



# Wild & Woolly



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VOLUME II

□ ISSUE IV

FALL 2012

## Canarian Goats and French Sheep

By Susan Schoenian

Recently, I had the opportunity to visit Spain and France. I attended the XI International Conference on Goats in the Canary Islands. After the conference was over and I returned to Madrid, I rented a car and visited the dairy sheep region of France. My travel companion was David Gordon, a 4-H and agricultural extension agent from Montgomery County. David is a member of my small ruminant "action team" for University of Maryland Extension.

At the goat conference, we presented two scientific posters. One summarized five years of data from our Western Maryland Pasture-Based Meat Goat Performance Test. The other poster gave the results of a preliminary study in which we compared the carcasses of pen-fed vs. pasture-raised goats.

### Canary Islands

The Canary Islands is an autonomous region of Spain, seven islands located off the northwest coast of Africa. Contrary to popular opinion, the Canary Islands were not named after the canary bird. In fact, it's the other way around. Although there is much speculation, the Canary Islands were most likely named after dogs.



Rouge de l'Ouest ram

Goats are the most important livestock in the Canary Islands. Most are dairy goats. There are almost as many dairy goats in the Canary Islands as the entire United States. Almost all the milk is made into cheese. A big hunk of cheese was included in our conference packet and we had the opportunity to sample many local cheeses.

I regret that we were not able to visit any dairy goat farms in the Canary Islands. On the tour day of the conference, we visited a local veterinary college and saw their sheep and goat research animals and facilities. Afterwards, we walked to an exhibition area where they had several local breeds of goats and sheep on display. We were introduced to the historical use of poles or sticks. Shepherds would use the long sticks

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## Maryland Sheep Breeders Association

Until a new editor of the *Maryland Sheep News* is found, *Wild & Woolly* will serve as the official newsletter of the Maryland Sheep Breeders Association (MSBA).

## WELCOME MSBA MEMBERS!

## *Canarian Goats and French Sheep continued from page 1*

to leap over ravines to tend to their stock.

### **Dairy sheep**

It was a day's drive from Madrid to the dairy sheep region of France. Along the way (in Spain), we saw many large flocks of sheep, being tended to be a herder and dog(s). Our first stop was to the INRA research station in Toulouse, where we met up with several dairy sheep researchers and extension specialists. From Toulouse, we traveled to St. Affrique, the center of dairy sheep activity.

We visited a "typical" commercial dairy sheep farm with 400 ewes. Management was intensive. The sheep spend half the year in the barn. During the grazing season, the ewes are allowed to strip graze for a few hours a day, usually alfalfa. The ewes were well-fed. The farm produces its own feed, harvesting its own hay and having its cereals custom combined.

Breeding is via artificial insemination, with rams covering ewes that fail to conceive to AI. Ewe lambs are bred to lamb for the first time as year-

lings. Lambing occurs in October and November. The lambs are allowed to nurse their dams for four weeks, after which time the ewes are milked twice per day. The lambs are sold to another farm that fattens them for market. Slaughter weight is approximately 40 kg (88 lbs.). All of the milking parlors we saw were double stan-

chions with a pit.

The farm was supporting an extended family. Since milk is produced on a quota system, there is little incentive for improving milk production. Instead, the goal is to reduce production costs and increase efficiency.

### **Cheese**

In Roquefort sur-Soulzon, we toured the world famous caves where Roquefort cheese is ripened. Roquefort cheese is one of the world's best known blue cheeses. While similar cheeses are produced elsewhere, European law states that only cheese aged in the natural caves of Roquefort sur-Soulzon may bear the name Roquefort. Roquefort cheese is made entirely from the milk of the Lacaune.

### **AI Stud**

We visited an AI (artificial insemination) stud in St. Affrique. Being in the dairy sheep region, most of the rams were of the Lacuane breed. The French have established several different selection lines of Lacaune: dairy, prolific, and meat. They have even infused a heavy-muscled Texel gene into one selection line. The Lacaune is definitely a breed that has something to offer the U.S. sheep industry, especially the fledgling dairy sheep industry. Too bad, it is so difficult to import germ plasma from other countries.

