. It sold for \$875. The buyer was Lynda Heise from St. Thomas, PA. Losch's Boer bucks have usually posted good fecal egg count data.



High-selling Boer buck  
(L-R) Lynda Heise and Sherrie Losch

*continued on page 2*

## *Boer Buck Top Sale (continued from page 1)*



**2011 Top consigner and 5 year consigner**  
(L-R) Lawrence Burke and Sam Burke



**Top-performing Gold buck**  
Consigned by Luke Miller

The next high-selling buck was a Purebred Kiko consigned by P.J. Murphy (NJ). It sold for \$725. It was also purchased by Lynda Heise. Murphy is a first year consigner and previous buyer of top-performing bucks.

Merritt "Sam" Burke (DE) was the top consigner in this year's test. He sold all four of his bucks that qualified for the sale. His top selling buck brought \$450. It sold to Mike & Rachel Moran from Alderson, WV. Burke was also recognized for being a five year consigner to the test.

The top-gaining buck was a Savanna x Spanish buck consigned by Janet & Stephen Garrett (VA). The crossbred buck sold for \$350. The buyer was Zach Teter from Beverly, WV. The Garretts are first year consigners.

The top-performing buck in this year's test was a Kiko x Boer buck consigned by Luke Miller from Indiana. This was the only buck that met the Gold standards of performance. Miller also had a buck that met the Silver standards of performance.

Both of Miller's top-performing crossbred bucks went back to his Indiana farm for breeding. Miller is a first year consigner to the test and a previous buyer of top-performing bucks.

In addition to the bucks sold in the sale, Lincoln University (Missouri) purchased four bucks from the test via private treaty. For their upcoming research project, they required two parasite "resistant" and two parasite "susceptible" Kiko bucks.

The four Kiko bucks selected by Lincoln will be used in a divergent selection experiment on parasite resistant. It will be interesting to follow the progress of this research. Of particular interest will be the fecal egg counts of the offspring sired by the two resistant and two susceptible bucks from the test.

Lincoln University purchased the most resistant buck in the test, a Purebred Kiko consigned by Craig Adams (IL). The Adams buck never had a fecal egg count above 500 epg. Its average egg count was 131 epg. The Adams buck was also one of the most resilient bucks in this year's test. All of his FAMACHA© scores were 1.

Jeanne Dietz-Band (MD) also had a buck whose FAMACHA© scores were all 1. The other "resistant" buck purchased by Lincoln University was a Purebred Kiko buck consigned by Mike & Lori Renick (WV).

In addition to the performance-tested bucks, seven Kiko does were offered for sale via private treaty. The high-selling doe was a Kiko yearling doe consigned by P.J. Murphy. It sold for \$600. Mark Sweitzer (PA) consigned four Kiko doe kids. Their average selling price was \$225.



*Lambing & Kidding School (continued from page 1)*

They will include a parasitology lab, skills lab, wet lab, and a skillathon practical.



In the parasitology lab, youth will learn how to set up fecal samples and determine fecal egg counts. In the skills lab, they will learn how to dock, castrate, disbud, ear tag, deworm, inject, and tube feed lambs and kids. In the wet lab, youth will dissect neonatal lambs and/or kids. A limited number of adults may participate in the youth sessions.

Other speakers will include Susan Schoenian, Sheep & Goat Specialist at the University of Maryland's Western Maryland Research & Education Center; Jeff Semler, Agriculture Extension Educator in Washington County; Chris Johnston, 4-H & Youth Educator in Queen Anne's County Maryland; Dr. Nelson Escobar, Small Ruminant Specialist at the University of Maryland Eastern Shore; and Dr. Dahlia O'Brien, Small Ruminant Specialist at Delaware State University.

The registration fee is \$45 per person. Additional family (or farm) members are \$35. Youth registration is \$25. Full registration includes the program, morning refreshments, a hot lunch, and a resource notebook or jump drive. The resource notebook and/or jump drive may be purchased separately for \$10 (\$15 for people who cannot attend the school).

