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# Wild & Woolly (

VOLUME XI 🗆 ISSUE II

SPRING 2012

# Alpaca Capitol of the World

By Stephan Wildeus Virginia State University

Alpaca production in the U.S. is a recent niche industry with about 100,000 registered animals used for fiber production. In contrast, Peru is the country with the largest population of alpacas, exceeding 3 million head, and a long established tradition of alpaca farming and fiber production.

Alpacas are found on the Peruvian Altiplano at 12,500 feet and above. The landscape at this altitude is dominated by perennial bunch grasses, and there are few or no trees and shrubs. Rainfall is scarce (3 to 5 inches) and condensed in a wet season from October to April.

Mean annual temperatures are around 50°F, and fluctuate greatly between day and night. It is this harsh environment that alpacas are uniquely suited for.



Suri Alpacas

In Peru alpacas are tended to by herders that live with the animals and there are no fences. There are stone-walled corrals that are used to gather the animals.

Stocking rates are generally less than one alpaca per acre, and there is usually no supplementation at any stage of production. Alpacas are kept in groups according to sex and production stage.

(Continued on page 2)

## **Developing Baby Rumens**

A baby ruminant is born with a very small, non-functioning rumen. Until the rumen is developed, baby ruminants function like simple-stomached animals (monogastrics) and require highly-digestible diets.

While rumen development is affected by several factors, the most important one is dry feed intake. The rumen will be slow to develop in an animal that is fed a strictly milk diet, as carbohydrates (from hay and grain) provide the substrates for microbial fermentation.

Contrary to what many producers think, a grain diet will develop the rumen more quickly than a forage diet. This is because grain is fermented to propionate and butyrate (volatile fatty acids), whereas forages are fermented to mostly acetate. Acetate is less stimulatory to rumen development.

Early rumen development is essential in artificial rearing and early weaning systems. It is one of the advantages to creep feeding.



Lamb eating creep feed

#### (Alpaca Capitol of the World Continued from on page 1)

The herd I visited was a group of 350 late pregnant females made up of both Suri (a finer, longer fleece with no crimp) and Huacaya (a shorter fleece with crimp fi-

ber) in a wide range of coat colors.

Up to 20 years ago, selection of white alpacas was favored, but there has now been a shift back to colored animals. The owner of the flock considered a true black male with a fiber diameter of 18 microns as his most outstanding animal. He also indicated that currently the

reddish color, similar to that of the alpacas wild ancestor the vicuna, was among the most favored. The average fleece weight is 6.5 pounds in females and 9 pounds in males, but fleeces of outstanding males can weigh as much as 12 pounds. Alpacas are shorn at the end of the year using hand shears. For shearing, alpacas are moved to a designated area and fleeces are sorted according to color.

Grading of the fleeces is done later at the warehouse.

Alpacas give birth usually from the last week of December to January and February and are bred back within two or three weeks of birthing. At the farm I visited, males were brought in from a different location, and hand mated with females of like color, and

based on fiber quality. Females are usually mated after 2 years of age, but may be mated younger if a target weight 70 lb has been reached. Males similarly will be used after 2-3 years of age, but outstanding males may also be used earlier.

Crias (alpaca babies) are born on range without further assistance. Predation losses can be quite high (i.e pumas), and combined with poor nutrition and disease (enterotoxemia) death losses in crias can be quite high.

The primary product of alpacas is the fleece, but animals are also used for meat production. Alpaca meat is very lean and reputed to be one of the lowest in cholesterol content. I visited a municipal slaughter facility in Nuñoa, in the Province of Puno, one of the more important centers of alpaca production in Peru. The facility slaughtered up to 200 animals on Tuesday's each week. These numbers equally represented sheep, alpacas and llamas. The slaughter process is not highly automated, and carcasses are not stored but sold within a day of slaughter.

Except at the slaughter facility I did not see many Llamas. They are usually kept at higher altitudes still, and are kept in smaller groups. Llamas do not herd as well as alpacas.