Another breed that was numerous at the AI stud was the Rouge de l'Ouest. The English translation is "Red of the West," referring to the breed's geographic origin as well as its unique pinkish face and legs. It is a very heavy muscled sheep. There were also some Charollais rams at the stud. They are similarly very heavy muscled.

The Suffolk rams at the AI stud looked nothing like the Suffolk rams we have in the United States. They were smaller-framed, heavier-boned, and heavier muscled. Europeans tend to put more emphasis on muscle and performance, as compared to the U.S. All of the rams at the stud were performance and progeny tested.



**Suffolk ram**



**Canarian goat**

(Continued on page 8)

## Research From Around The World

These research tidbits were gleaned from research journals and internet search engines:

- Researchers at West Virginia University are studying the immune system of St. Croix sheep to figure out how this hair sheep, native to the U.S. Virgin Islands, resists the barber pole worm.
- UK researchers attached GPS-enabled backpacks to a flock of sheep and a herding dog to test the theory that animals spend time together in large groups not because they like to enjoy each other's company, but rather because it lowers their chances of being eaten. Their findings may shed some light on neurodegenerative diseases such as Huntington's. Sheep are a popular model for the study of Huntington's.
- Incorporating live yeast and/or an ionophore into the standard feed lot diet of South African Mutton Merino lambs had no effect on feed intake, average daily gain, feed efficiency, carcass weight, or carcass characteristics, though carcasses from the ionophore diet were leaner than carcasses from the control diet.
- Scientists from Utah and Louisiana collaborated to show that lambs have the ability to "self-medicate." In their experiment, parasitized lambs showed a preference for tannin-rich feed (vs. the control diet) after "learning" the beneficial effects of condensed tannins while parasitized.
- Richard Browning at Tennessee State University found a negative effect of endophyte infection in tall fescue on the growth rates of meat goat yearling does. The effects were not totally dependent on nutrient intake levels.
- A recent study in Australia showed that ewes with a calm temperament produce more colostrum than ewes with a nervous temperament and that nutritional supplementation can decrease this disparity.
- Pregnant does grazing in northern Mexico selected a more nutritious diet than non-pregnant does. The diet selected by the pregnant does was higher in crude protein, lower in fiber, and 32% higher in calcium.
- In Iran, castrated goats had more carcass fat and less lean than intact males, but a taste panel found the meat from the castrated kids to have a milder smell than the meat from intact males.
- Swiss biologists are testing a sheep collar wolf-warning device that registers heart rate changes and alerts shepherds to attacks via text message, while simultaneously emitting a repellent.
- Australian scientists are attempting to unravel the genetic make-up of sheep in hope that they can one day breed animals that produce less methane. Methane, a greenhouse gas, is the by-product of the fermentation in the sheep's rumen and hind gut. Cattle research suggests that methane production may be heritable (to some degree).
- Russian scientists have genetically engineered goats to produce human breast milk.

## Oral Moxidectin More Effective

The efficacy of moxidectin administered by different routes, against naturally acquired infections of gastrointestinal nematode parasites of cattle, was compared using fecal egg count reduction tests on 14 commercial farms throughout New Zealand.

On each farm, groups of 15 calves were sampled for fecal nematode egg count and then treated with ivermectin administered orally, or with moxidectin administered either by the oral, subcutaneous injection, or topical (pour-on) route.

Samples were again collected 14 days after treatment and efficacy was calculated as the percentage reduction in group mean egg count between the pre- and post-treatment. Averaged across all tests, the reduction in fecal egg count was significantly greater after treatment with moxidectin oral (91.1%) than following treatment with moxidectin injection (55.5%) or with moxidectin pour-on (51.3%).