The registration form and payment (checks made payable to University of Maryland) should be mailed to 2011 Lambing & Kidding School, Western Maryland

Research & Education Center, 18330 Keedysville Road, Keedysville, MD 21756. The registration form/flyer is available at <http://www.sheepandgoat.com/programs/11LKSchoolFlyer.pdf>

Questions pertaining to registration should be directed to Pam Thomas at (301) 432-2767 x315 or [pthomas@umd.edu](mailto:pthomas@umd.edu). Questions pertaining to the program should be directed to Susan Schoenian at (301) 432-2767 x343 or [sschoen@umd.edu](mailto:sschoen@umd.edu).

The registration deadline for the school is November 9.

#### Tentative program -- Adults

Time	Topic	Speaker
8 a.m. to 9 a.m.	Registration and light refreshments	
9 a.m. to 9:15 a.m.	Welcome and introduction	Susan Schoenian
9:15 a.m. to 9:45 a.m.	Getting ready for lambing and kidding	Susan Schoenian
9:45 to 10:15 a.m.	Obstetrics I	Dr. Susan Kerr
10:15 a.m. to 10:30 a.m.	Break	
10:30 a.m. to 11:15 a.m.	Obstetrics II	Dr. Susan Kerr
11:15 to 12 noon	Nutrition before and after lambing/kidding	Dr. Nelson Escobar
12 noon to 1:15 p.m.	Lunch and door prizes	
1:15 p.m. to 2:45 p.m.	Neonatal care	Dr. Susan Kerr
2:45 to 3 p.m.	Break	
3 p.m. to 4 p.m.	Basic necropsy	Dr. Susan Kerr

#### Tentative program -- Youth

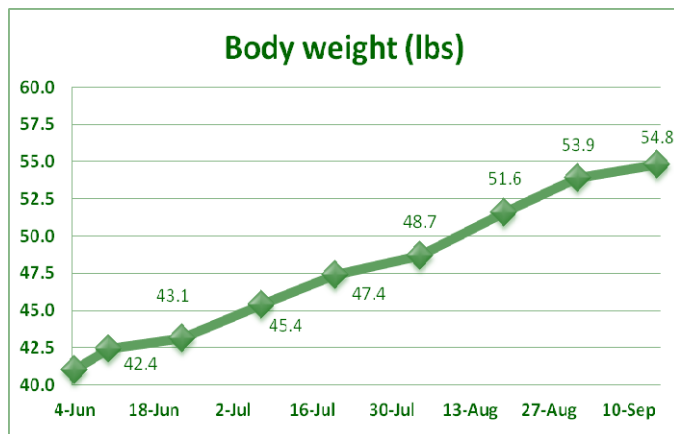
Time	Adult program	Instructor
8 a.m. to 9 a.m.	Registration and light refreshments	
9 a.m. to 9:15 a.m.	Welcome and introduction	Susan Schoenian
9:15 a.m. to 10:15 a.m.	Parasitology lab	Dr. Dahlia O'Brien Graduate students
10:15 a.m. to 10:30 a.m.	Break	
10:30 a.m. to 12 noon	Skills lab	Jeff Semler
12 noon to 1:15 p.m.	Lunch and door prizes	
1:15 p.m. to 2:45 p.m.	Wet lab	Dr. Nelson Escobar
2:45 to 3 p.m.	Break	
3 p.m. to 4 p.m.	Skillathon practical	Chris Johnston

## 2011 Goat Test Results

Eighty bucks were consigned to the 2011 Western Maryland Pasture-Based Meat Goat Performance Test. They were delivered to the test site on Friday and Saturday, June 3 and 4. On these days, weights ranged from 29 to 69 lbs. and averaged 41.0 lbs. After a 6-day adjustment period, the goats were re-weighed. The weights recorded on June 10 were the starting weights for the test. Starting weights ranged from 28 to 70 lbs. and averaged 42.5 lbs.

Final weights were recorded on September 15. Final weights ranged from 37 to 71 lbs. and averaged 54.9 lbs. While on test, weight gain ranged from -9 to +23 lbs. and averaged 12.4 lbs. Average daily gain (ADG) is determined by dividing the weight gain by the number of days of the test (98).

The goat with the highest rate-of-gain was a Savanna x Spanish buck consigned by Janet & Stephen Garrett (VA). The crossbred buck gained 0.235 lbs. per day. His ADG ratio was 181%, meaning he gained 81% better than the average buck in the test. Only bucks with gain ratios above 100 should be selected for breeding.