Note: Virginia State University's Small Ruminant Program has a small alpaca herd and evaluates management practices affecting fiber production under the environmental conditions of the Mid-Atlantic region. I had the opportunity to visit Peru upon the invitation of Dr. Wilfredo Huanca, a Reproductive Physiologist in the Faculty of Veterinary Medicine at the San Marcos University in Lima, Peru. I want to thank Dr. Huanca for setting up and accompanying me on this trip, serving as my tireless translator, and providing me access people and sites that are not readily available to the casual visitor. The trip would not have been possible without him.



Alpaca fiber is long, fine, and without grease. Baby alpaca is the finest, about 23 microns. While easily dyed, alpaca fleece comes in 22 distinct colors.





Dr. Stephan Wildeus, pictured here in Peru (back left), is a research animal scientist at Virginia State University.



## **How Coccidiostats Work**

In the U.S., three anticoccidial agents are FDA-approved for use in sheep and/or goats: Bovatec®, Rumensin®, and Deccox®. Bovatec® is approved for use in sheep in confinement. Rumensin is approved for use in confined goats. Deccox® is approved for young, non-lactating sheep and goats.

Deccox® (decoquinate) is a coccidiostat that stops the growth of coccidia, but does not kill coccidia. It works by inhibiting the activity of the cell's mitochrondria, interfering with energy production in the cell. Deccox® acts at five developmental stages of coccidia, and provides the widest range of action of all the anticoccidial agents.

Bovatec® (lasalocid) is a coccidiocide that kills coccidia. It is an ionophore that moves potassium, sodium, calcium, and magnesium into the cell, causing the cell to burst.

Bovatec® works primarily on a single developmental stage of coccidia, providing a narrower range of action than Deccox.



Like Bovatec®, Rumensin® (monensin) is an ionophore and effective anticoccidial agent. Though their modes of action differ, similar levels of coccidia control have been achieved with Bovatec® and Deccox® in research studies.

Source: Deccox vs. Bovatec, Merrick's Animal Nutrition

# Research: Protein Supplementation In Late Gestation

British and Greek researchers collaborated to determine the effect of increased protein nutrition on fecal egg counts and the performance of ewes and their lambs.

Seventy-two, twin-bearing Greyface ewes were used in the experiment. They were fed at 0.9 times their metabolizable energy (ME) requirement and either 0.8 (LP) or 1.3 (HP) times their metabolizable protein (MP) requirement.

Their diet consisted of 1/3 chopped hay and 2/3 concentrate. Every Mon-Wed-Fri from day(-42) to d-25, they were trickle-infected with different levels of *Teladorsagia circumcinta* larvae: 1,000, 5,000, or 10,000.

Immediately after lambing, HP ewes were heavier than LP ewes and this effect was maintained throughout their lactation. Litters from the HP ewes grew faster than litters from the LP ewes: 708 vs 651 g/d (1.56 vs. 1.44 lbs/d).

Protein supplementation also reduced fecal egg counts throughout lactation. The reduction in fecal egg counts is important, as nematode egg excretion by periparturient ewes is the main source of infection for their immunologically naive lambs.

Source: www.animalbytes.org



# Natural" Anthelmintics: Do they work?

Sheep and goat producers are becoming increasingly interested in "natural" anthelmintics. Their interests are driven primarily by two trends: 1) the widespread emergence of anthelmintic-resistant worms; and 2) a growing preference for more "natural" pest control methods.

An anthelmintic is a drug that expels worms by either stunning them or killing them. Currently, there are three classes of anthelmintics available to sheep and goat producers in the U.S. Anthelmintics in each class have a different way of killing worms.

Though it varies significantly by geographic region and individual farm, worms have developed varying degrees of resistance to all three classes of anthelmintics.

A "natural" anthelmintic is a naturally-occurring compound that is purported to have "anthelmintic-like" properties. There is a long list of such compounds, including tobacco, garlic, papaya, black walnut, wormwood, diatomaceous earth, and pumpkin seed. As the efficacy of most "natural" anthelmintics is largely antidotal, researchers are busy trying to quantify any potential effect(s).