(Continued on page 5)



## MD Sheep Breeders Association Presidents Report by Steve Hobbs

I hope that everyone had a great summer; and for many of you, breeding season and fall lambing is here. Hay season was a bonus and many storage barns are full. Ready for the winter????

The Maryland Sheep Breeders Association will be celebrating several milestones in 2013.



### ♦ Sheep and Wool Festival

Preparation for the *Fortieth* Maryland Sheep and Wool Festival has begun. This will be a milestone, not only for Maryland, but the entire US sheep industry, as few states can claim the longevity and success of a sheep festival such as ours. This Festival was created many years ago as a means for Maryland Sheep Producers to promote their local product.

### ♦ Wool Pool

The Maryland Wool Pool processed 29,500 pounds of wool, slightly higher than last year. The wool clip was purchased by Charquers and will be processed at their mill in Jamestown SC. Next year, 2013, Rich Barczewski will be celebrating his *twentieth* year as manager of the wool pool.

### ♦ Shearing School

The MSBA shearing school is one of the longest running shearing schools in the nation. In 2013 David Greene will be celebrating 49 years as an advisor, mentor, instructor and coordinator of the school.

### Newsletter

Until a new editor of the *Maryland Sheep News* is found, the MSBA newsletter will be merging with the University of Maryland's 'Wild and Woolly' newsletter. Susan Schoenian continues to support Maryland's sheep and goat producers and we are indebted to her for all of her help in this matter. MSBA is accepting resumes and will be interviewing for a new editor in the upcoming months.

### 2012 Scholarship Award

Victoria Willis of Anne Arundel County and Hannah Archer of Baltimore County were selected as the recipients of the annual MSBA 2012 scholarships award. The recipients received \$500 and \$300 respectively; these scholarships are used to fund their college expenses. All applications are reviewed by Victor Loun, chairperson of the scholarship committee.

As I near the end of my term as president of the Maryland Sheep Breeders Association, I would like to thank all those members that have worked so earnestly with me to improve this association. We crossed several major hurdles.

- The completion of the tax audit; which reinstated our good standing with the Maryland Agriculture Fair Board Commission, thereby restoring MSBA's eligibility for grant funds.
- The purchase of the insurance policy; which will ensure protection for the Board of Directors in the event of a law suit.

## Recipe - Lamb Barbecue

### Ingredients

2 1/2 lbs. ground lamb  
2 med onions chopped  
1/2 cups chopped celery  
1/2 cups chopped green pepper  
1 can tomato soup  
2 teaspoons vinegar  
2 teaspoons Worcestershire sauce  
1/2 cup uncooked rice  
2 teaspoons sugar  
3/4 teaspoons dry mustard  
1 bottle chili sauce  
1 bottle catsup



### Preparation

Brown meat, add vegetables and sauté. Add remaining ingredients and cook slowly until rice is completely soft. You should not realize rice is there. Skim off fat as mixture cooks. Serve on buns.

A special thanks to Karen Sowell for providing this recipe by Florence Hall

*Oral Moxidectin, continued from page 3*

The oral treatments were significantly less variable in efficacy than the injection and pour-on treatments.

Route of administration	Efficacy
Oral	91.1%
Injectable	55.5%
Topical (pour-on)	51.3%

Based on these results, along with those of other studies, it is proposed that oral administration of macrocyclic lactone anthelmintics results in higher concentrations of the active ingredient reaching the target worms in the gastrointestinal tract than following either administration by injection or by pour-on.

Source: Journal of Veterinary Parasitology, Sept, 2012.

## Maryland Lamb and Wool Queen

Hello, my name is Ashley Blum. I am your 2012 Maryland Lamb and Wool Queen. I live in White Hall, MD with my parents Bud and Trisch Blum, my two little sister's Allison and Alivia Blum and my Grandparents Dale and Diane Wheeler. I am a Senior at Hereford High School, where I serve as the FFA Chapter President. I am also the President of the White Hall 4-H Club.