Weight gains, while not robust, were steady, as evidenced in the graph above. During the test period, the goats experienced a variety of weather and forage conditions. The test site was dry during the middle part of the test, but very wet during the last six weeks of the test period.

Individual fecal samples were collected every two weeks. The samples were collected directly from the rectum of the goat, unless the goat provided a sample while he was waiting to be worked.

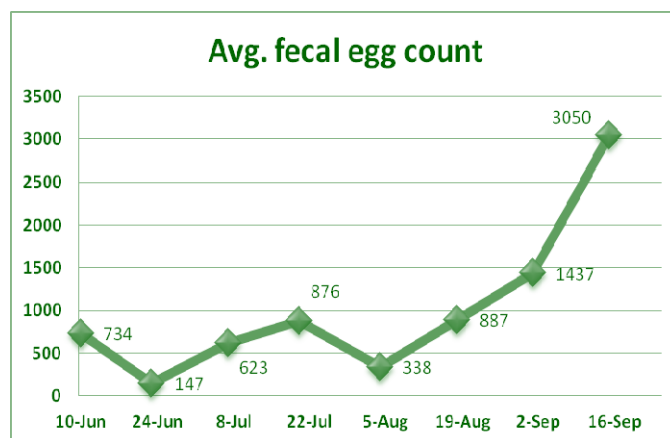
Fecal egg counts were determined by Dr. Dahlia J.

O'Brien's lab at Delaware State University. Fecal egg counts are an estimate of the number of adult worms present in the goat's gut. They are a measure of parasite resistance.

The purpose of the test is to determine which bucks are more resistance to internal parasites. It goes without saying that bucks which shed a lot of parasite eggs should not be kept for breeding. Parasite resistance is a moderately heritable trait that should not be ignored in selection programs. Bucks should be held to a higher standard than does, as their genetics will be passed onto more offspring.

During the early and mid-part of the test, fecal egg counts were not very high. While some goats had high egg counts, the majority of egg counts were below 2,000 epg and often below 1,000 epg. Though clinical parasitism could occur at lower levels, 2,000 epg is often considered the level of clinical significance for the barber pole worm. Fecal coprocultures showed worm eggs to be almost all barber pole worm (*Haemonchus contortus*). Dr. Ray Kaplan's lab at the University of Georgia ID'ed the worm larvae.

During the last six weeks of the test, egg counts rose



significantly, as a result of the increased rainfall. In fact, egg counts from the September 15 collection were so high that they eliminated five bucks from the sale. Before September 15, these bucks were meeting the standards for parasite resistance.

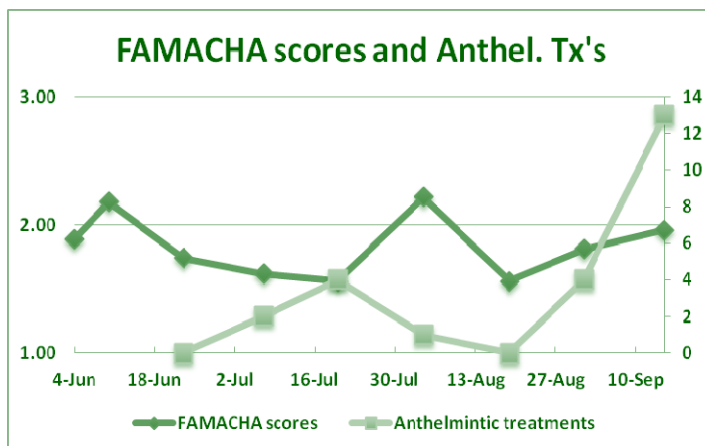
Three bucks in the test showed themselves to be quite resistant to the parasite challenge under this year's test conditions. The most "resistant" buck was a purebred Kiko consigned by Craig Adams (IL). The two other

(Continued on page 5)

2011 Goat Test (continued from page 4)

bucks with very low egg count data were a Kiko x Boer buck consigned by Luke Miller (IN) and a full-blood Boer buck consigned by Sherrie Losch (PA).

A few goats required deworming during the test, but for the most part, clinical parasitism was not a problem during this year's test. The high egg counts from the samples collected on September 15 would likely have led to some clinical parasitism if the test had continued for several more weeks. For this reason, goats with FAMACHA® scores of 3 were dewormed on September 15.