So far, research has failed to identify a "natural" anthelmintic that can be used to kill worms and reverse the effects of clinical parasitism. If an animal is clinically parasitized, it should be administered an effective anthelmintic (drug). Otherwise, it is likely to succumb to the effects of parasitism. Even the National Organic Standards stipulate that a parasitized animal receive medical treatment, though once treated the animal can no longer be sold as certified-organic.

But just because we don't have any "natural" anthelmintics that can be used to treat a parasitized animal doesn't mean that "natural" anthelmintics don't have a role to play in internal parasite control. While anthelmintics (drugs) are used to treat parasites inside of the



animal, the role of "natural" anthelmintics might be more to disrupt the life cycle of the parasites while they are in their free-living stages outside of the host (on pasture).

Some naturally-occurring compounds have been shown to inhibit the ability of stomach worm eggs to hatch and/ or develop into infective third stage larvae. Some fungus will actually "eat" parasite larvae.

Fewer eggs and larvae means that animals will be exposed to lower levels of pasture contamination and be less likely to suffer the negative effects of parasitism. Other "natural"

anthelmintics may bolster the animal's immune system, making it better able to cope with the effects of parasites.

If "natural" anthelmintics are incorporated into a parasite control program, producers should still continue to regularly monitor their animals for clinical signs of parasitism and deworm those which require treatment. Hopefully, "natural" anthelmintics and other management practices will reduce the number of animals that require treatment with an anthelmintic (drug).

In sheep and goats, the clinical signs of parasitism are anemia (as evidenced by pale mucous membranes), "bottle jaw" (an accumulation of fluid under the jaw), poor body condition, a rough hair coat or open fleece, and/or dagginess (scouring). A clinically-parasitized animal will not necessarily have a high fecal egg count and vice versa.

Editor's note: Many land grant universities, including the University of Maryland Eastern Shore (UMES) and Delaware State University (DSU), are investigating alternate methods of parasite control in sheep and goats. Their current research efforts are focusing on pumpkin seed as a potential "natural" anthelmintic.

Did you know? Genetically engineered goats are carrying Malaria Vaccine.

# Write Your Own Biosecurity Plan

Disease prevention is much easier and less expensive than treating an outbreak, and the University of Maine has developed a template designed for sheep and goat producers in any region of the country to create a customized biosecurity plan for their farms.

With funding from Northeast Sustainable Agriculture Research and Education (SARE), the plan was developed jointly by UMaine Extension Educator Richard Brzozowski and University of Maryland Extension Sheep and Goat Specialist Susan Schoenian.

The plan is an offshoot of a sheep foot health research project currently underway in the northeast. The link to write an individual biosecurity plan is www.sheepandgoat.com/biosecurity/.

Producers are encouraged to read and respond to a series of questions or statements. A customized document will be created as they work through the form. Each farm's biosecurity plan will be saved at a secure location and available to producers via a specific password the producer creates.

Producers also can save and print their own plans and may update, revise or delete their plan at any time. All information will be confidential.

"The hope is that each plan created will benefit producers and their livestock by saving time and reducing losses," Brzozowski says.
"By implementing the plan, producers will have a better chance of maintaining a healthy and productive herd or flock. Most contagious diseases of livestock



are unknowingly purchased by producers when they introduce new livestock on to their farm or mix their livestock with others. Every livestock producer ought to have a plan to prevent disease."

For more information about writing a biosecurity plan, please contact Brzozowski at richard.brzozowski@maine.edu.

Editor's note: The biosecurity template is being hosted by the Maryland Small Ruminant Page at www.sheepandgoat.com.

## **Snotty Noses Can Be Caused by Nasal Bots**

Nasal bots are the maggots larvae of the sheep nasal bot fly, *Oestrus ovis*. The fly probably originated from Africa, but is now present throughout the world.

Nasal bots are normally found in sheep and goats, but may occasionally target people, dogs, and cats. However, the bots don't develop to maturity in species other than sheep and goats. Bots may be more common in horned breeds of sheep.

Bot fly activity is seasonal and generally peaks in spring and late summer, when temperatures exceed 68°F, however the pattern of fly activity varies by region.