My family has been raising sheep since I was 3 years old. We raise Commercials, Natural Coloreds and Tunis. We currently lamb out 35 head.

I have represented the Maryland Sheep Breeders at the following fairs: Baltimore County 4-H Fair, Mason Dixon Fair, Washington County Ag Expo, Harford County Fair, Howard County Fair and Montgomery County Ag Fair. I will also be at the Maryland State Fair and Frederick County Fair.

After graduation, I plan on attending a local community college. I want to then transfer to WVU, where I want to



obtain a degree in Ag Ed and Extension with a minor in Business.

I have enjoyed representing this wonderful organization and look forward to the many activities ahead.

## A Different Approach to Footrot

For the past several years, the University of Maine has been conducting a Foot Health Project. The purpose of this SARE-funded research and education project is to help eliminate the effects of footrot in sheep flocks in the Northeast. Footrot is one of the most significant diseases affecting sheep and goats, probably second in importance to internal parasites.

The University of Maine project recommends a 4-week protocol for eradicating footrot. The protocol will work equally well for goats. It involves hoof trimming, foot soaking (in zinc sulfate), sorting, and culling. Similar protocols have been used successfully in other countries (especially Australia) to eradicate footrot. Blood samples are also being collected to study the genetic aspects of footrot.

In Great Britain where footrot is more endemic due to their damp climate, researchers have developed some alternative hypotheses (and recommendations) with regards to footrot. According to British researchers, traditional methods of footrot control have not been very effective (in the UK) and gathering, foot bathing, and foot trimming increases the transmission of the bacteria that causes footrot (*Dichelobacter nodosus*).

The University of Warwick conducted a study in which they compared the methods of treating footrot. Their research showed that PROMPT treatment of infected sheep with a long-acting antibiotic, used in conjunction with an antibiotic foot spray, was the most effective treatment and that trimming of the hoof at any stage slowed down the healing process. The Warwick study used 1 ml of long-acting oxytetracycline per 10 kg (22 lbs.) of body weight. The feet were sprayed with terramycin (per e-mail communication).

According to the scientists, the antibiotic injection helps the sheep's immune system fight the infection



### Treat PROMPT!

and reduces the swelling and pain that make the sheep lame. This allows the hoof to heal and the foot conformation to return to normal. When trimming a swollen infected foot, live tissue can get damaged, causing more damage to the hoof. In the study, less than 30% of infected sheep that had their feet trimmed recovered within 10 days vs. 90% of those treated with antibiotics.

While it has always been recommended that infected feet be trimmed (vigorously) to open up the infection and kill the anaerobic bacteria, the University of Warwick research demonstrated that routine trimming of feet is not effective in the control of footrot and may be a contributing factor in the spread of the disease.

Of course, regardless of the method of treatment, any sheep (or goat) that repeatedly has footrot or fails to respond to treatment should be culled.

To learn more about the University of Warwick's work, watch this YouTube video: <http://www.youtube.com/watch?v=1VwpMFkNSQk> or visit their web site at [www.footrotinsheep.org](http://www.footrotinsheep.org).

To learn more about the University of Maine Foot Health Project, visit their web site at [umaine.edu/sheep](http://umaine.edu/sheep).



## Dairy Sheep Symposium Holds Annual Symposium

The Dairy Sheep Association of North America (DSANA) held its 18th annual symposium October 18-20, 2012, in Sterling, Virginia. The symposium was attended by people from all over the United States, Canada, and Mexico.

The symposium, formerly called the Great Lakes Dairy Sheep Symposium, included two days of educational presentations and a tour day. Shepherd's Manor Creamery in New Windsor, Maryland, hosted one of the tour groups. The other tour group visited Everona Dairy in Rapidan, Virginia.