FAMACHA® scores (1-5) are an estimate of packed cell volume and the need for deworming individual goats. While not as heritable as parasite resistance (fecal egg counts), selection for parasite resilience is highly recommended. Goats that require frequent deworming as evidenced by high FAMACHA® scores should not be kept for breeding. Bucks should be held to a higher standard than does.

Two goats had FAMACHA® scores of 1 each time they were checked, resulting in an average FAMACHA® score of 1.0. The two most resilient bucks in the test were a purebred Kiko consigned by Craig Adams and a percentage Kiko buck consigned by Jeanne Dietz-Band (MD). Questions about the test should be directed to Susan Schoenian at [sschoen@umd.edu](mailto:sschoen@umd.edu) or (301) 432-2767 x343.

## Webinars A new way to learn



Webinars are seminars presented through the world wide web. Anyone anywhere can participate in a webinar, so long as they have a connection to the Internet. High speed access is recommended. Interaction is via a chat box.

Last year, the University of Maryland Extension Small Ruminant Program conducted two webinar series: 1) Ewe and Doe Management: Late Gestation thru Weaning; and 2) Spring Worm Webinar Series. Both webinar series are available for viewing at <http://www.sheepandgoat.com/recordings.html>.

The PowerPoint presentations that accompanied the webinars may also be viewed or downloaded from the same web page.

Pre-registration is no longer required for webinars. Participation is open to the first 80-100 people who log on. You can have your name added to an e-mail reflector list to be notified of upcoming webinars. Contact Susan Schoenian at [sschoen@umd.edu](mailto:sschoen@umd.edu) to have your e-mail address added. Webinars will also be announced via the Shepherd's Notebook blog at <http://mdsheepgoats.blogspot.com>.

For various reasons, it makes sense that more educational programs will be delivered via web technologies. Webinars won't replace traditional educational programs, but they will give more people access to information and they will reduce the costs of program delivery.

The University of Maryland Extension Small Ruminant Program plans to conduct more webinars in 2012. Please suggest webinar topics to Susan. A webinar focusing on nutrition and feeding is being planned for early 2012.

## Lambco Update

LambCo is a USDA-inspected, state-of-the-art facility for slaughtering lambs and goats. It also performs custom exempt slaughter for the ethnic market and other individual customers. The facility opened in July 2008, in New Windsor MD.

Recently, people may have seen a "For Sale" sign in front of LambCo and heard rumors that the facility was closing. While it's true that LambCo is no longer processing lambs for its previous customer, the facility is in the process of negotiating a deal with another meat purveyor. If successful, LambCo will begin full operations again and be looking to source local lambs for its new client.



## 4-H Meat Goat Show Finishes Ahead of Hurricane

### Congratulations!



**Grand and Reserve Champion Market Goats**  
Exhibited by Cooper Bounds (R)



**Reserve and Grand Champion Rate-of-Gain**  
Bryan Bowman (L) and Charles Buckmeier (R)



**Champion Meat Goat Showman**  
(L-R) Ashley Braun, Margaret Holloway,  
Crystal Stowers, and Heather Gleason

With the threat of Hurricane Irene looming, the 4-H/FFA Meat Goat Show was held at the Maryland State Fair on August 26. The show was expedited so that 4-Hers could depart the fair early, before the storm hit. The 4-H/FFA Livestock Auction was postponed until the following week-end.

### Market goats

Cooper Bounds, a 4-Her from Carroll County exhibited the Grand and Reserve Champion market goats. Katie Mayne from Montgomery County had the Best Bred-and-Owned 4-H Market Goat.

The following 4-Hers had class winners in the market goat show: Erica Sprout (2), Cooper Bounds (3), Tanner Ridgely, Troy Bennett, Katie Mayne, and Casey Bounds. Carroll County had the top county group of market goats.

### Rate-of-gain

While there is no rate-of-gain requirement for the market goats at the state fair, awards are given in recognition of superior performance. The market goat with the highest rate-of-gain was exhibited by Charles Buckmeier from Frederick County.

Charles' market goat gained 0.75 lbs. per day between its county weigh-in and the first day of state fair. Reserve champion rate-of-gain was won by Bryan Bowman from Howard County. Bryan's goat gained 0.54 lbs. per day.