The sheep nasal bot fly deposits larvae, not eggs, on its host, unlike the related bot fly of horses. Once the larvae have been deposited in the sheep's nostrils, they move and grow within the nasal cavity and the frontal and possibly maxillary sinuses.

Affected sheep show various signs, possibly depending upon the number and stage and development of the lar-

vae. There may have a watery or thick discharge from one or both nostrils. They may have difficulty in breathing and may sneeze or cough. When flies are active, sheep may snort and stamp their front feet, running in short bursts with their noses pressed almost to the ground. Conversely, some sheep may show no signs at all of infestation. Goats rarely show any signs.

According to new fact sheep published in Australia, treatment with an anthelmintic solely for nasal bots is not recommended unless it is believe that the health of the animals is being affected by the parasites. The current treatment is usually a macrocylic lactone drench, such as ivermectin.

There is no definitive diagnosis for nasal bots. The peculiar behavior exhibited by affected sheep is usually the cause for diagnosis.

Source: Nasal Bots in Sheep, Western Australia http://www.agric.wa.gov.au/objtwr/imported\_assets/content/pw/ah/par/fn\_nasal\_bots\_sheep.pdf

### Nominate Bucks to 2012 Pasture Test

The nomination period for the 2012 Western Maryland Pasture-Based Meat Goat Performance Test is April 1 thru May 15. The test is open to male goats of any breed or breed cross, with or without registration papers or registration eligibility.

Consigners may nominate up to five goats to the test. A minimum of two is recommended. The nomination fee is \$20 per goat. In 2012, the total cost of testing a goat will be \$95, the first increase in several years. Thus, an additional \$75 per goat will due upon delivery of the goats to the test site on June 2.

Eligible goats must have been born between December 20, 2011, and March 20, 2012. They must weigh between 35 and 70 lbs. upon delivery to the test site. They must have been weaned for at least two weeks and have received two inoculations for overeating disease (type C & D) and tetanus. Their hooves must be trimmed (if necessary) prior to arrival at the test site.

Each consignment of goats must be accompanied by appropriate health papers: intrastate health papers for in-state goats and interstate health papers for out-of-state consignments. Consigners must also fill out a self-certification form, attesting to the health of their animals. With the exception of the health papers, all of the documents pertinent to the goat test may be downloaded from the blog at http://mdgoattest.blogspot.com. To request a nomination package you may contact Pam Thomas at 301-432-2767 ext 315 or by email at pthomas@umd.edu.



Last Year's Top Performing Buck - Boer X Kiko



During the test, the goats will be handled every two weeks to record data and collect fecal samples. Towards the end of the test, they will be scanned to determine carcass characteristics. They will also be evaluated for structural correctness and reproductive performance.

Goats meeting Gold, Silver, and Bronze standards of performance will be eligible to sell. A sale will be held on Saturday, September 15, at the Western Maryland Research & Education Center (in Keedysville). Goats not sold for breeding or to a commercial buyer must be picked up from the test site on September 15.

#### Why is the test triple-deworming the goats?

Upon arrival to the test site, the goats will be triple-dewormed with anthelmintics from each class of dewormer: 1) moxidectin (Cydectin® sheep drench @ 2 ml/11 lbs.); 2) levamisole (Prohibit® sheep drench @ 3 ml/50 lbs.); 3) albendazole (Valbazen® liquid @ 3 ml/50 lbs).

In addition, the labeled dose of each anthelmintic will be increased since goats metabolize anthelmintics faster than other livestock and higher doses are required to get the same level of efficacy. Usually, goats are given double the sheep dose. In the case of levamisole, the dosage for goats is 1.5x the sheep dose, as levamisole has a lower margin of safety.

(Continued on page 9)

# Levamisole Update

On many sheep and goat farms, levamisole (Trade name: Prohibit®) is the most effective anthelmintic. In fact, for some producers, levamisole is the only anthelmintic that still works. Unfortunately, it is no longer available for purchase as a veterinary drug, unless some individual or company still has a cache.

The distributor of levamisole is Agri-Labs. According to a company representative, levamisole is on indefinite manufacturer's back order, as Agri-Labs is waiting to receive FDA approval for its new source of levamisole.