The dairy sheep industry in North America is not very large, but there is potential for growth, as almost all sheep cheeses are imported from Europe. Sheep dairying lends itself well to farmstead cheese production and direct marketing at farmers' markets, wineries, gourmet food stores, and white table cloth restaurants. Ewe's milk is superior to either cow or goat milk, yielding more cheese from a gallon of milk. The milk can also be made into soap or other dairy products, such as yogurt.



**Tour group at Shepherd's Manor Creamery**

There are only two breeds of dairy sheep in the United States: East Friesian and Lacaune. Most sheep dairies milk ewes of these two breeds or their crosses. Milking of ewes begins when lambs are removed at one day of age or after being allowed to nurse their dams for 4 weeks. Sheep do not produce as much milk as goats or cows, but the milk is superior and lamb sales have a larger contribution to the income of the enterprise.

## Learn Sheep Management Via Distance Education

The nationally-recognized Pipestone Lamb and Wool Program is currently taking registration for five distance-delivered courses. The most popular distance-delivered course is the Introduction to Sheep Management (LWMP 1001) course. This course is offered through the mail or as an online course. It provides an overview of year-long sheep management.

Other online course offerings include: Equipment and Facilities (LWMP 1201), Introduction to Sheep Health (LWMP 1300), Ewe Ration Formulation (LWMP 1502), and Wool Characteristics and Properties (LWMP 1701).

Online sheep management courses are an excellent opportunity for youth and adults to learn more about sheep production within their own home or community. These courses are offered each fall (October-December) and Spring (January-April).

The Pipestone Lamb and Wool Program is a sheep management education/consulting program offered by Minnesota West Community and Technical College located at Pipestone, Minnesota.

For more information visit the Pipestone Lamb and Wool Program web page at [www.pipestonesheep.com](http://www.pipestonesheep.com) or contact one of the Lamb and Wool instructors: Philip Berg at [philip.berg@mnwest.edu](mailto:philip.berg@mnwest.edu) or (507) 825-6799 or Mike Caskey at [mike.caskey@mnwest.edu](mailto:mike.caskey@mnwest.edu) or (507) 825-6808. To register for one of the on-line courses contact Sue Lovell (507) 847-7929, [sue.lovell@mnwest.edu](mailto:sue.lovell@mnwest.edu).

## *Canarian Goats and French Sheep continued from page 2*

### **Artificial Insemination**

In France, most dairy sheep and some meat sheep are bred via artificial insemination. Ewes are inseminated once (by an AI technician) with fresh semen from an AI stud. A 70% conception rate is the norm. After a single insemination, rams are put it to breed ewes that did not conceive to AI.

Artificial insemination goes hand-in-hand with performance testing. Genetic improvement is not possible without both. This is where the U.S. sheep industry is at a huge disadvantage to France. AI is not very viable in U.S. sheep, because our industry is separated by huge geographic distances. In France, it is possible to deliver fresh semen anywhere in the country within six hours. In the U.S., it is necessary to use frozen semen.

The conception rates with frozen semen are not very high unless the semen is deposited directly into the uterine horns via laparoscopy, a surgical procedure that requires expensive equipment and a high level of expertise; thus, usually cost-prohibitive.

The U.S. sheep industry also lags behind other countries in the use of performance testing. The primary purpose of AI is increase the use of genetically-superior males, as determined by performance and progeny testing (not phenotype). There is little value in spreading the semen of a male that will not improve performance.

### **Research**

Our favorite visit was to the INRA research station in La Fage. At La Fage, they maintain research flocks of dairy and meat sheep. The dairy sheep were Lacaune. The dairy barn had a computerized feeding system that allows for individual feeding of the ewes. One of the station's current research projects was investigating the economics of once-per-day milking.

The meat flock was composed of crossbred ewes: Romanov crossed with a local French breed. The meat sheep were being raised on pasture (range). One research project was looking at the effect of fertilizing native range. The station was also doing some interesting behavior studies with the ewes and their lambs.