### Breeding goats

The 4-H/FFA Meat Goat Breeding Show is divided into a commercial, non-registered division and a registered division, with fullbloods and percentages competing against each other.

Sam Zambuto from Cecil County exhibited the Grand Champion Commercial Doe. Dean Bennett had the Reserve Champion Commercial Doe. Cooper Bounds had the Grand and Reserve Champion Registered Does. Cooper's doe was named the Best Doe in the Meat Goat Show.

Rachel Novotny had the Champion Buck in the show. The Best Bred-and-Owned Breeding Goat was the Champion Commercial Doe exhibited by Sam Zambuto.

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## Carcass Comparison: Pasture vs. Pen-Fed Goats

Ten consigners from the 2011 Western Maryland Pasture-Based Meat Goat Performance Test were asked to provide an additional goat for pen feeding. The goal was to have one goat from the pasture test and one goat from pen feeding (from the same consigner) that could be harvested to collect carcass data. To make valid comparisons between the carcasses of pasture and pen-fed goats, it was important that the goats be of similar size, age, and genetics.

While the pasture-test goats consumed a pasture-only diet, the pen-fed goats were given free choice access to a grass hay (square bales). Grain was gradually introduced to their diet and was increased as the test progressed and their appetites increased.

Officially, the pen-fed goats were fed grain once a day, all they could eat in 20 minutes. They were fed in poly troughs that were hung on the side of the pen. Feeder space was ample, though some goats dominated others at feeding time. The grain was a 16 percent commercial goat pellet manufactured by ADM and called Goat Power.

The pen-fed goats were handled in the same manner as the pasture-raised goats. They were weighed bi-weekly and FAMACHA®, body condition, coat condition, and dag scores were determined. On September 1, they were scanned to determine their rib eye area and back fat thickness.

Nine goats from the pen and nine goats from the pasture test were harvested on September 29 at Country Foods

in Waynesboro, PA. The carcasses were deboned to determine yields of boneless meat.. A sample was taken from each carcass to determine fatty acid composition. The carcass data will be reported in the next issue of the newsletter.



4-H Meat Goat Show Finishes Ahead of Hurricane( *Continued from page 6* )

## Showmanship



The 4-H/FFA Meat Goat Showmanship competition was swept by girls. Heather Gleason was the 1st place novice showman. She was awarded a set of clip-pers donated by Frey's Livestock Supply. Crystal Stowers from Carroll County was the Champion Junior Showman. Rachel Novotny was Reserve Champion.

Margaret Holloway from Harford County was the Champion Intermediate Showman. Austin Stoner was Reserve Champion. Ashley Braun from Charles County was the Champion Senior Showman. Sam Zambuto was Reserve Champion.

Margaret Holloway was named Grand Champion 4-H/FFA Meat Goat Showman. She defeated Margaret Buckmieier from Frederick County in the Dean's Showmanship Challenge.

Brent Jennings, a 4-H animal science specialist from North Carolina State University served as the show's judge for the second year in a row. Susan Schoenian is the superintendent of the 4-H goat show. Shannon Uzelac is the assistant superintendent.

The hurricane resulted in a very small Open Class Boer Goat Show two days later at the fair





## Distiller's Grains Reduce Need For Deworming

Weaned lambs (and goats) grazing on pasture have high susceptibility to internal parasites which can greatly reduce growth rates and contribute to lamb mortality.

Researchers at The Ohio State University (in Wooster) conducted three experiments to determine the effects of supplementation with dried distiller's grains (DDG) or soybean hulls (SH) on weaned lambs grazing orchardgrass pastures.

In three experiments, supplementation with DDG reduced parasitism (i.e. fewer lambs required treatment with an anthelmintic) and improved growth rates.

DDG is a by-product of the ethanol industry and a cheaper feed alternative for livestock.

Source: Abstract provided by Dr. Steve Loerch.

Experiment 2		
Treatment	ADG (lbs/d)	Percent Tx
Control No supplemental feed	0.21	81
Supplement – SH 1.3 lbs per lamb per day	0.41	31
Supplement – DDG 1.4 lbs per lamb per day	0.49	9

## Web Resources

### Hoof Trimming Video

As part of their SARE-funded Sheep Foot Health Project, the University of Maine has created a video on hoof trimming. The video is equally applicable to either sheep or goats.