#### What's the hold-up?

Levamisole is increasingly being used as a cutting agent for cocaine. According to a 2011 report by the U.S. Drug Enforcement Agency, 82 percent of seized cocaine contains the levamisole.

#### Why?

Levamisole adds bulk and weight to cocaine and makes it appear more "pure." Other reasons cited for its use in the cocaine trade are its possible stimulant effects, a similar appearance to cocaine, and an ability to pass street purity tests.

#### But

With the increasing use of levamisole as an adulterant, a number of serious side effects have been reported by cocaine users. Levamisole attacks the blood vessels that supply the skin, which can lead to dark patches of dying flesh. Levamisole-laced cocaine has been implicated in several high-profile deaths.



#### In people

Levamisole has been used to treat parasitic infections. It was previously used to treat several types of cancer. It was removed from the U.S. market in 2000 due to the risk of serious side effects and the availability of more effective alternatives.

Editor's note: I have made several attempts to contact the FDA Center of Veterinary Medicine (via phone and e-mail) to determine the status and/or future of levamisole, but my efforts so far have been unsuccessful.

## 2012 Junior Sheep & Wool Skillathon



The 2012 Junior Sheep & Wool Skillathon will be held on Sunday, May 6, 2012, at the Maryland Sheep & Wool Festival. The Festival is always held the first full weekend in May at the Howard County Fairgrounds in West Friendship, Maryland.

The skillathon will be held in the dining hall. Registration will begin at 8 a.m. The contest will start at 9 a.m. Results are usually announced around 2 or 3 p.m. Lunch will be provided (pizza and soda)

Premiums and awards will be provided by the Festival Committee of the Maryland Sheep Breeders Association and the University of Maryland Small Ruminant Extension Program.

The skillathon is open to individual and teams (3 or 4) of youth, ages 8 to 18, from any state of province. Youth compete according to their age as of January 1, 2012. Pre-registration is requested by Monday, April 30. Teams <u>must</u> be pre-registered in order to compete. To pre-register, send names and ages (as of January 1) to Susan Schoenian at sschoen@umd.edu or (301) 432-2767 x343. Individuals and teams may also pre-register on the Festival web site at www.sheepandwool.org.

A series of online quizzes has been developed to help youth study for the skillathon competitions. The url of the online quizzes is http://www.sheepandgoat.com/onlinequizzes.html.

# Sheep and Goat Webinars

A webinar is a seminar that is taught over the world wide web. Usually, webinars are recorded and archived for public viewing.

#### Feeding and nutrition

This past winter, University of Maryland Extension conducted a webinar short course on sheep and goat feeding and nutrition. The short course was held over the course of six evenings. Topics included digestive physiology, nutrients, feedstuffs, nutritional management, ration balancing, and nutritional disorders.

The webinars were recorded and minimally edited. Links to the recordings are available at http://www.sheepandgoat.com/recordings.html#feeding.

The page also includes links to the PowerPoint presentations and handouts (PDF copies of the PowerPoint slides) that accompanied each webinar. The presentations and handouts are available for viewing and downloading at http://www.slideshare.net/schoenian.

#### Foot health

In February 2012, University of Maine Extension hosted two webinars pertaining to sheep and goat foot health. The webinars were part of their on-going foot health project, a Northeast SARE-funded project to help sheep producers eradicate footrot from their flocks. The University of Maryland is a collaborator on the project.

The foot health webinars were recorded and may be viewed from a computer. Links to the recordings are available at http://www.sheepandgoat.com/recordings.html#foothealth.

#### Goat Health

On January 23, 2012, the University of Wisconsin hosted on Webinar on Goat Health. Dr. Joan Dean Rowe, an associate professor in the Department of Population Health and Reproduction at University of California, Davis School of Veterinary Medicine, presented an educational webinar on goat. She discussed the importance of testing for and strategies to manage herd diseases such as Caseous Lymphadenitis (CL), Caprine Arthritis Encephalitis Virus (CAEV) and Mycoplasma.