### **Europe's Biggest Livestock Show**

Our final stop before returning to Madrid was to the

Sommet de L'Elevage, Europe's largest livestock show. The show reminded me of the Maryland Sheep & Wool Festival, wall-to-wall people!. It had a very large trade show and we had the opportunity to see many different breeds of beef cattle, dairy cattle, sheep, and horses.

The shows were more celebratory than ours. We saw lots of big bells at the show, around the necks of both sheep and cattle. Some of the cattle had beautiful leather collars to display the bells. Most of the beef cattle were very heavy muscled. One breed (Belgian Blue) requires the cow to have a c-section in order to get a live calf. They call these cows, "zipper cows!" Even Simmental cattle were shown as a dairy breed.

We saw an assortment of sheep breeds: popular French breeds (e.g. Charollais, Ile de France, Lacaune, Rouge de l'Ouest), common European breeds (Hampshire, Merino, Southdown, Suffolk, and Texel), and rare French breeds (e.g. Bizet, Rava, Thones et Marthrod). The most numerous breed at the show was the Blanc du Massif Central,

There was a lot of sheep handling equipment in the trade show. Sheep seem to be managed much more intensively in France, from the standpoint of feeding and breeding.

### **On the way back**

On the way back to Spain, we drove through the Pyrenees Mountains. Amidst beautiful mountain scenery, we saw many flocks of sheep. The Pyrenees are another production area for dairy sheep, but the breeds and production systems are different from those in the St. Affrique area. In the mountains, the sheep have longer fleeces and are horned. They are raised more extensively.

Our trip to Spain and France wetted my appetite for travel to Europe. I am interested in learning more about sheep and goat production systems in Europe and perhaps doing a sabbatical. From a production standpoint, I think there are more similarities between the U.S. and European countries than New Zealand and Australia, at least in the eastern half of the US.

Our trip was partially funded by the National Association of County Agricultural Agents.



## Recap Of This Year's Buck Test

Thirteen breeders from seven states consigned 49 bucks to this year's Western Maryland Pasture-Based Meat Goat Performance Test. States represented in the test were Delaware, Indiana, Kentucky, Maryland, Tennessee, Vermont, and Virginia. Kentucky breeders had the most goats in the test. There were five new consigners.

The bucks in this year's test represented a variety of breeds and breed crosses, but were 90 percent Kiko or Kiko-influenced. The median birth date of the



**Top consigners  
Randy & Jodie Majacsik**

bucks in the test was February 17. On-average the bucks were  $107 \pm 8$  days of age at the start of the test.

The bucks were delivered to the test site on June 2. After a 12-day adjustment period, starting weights were recorded on June 14-15. They averaged  $46.4 \pm 8.5$  lbs. The test lasted

for 84 days, commencing on September 6-7, with the final weighing and collection of data.

Upon arrival, the goats were triple-dosed with dewormers (moxidectin + albendazole + levamisole). This reduced fecal egg counts to near zero, after which time the goats were given 1,000 *Haemonchus contortus* (L3) larvae. The purpose of the artificial dosing of larvae was not to "challenge" the goats, but rather to help "seed" the pastures with eggs. A sufficient parasite challenge is needed in order to separate resistant from susceptible animals.

Every two weeks, the goats were handled to determine body weights, FAMACHA© eye anemia scores, body condition scores, coat condition scores, and dag scores. FAMACHA© scores (1-5) measure anemia and are an estimate of packed cell volume

(PCV), the proportion of red blood cells in whole blood. Along with the need for anthelmintic treatment, they are a measure of parasite resilience. Goats with FAMACHA© scores of 4 and 5 were dewormed. Those scoring 1 or 2 were not dewormed. The decision to deworm goats with a FAMACHA© score of 3 was based on the criteria of the Five Point Check©, along with other data.