In addition to demonstrating proper hoof trimming techniques, the video provides information about foot rot, a highly contagious disease that can affect the hooves of sheep and goats.

Dr. Richard Brzozowski, University of Maine Extension Educator and lead investigator for the foot health project, demonstrates and discusses hoof trimming and foot rot in the 8:35 minute (edited) video.

The video can be accessed from the University of Maine Sheep Foot Health Project web site at <http://umaine.edu/sheep/foot-rot/>. The video may also be viewed on YouTube at <http://www.youtube.com/watch?v=Ar7D-GARhI>.

The purpose of the sheep foot health project is to help Northeast sheep producers eliminate foot rot from their flocks. The project includes cooperators in multiple states, including Maryland. The investigators are seeking funding to expand the project to goats.



### Sheep Management Tips

The American Sheep Industry Association (ASI) is providing management tips for producers as they look for recommendations to increase flock size and improve efficiency. ASI, through its Let's Grow with two PLUS initiative, is developing a series of universal management practices designed to assist in a number of specific production areas.

"The fact sheets are written by sheep specialists from around the country," stated Peter Orwick, ASI executive director. "Each topic contains practical information for producers of all sizes, from any part of the country." The management tips have been posted to [www.growourflock.org/resources](http://www.growourflock.org/resources).

<http://www.growourflock.org/resources>





## *Recipe*

### *Lamb Stew with Mashed Potatoes*

**Ingredients:**

3 American Lamb shanks  
 1 cup flour  
 1/4 cup chile powder  
 1 Tbsp. kosher salt  
 1 Tbsp. cracked black pepper  
 1/4 cup olive oil  
 1 cup diced onions  
 1 cup diced celery  
 1 cup diced carrots  
 6 cloves garlic  
 1 cup white wine  
 4 cups beef broth  
 2 sprigs thyme  
 3 sprigs rosemary  
 2 bay leaves  
 4 to 5 Yukon Gold Potatoes, peeled and quartered  
 3 cups heavy cream  
 4 oz. unsalted butter  
 6 roasted garlic cloves, pureed  
 Salt and pepper to taste



Mix together flour, chile powder, salt and pepper. Roll lamb shanks in this flour mixture.

In a large roasting pan, heat oil; sear shanks. Add onions, celery, carrots and garlic; continue to sear. Add wine, broth, thyme, rosemary and bay leaves. Bring to a boil; reduce to a simmer and cover. Cook for 2-1/4 hours, turning shanks occasionally, until meat is very tender.

Pull meat from the bone; continue to simmer over low heat until stew thickens slightly. Strain the sauce from the bottom of the pan and reduce by half. Add back; cool.

**Mashed Potatoes:** In a small pot, boil potatoes until fork slides out of potatoes easily. While potatoes are boiling, in a separate pan, heat cream and butter until hot. Do not boil. Drain water from potatoes; place potatoes in mixer with paddle attachment. Add 1 cup cream mixture; mix until blended. Slowly add remaining cream while mixer is on medium speed. Add salt and pepper to taste. Put lamb stew in oven safe bowl; top with warm mashed potatoes. Bake at 375°F for approximately 15 minutes, until stew bubbles over the side and potatoes are golden brown.

Source: <http://www.superiorfarms.com/pages/recipes.htm>

## New Consumer Recipe Brochures

The American Lamb Board has designed a fresh new recipe brochure that includes 12 simple seasonal recipes and photos.

The Lamb Board has also restocked many of the best-selling/fan favorite brochures such as Chop Chop, which includes cooking times and temperatures for chops along with several simple marinade and rub recipes, and Local Flavors, a beautiful booklet with four elegant grilling recipes that use fresh, seasonal ingredients.

To order up to 100 copies of these brochures free of charge, send an e-mail to :

[Courtney@americanlambboard.org](mailto:Courtney@americanlambboard.org).

## Genetics of Wool Shedding

Researchers in the United Kingdom set out to unlock the genetics of wool shedding. They concluded that wool shedding is most likely controlled by a single dominant gene on a non-sex chromosome. But, the speed and extent of shedding varies by animal and is a polygenic trait, just like commonly recorded traits, such as weaning weights.