Visit the following web site for details on how to view the webinar and for handouts that you can download: http://fyi.uwex.edu/wisheepandgoat/2012/01/17/goathealth-webinar-january-23/

# www.sheepgoatmarketing.info Removed From Web

The **www.sheepgoatmarketing.info** web site has been removed from the web for reasons of security.

The web site was originally created by Cornell University. It was later moved to a server at the University of Maryland.

The purpose of the web site was to serve as a national resource on the ethnic marketing of lamb and goat.

One of the main goals was to connect buyers and sellers through the use of online databases. It is these databases that became vulnerable to hackers.

Editor's note: I hope to create a similar database for producers with sheep, goats and their products to sell. Cornell University is also planning to reestablish a similar web resource

## **Shepherd Magazine**

Shepherd Magazine has been the sheep industry's premier publication since 1956. Sheep and Farm Life Inc. (Ohio) had been the publisher of the magazine since 1985. In early 2012, Long Draw Publishing (of Wyoming) announced that it had acquired the magazine.

For more information, visit the web site at www.theshepherdmagazine.com.



(Nominate Bucks to 2012 Pasture Test - continued from page 6)

In 2008 and 2009, the moxidectin + levamisole combination treatment reduced fecal egg counts by more than 95 percent, but in 2010 when levamisole was off-themarket, the combination of moxidectin + albendazole only reduced egg counts by 35 percent. Last year, the moxidectin + levamisole combination reduced fecal egg counts by 80 percent. To get a fecal egg count reduction closer to 100, albendazole is being added to the 2012 protocol.

The purpose of the triple-deworming is to fecal reduce egg counts in all the goats to near zero. This way, all the goats will start the test equally (essentially free of worms), and comparisons among the goats for parasite resistance and resilience will be valid.

Research has shown that there is a synergetic effect when combinations of anthelmintics are administered. In other words, the effectiveness of the combination is greater than the combined individual effectiveness of each drug.

Producers should not interpret the test protocol as a recommendation for all farms. While combination deworming is a strategy for extending the useful life of anthelmintics, it allows worms to simultaneously develop resistance to multiple drugs. This is the same risk when drugs are rotated after each use. Producers who have documented resistance to all three classes of anthelmintics may consider combination anthelmintic treatments.

Another situation when drug combinations should be given is when new animals are introduced to the farm. In this case, the goal of treatment is the same as in our goat test, to reduce fecal egg counts to near zero. No drug will effectively kill all worms (some will always survive). If all worms are not eliminated from new animals, there is a risk that the new animal will introduce drug-resistant worms to the farm. Anthelmintics from the different classes can be administered while the new animal is in quarantine.

When giving combinations of drugs, the anthelmintics should not be combined into a single "cocktail." Each treatment should be given individually (all orally), one after the other or on subsequent days. In the case of the goat test, they are given at the same time, one dose after another.



Combination treatments should combine drugs from different chemical classes. For example, you would not give ivermectin + moxidectin, as they are both in the macrocyclic lactone class of anthelmintics.

#### Who should consign goats to the test?

The purpose of the Western Maryland Pasture-Based Meat Goat Performance Test is to determine genetic differences in weanling male goats consuming a pasture-only diet. While on test, the goats are evaluated for growth (ADG), parasite resistance (fecal egg counts), and parasite resilience (FAMACHA© scores and the need for deworming).

Some consigners consign goats year after year, because their goats always do well in the test. Others consign goats only once, perhaps because their goats didn't do very well on test.

Test conditions are equal for all goats, so when goats fail to perform, the main reason for their poor performance is poor genetics, including poor adaptability to the test conditions. Good management (on the farm) can cover up poor genetics and vice versa. The purpose of a central performance test is to equalize the environment so that the differences observed or measured in the goats can be attributed primarily to genetics.

The test is ideally suited to meat goat producers who raise their goats, especially their kids, mostly on pasture. Indirectly, these producers have already been selecting for adaption to a pasture-only diet and resistance to internal parasites.

(Continued on page 10)

(Nominate Bucks to 2012 Pasture Test - continued from page 9)

Kids that are creep-fed do not have an advantage in the test. In fact, they may be at a disadvantage if they are not also adapted to a pasture diet.