Every two weeks, a fecal sample was collected from the rectum of each goat. Fecal egg counts (epg) estimate the worm load and are a measure of parasite resistance. Every four weeks, a pooled fecal sample was collected for larvae ID. During the duration of the test, *Haemonchus contortus* (the barber pole worm) comprised 72 to 98 percent of the worm load. All fecal analyses were performed by Dr. Dahlia O'Brien's parasitology lab at Delaware State University.

### Sale of Top-Performing Bucks

Seven bucks met Gold, Silver, or Bronze standards of performance for growth, parasite resistance, and parasite resilience and qualified for the sale on September 15. Five additional bucks (with a single disqualifying data point) were added to the sale roster.

The top-performing buck, a New Zealand Kiko consigned by Sam Burke (Delaware), sold for \$1175. The high-selling buck was another New Zealand Kiko consigned by Jarred Dennison (Kentucky). It sold for \$1,525.

This year's top consigners (best 3 bucks) were Randy & Jodie Majacsik, new consigners from Kentucky. Their top-selling buck (Kiko), the most resilient buck in the test sold for \$600. The Majacsiks also received awards for having the most resistant buck in the test and the best-gaining buck in the test. This was the same Kiko x Boer buck. It was the best buy in the sale, selling for a bargain \$250.

Verlin Garber, a new consigner from Tennessee, sold the second best-performing buck (3/4 Kiko x 1/4 Boer) for \$375. Garber also received an award for having the buck with the largest rib eye area (according to ultrasound). The best Boer buck in the test, consigned by Jill Zink, a new consigner from Indiana, was sold via private treaty for \$400.

Forty-seven bucks

*Continued on page 11*

## Scrapie Update

### Scrapie Surveillance in Goats

A potential stumbling block to scrapie eradication has been identified that needs to be addressed. Last fiscal year, for the first time, there were more scrapie field cases in goats than in sheep.

In FY 2008 and 2011, two significant scrapie outbreaks occurred in goats involving a total of 18 positive goats. The initial case in each outbreak was discovered through owner submission of a suspect animal. In one outbreak, while sheep had resided on the farm years earlier, none of the positive goats had come in contact with sheep.

In the other outbreak, the positive goats no longer resided with sheep. This indicates that to eradicate scrapie from the United States it will be necessary to conduct slaughter surveillance in goats similar to what is being done for sheep.

The current goat identification rules are inadequate to allow for effective slaughter surveillance in goats. To address this situation USDA is planning to publish a proposed rule that will consider making the identification requirements for goats similar to those currently in place for sheep.

Source: Quarterly Scrapie Newsletter. June 12, 2012

### Importance of Record Keeping

- It is important for producers to keep good records of sales and purchases.
- Last year, two positive sheep could not be traced due to poor records.
- Since the incubation period for scrapie is typically three to five years, it is critical that producers keep purchase and sales records for at least five years.

### Producer Help Needed

USDA needs help from producers to get surveillance samples to test from flocks and herds that sell cull animals only through nontraditional markets. USDA is asking for owners of these types of flocks or herds to submit the heads of animals found dead between 30 and 52 months of age to the state diagnostic laboratory for scrapie testing.

This is especially true if the sheep are of a black-face meat breed or if they have been commingled with ewes of a black-face meat breed even if the commingling occurred several years ago. In the recent goat cases, there was a history of Suffolk sheep having been commingled with the goats years before the positive goat cases were found.

Likewise it is critical that all producers notify their state veterinarian's office or their area USDA Veterinary Services office (866-873-2824) if they have a sheep or goat over 18 months of age with neurological signs such as incoordination, behavioral changes or severe frequent rubbing with wool loss and thickened or abraded skin.

Producers can prevent scrapie by maintaining a flock/herd closed to female additions, increasing genetic resistance and/or only purchasing ewes that are genetically resistant or from certified scrapie-free flocks/herds.

### *Recap of This Year's Buck Test continued from page 9*

finished the test. One died. One was removed from the test. Nineteen were taken to the sale barn. The top-performing sale bucks were bound for Delaware, Kentucky, Maryland, Pennsylvania, and West Virginia.