In a flock of shedding breeds (Dorper, Katahdin, Wiltshire Horn, and Easycare), shedding score (1-5; 1=no shedding, 5=complete shedding) was determined to have a heritability of 0.54 +0.07 in lambs and 0.26 +0.06 in animals of all ages. Shedding score as a lamb had a genetic correlation of 0.94 +0.08 with shedding score as a 2 year old, but at the phenotypic level was only 0.39 +0.05.

According to the researchers, breeding for increased wool shedding ability is possible. First, the dominant gene needs to be introduced into the flock. Then, selection between animals can be done to improve the speed and extent of shedding.

Wool shedding is a valuable trait in situations where the cost of producing and harvesting wool exceeds its value. In the U.S., Canada, Australia, and Europe, more and more producers are turning to hair or "shedding" sheep to increase their profitability and/or ease of management.

Source: Abstract. J. Animal Science, August 2011

## Not Everything In The Sheep Industry Is Black & White

The Tunis is one of the oldest indigenous breeds of sheep in the United States. During its early history, it was associated with several prominent agriculturists and citizens including John Adams, Thomas Jefferson, and George Washington Custis.

### History

The Tunis was developed by combining Middle Eastern fat-tailed sheep with the European breeds of sheep that were common to New England farms in the 1800's. The breed's American history begins around 1799, when the Bey of Tunisia gifted some rams to George Washington.

Only two rams survived the long voyage from North Africa. They were placed in the care of Judge Richard Peters from Belmont, Pennsylvania, who made them available and gave lambs away to spread the breed. Gradually, the "American" Tunis evolved and spread throughout the Mid Atlantic states and southeastern U.S. A breed association was established in 1896.

Prior to the Civil War, the Tunis was one of the most popular breeds of sheep in the United States. Most of the Southern flocks were destroyed during the Civil War. The introduction of sheep breeds that produced finer wool is another reason why the breed's popularity may have diminished. In the country's early history, sheep were raised more for wool than meat.

The American Livestock Breeds Conservancy (ALBC) includes the Tunis breed on its "Watch" list. In recent years, the breed has increased in popularity, especially on small farms that practice sustainable agriculture and forage-based livestock production. The breed association is experiencing a continuous growth in registrations and transfers.

### Physical attributes

Tunis sheep have several distinct features which separate them from other breeds of sheep. The first is their red color. Lambs are born with a double coat of red fiber. As they mature, their fleeces gradually turn white, but they retain the copper-red color on their faces, legs, and ears. Sometimes, lambs have a white spot on their head or tip of their tail. Tunis sheep have clean heads and lop ears. Both sexes are naturally polled.

The other distinct feature of Tunis sheep is their slightly fat-tail, a result of their fat-tailed ancestry. Fat-tailed or fat rump sheep store energy (fat) in their tail region. Fat-



Photo courtesy of National Tunis Sheep Registry, Inc.

tailed sheep are noted for their adaptability to extreme climates. They comprise approximately 25 percent of the world's sheep population.

The Tunis is a medium-size sheep raised mostly for meat. They produce a creamy colored fleece of medium grade (24 to 30 microns, 54 to 58's spinning count, 3/8ths blood). The fleeces from lambs and sometimes yearlings are naturally colored, due to the presence of red fibers. Red fibers are discouraged in mature Tunis sheep.

### Production characteristics

The most outstanding production characteristic of Tunis sheep is their ability to breed out-of-season, making them suitable for fall or accelerated lambing. They are a good breed for crossbreeding, especially to improve ewe productivity. According to the National Tunis Sheep Registry, the breed excels in mothering traits.

The breed association also claims that the meat from Tunis lamb has a delicate and fine flavor and that "Tunis mutton tastes as good as lamb of other breeds." In their early history, Tunis lambs were sought after in the hothouse lamb markets around Philadelphia.

Tunis sheep are also known for their disease resistance and ability to remain productive on marginal land. They exhibit tolerance to both warm and cold climates. Their adaptability to warm, humid climates may explain why they were so popular in the southeastern United States during the 1800's.

The Tunis is an old breed that is certainly worthy of consideration by today's small and sustainably-minded farmers.

Resources: National Tunis Sheep Registry, American Livestock Breeds Conservancy, Oklahoma State University Breeds of Livestock Project.



## Corid

### Efficacy of Amprolium in goat kids

Although amprolium (Corid) is approved in many countries for the treatment of Eimeria (coccidia) infections in animals, there is little data available on the efficacy and proper dose for use in goat kids.



Researchers at North Carolina State University conducted a clinical trial to determine the efficacy of two different doses of amprolium in goat kids heavily infected with pathogenic Eimeria species.

Forty Boer kids (3-4 mos. of age) were treated orally with 9.6% amprolium for five days at a dose of either 10 mg/kg or 50 mg/kg. Fecal samples were collected at day 0 and 7 and a pooled sample was analyzed to identify the species of Eimeria.

At day 7, the Eimeria oocyte per gram concentrations were significantly reduced in the kids that received amprolium at a dose of 50 mg/kg; however concentrations were not significantly different in the kids that received amprolium at a dose of 10 mg/kg.

Kids that received the higher dose of amprolium had normal fecal consistencies by day 7, but diarrhea was still present in the kids that received the lower dose of amprolium.

Of the 100 oocytes identified in the pooled sample, 52% were identified as *E. christenseni*, a pathogenic strain of Eimeria.

The researchers concluded that amprolium can be an effective treatment for Eimeria infection in goat kids, but that higher doses (50 mg/kg) should be given.

Coccidiosis can be a major disease problem in goats (and sheep). Amprolium (Corid) is not FDA-approved for use in goats (or sheep), but can be prescribed by a veterinarian under the extra-label drug rules.

Source: Kenes Group

## 2012 Sheep Industry Leadership School

For the first time, the annual Howard Wyman Sheep Industry Leadership School will be held on the East Coast, in proximity to the major metropolitan areas of New York City, Philadelphia and Washington, D.C. and the large eastern ethnic markets. Dates for the 2012 School are July 8-11, and applications to attend must be submitted by April 16, 2012.



Laurie Hubbard, Shepherd for Penn State University, and Joanne Evans, President of the Pennsylvania Sheep & Wool Growers, are the 2012 coordinators. Said Hubbard, "The focus will be on educating the participants about the non-traditional marketing of lamb."

Interested individuals may apply by completing a brief application and short essay. A group of 26 participants, age 20 or older, will be selected to attend. The registration fee is \$200 per person and participants are responsible for their own travel expenses. NLFA covers the cost of food, lodging and tour-related expenses during the school.

## Goat Receives Stem Cell Treatment

A 7-year old pet goat suffering from a torn ACL and bad carpal joints received stem cell therapy at a veterinary clinic in Kentucky. It was the first goat to receive stem cell treatment.



Cats, dogs, and even horses are already seeing tremendous results from stem cell therapy. A pug paralyzed from the waste down after a car accident received stem cell treatment instead of being euthanized. Stem cell therapy got his legs moving again.

Source: WMEN.com

## Calendar of Events



### October 29

#### *Maryland Sheep Breeders Association Annual Meeting*

Howard County Fairgrounds, West Friendship, Maryland

Info: Jeff Hevner at (410) 984-7712

### November 3

#### *Frederick Sheep Breeders Association Annual Dinner*

Cozy Inn Restaurant, Thurmont, Maryland

Info: Peter Vorac at (301) 371-4111 or pvorac@comcast.net

### November 12

#### *Dairy Goat Linear Appraisal Workshop*

Howard County Fairgrounds, West Friendship, MD

Info: Don Marston at dbmarstonjr@aol.com

### November 19

#### *Biennial Lambing & Kidding School*

Chesapeake College, Wye Mills, MD

Info: Susan Schoenian at (301) 432-2767 x343 or

sschoen@umd.edu

### January 25-29

#### *American Sheep Industry Association Annual Convention*

Scottsdale Plaza Resort, Scottsdale, Arizona

Info: info@sheepusa.org

## UNIVERSITY OF MARYLAND EXTENSION

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Comments and suggestions regarding the newsletter are always welcome. References to commercial products or trade names are made with the understanding that no discrimination is intended and no endorsement by University of Maryland Extension is implied.

More information on sheep, goats, and upcoming events can be accessed at:

<http://www.sheepandgoat.com/>

<http://www.sheep101.info/>

<http://mdsheepgoat.blogspot.com>

<http://www.sheepgoatmarketing.info>.

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