Information about the Western Maryland Pasture Based Meat Goat Performance Test is always available on the blog at <http://mdgoatstest.blogspot.com>. Nominations for next year's test will be received April 1 – May 15, 2013.



**Top-performing buck  
Sam Burke (R)**



**Top-selling buck  
Jarred Dennision**

For the second year in a row, a study was conducted to compare pen-fed vs. pasture-raised goats. This year's study was funded by the Maryland Grain Producers Utilization Board.

The goats in the pen were fed free choice grass hay, harvested from the same fields that the test and study goats grazed. The pen goats were hand-fed grain once daily, the amount they could eat in 20 minutes time. The grain ration was a 16% crude protein mixture of whole barley and a 38% protein pellet. The goats often sorted the pellet out.

The pasture-fed goats grazed alongside the goats in the pasture test. Both study groups were handled every two weeks in the same manner as the goats in the test, but the study goats were not given worm larvae.

The study goats were harvested on September 7 by Country Foods, a custom-exempt abattoir in Waynesboro, Pennsylvania. The carcasses were deboned and measured on September 12. The meat from goats not sold was donated to a food pantry in Pennsylvania.

The highest-yielding carcass in each group was from a Myotonic. The pen-fed Myotonic had the highest yield overall, followed by another pen-fed goat, a Sannen x Kiko buck provided by Jill Zink (Indiana). The pasture-raised Myotonic had the third highest yield overall. The Myotonics in the test were provided by Kent Ozkum (Maryland). The Myotonic goats in last year's study also had the highest yielding carcasses.

In contrast with last year, the pasture-fed goats performed better than the pen-fed goats (0.183 lb/d vs. 0.149 lb/d), though the pen-fed goats had lower fecal egg counts and lower FAMACHA© scores. In fact, half of the pasture-fed goats required deworming. None of the pen goats required anthelmintic treatment.

While there was variation among individual goats, there were no differences in the carcasses from the pen vs. pasture-fed goats. A sample of the longissimus dorsi muscle has been sent to Ohio State University for further (fatty acid) analysis.

The pen vs. pasture study will be repeated next year pending funding.

### Pen vs. pasture study



**Featured web site:  
A Guide to All Things Sheep©**

Premier Sheep Supply Ltd. is undertaking the challenge of putting out an online publication entitled **A Guide to All Things Sheep©**. Its purpose is to be an information exchange among educators, organizations, producers, event organizers, and suppliers of sheep/lamb/fiber goods and services to the sheep industries in the United States and around the world. The focus of the first issue will be on parasite infections and control with articles on parasite prevention and management from several authors and a how-to on drenching sheep in a handling chute.

Each publication will contain nine subsections, which include Best of the Best, Industry Spotlights, Education, Features, Viewpoints, How-to's, Photo Gallery, Recipes and Event Calendar.

<http://www.premier1supplies.com/sheep-guide/>

Source: American Sheep Industry Association (ASI), 8.17.12

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*Wild & Woolly*, is published quarterly by the University of Maryland Extension. It is written and edited by Susan Schoenian, Sheep and Goat Specialist, at the Western Maryland Research & Education Center (WMREC), 18330 Keedysville Road, Keedysville, MD, tel. (301) 432-2767 x343 or 315, fax (301) 432-4089; e-mail: [sschoen@umd.edu](mailto:sschoen@umd.edu) or Pamela Thomas, Administrative Assistant, [pthomas@umd.edu](mailto:pthomas@umd.edu). The cost of receiving the newsletter by mail is \$10 per year, payable to the University of Maryland. The newsletter can be accessed for free on the Internet at <http://www.sheepandgoat.com/news/index.html>. Internet users can ask to be added to a list to receive an e-mail message when a new newsletter has been posted to the web.

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..wormx.org>  
<http://mdgoatquest.blogspot.com>

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