Producers that creep feed their kids and push them for rapid growth may find it more beneficial to consign their goats to a pen-based test that feeds a high-

er energy diet. On the other hand, if you'd like to know what your herd's genetics for parasite resistance and/or resilience are, you should consider consigning goats to the Maryland Test.

Only by keeping goats on a pasture-only diet can parasite traits be measured. Goats are minimally exposed to parasites when they are kept in the barn or in a dry lot. Even on pasture, it can be a challenge to expose goats to sufficient numbers of worm larvae. For this reason, this year's test goats will receive an artificial dose of worm larvae, in addition to their natural challenge.



After the challenge they will be closely monitored for signs of clinical parasitism and the need for deworming.

Consider sending your goats to Maryland to get an evaluation of parasite resistance. After the test is over, the goats can be returned to their original production system. They can be fed supplemental feed to support better

growth. But at least you'll know their genetics for parasite resistance and resilience.

Regardless of your production system, any goat that is consigned to the Maryland test will do better if it is already adapted to a pasture diet. Having a "buddy" (or two) will also help it to adapt to the test.

Editor's note: If I were picking goats for a pasture test, I'd pick bucks with some opportunity for compensatory gain, e.g. twins or triplets or kids out of a yearling dam. I'd pick goats that looked like they had the capacity to eat a lot of forage and the "personality" to dominate other goats. I'd consign multiple goats out of the same sire to improve the repeatability of the data.

## **U.S. Sheep and Goat Inventories Decline**

The U.S. sheep and lamb inventory on January 1, 2012, was 5.35 million head, down 2 percent from 2011. The breeding sheep inventory declined 3 percent to 3.98 million head.

The lamb crop for 2011 totaled 3.51 million head. It was down 2 percent from 2011. The 2011 lambing rate was 109 per 100 mature ewes, an increase of 2 percent from 2010.

Wool production in 2011 was 4 percent below 2010. However, the value of wool was up 40 percent. The average price paid for wool in 2011 was \$1.67 per lb. The average fleece weight was 7.3 lbs.

The U.S. goat and kid inventory on January 1, 2012, was 2.86 million head, down 4 percent from 2011. The meat (and other) goat inventory fell 4 percent, while dairy goat numbers were unchanged from 2010. The Angora goat population declined another 15 percent.

The breeding goat inventory declined 4 percent to 2.38 million head. The kid crop for 2011 totaled 1.88 million for all goats. It was down 2 percent from 2010.

Severe weather is blamed for the inventory declines: heavy moisture across many of the northern states and a 100-year drought in the southwest. Texas, the nation's leading sheep and goat-producing state, reduced its sheep, Angora goat, and meat goat inventories by 24, 23, and 11 percent, respectively.

At the same time, strong prices are bringing new people into the sheep and goat business.



# **Buck Pairs Needed For The Pen vs. Pasture Study**

Fifteen pairs of genetically-similar buck kids are needed for a comparison study that is being conducted at the Western Maryland Research & Education Center. A total of 30 bucks is needed: 15 to go in the pen and 15 to go on pasture.



The bucks need to weigh approximately 40 lbs. on June 2. In order to make valid comparisons, the 30 bucks need to start at similar weights. There was too much variation (in starting weights) in last year's preliminary study. The bucks should be full or half-sibs, as similar genetics are also necessary for a valid comparison. The grant supporting the study allows a payment of \$100 (each) for the 40-lb. goats used in the study. Producers will retain ownership of the bucks until the end of the feeding period (around September 15), after which time they will receive payment for their goats, regardless of how their goats performed in the study. All of the goats designated for the study will be harvested to collect carcass data. Producers will receive performance data on the goats in the study, but will not be able to keep any of the bucks for breeding.

One buck from each pair will be put in the pen for feeding. It will receive free choice hay and once a day grain feeding. The other buck will graze alongside the bucks in the Western Maryland Pasture-Based Meat Goat Performance Test. Which buck goes where will be random.

The bucks in the study will be handled the same as those in the pasture test, except that they will not be artificially -challenged with infective worm larvae and they will not be evaluated for reproductive or structural soundness.

Consigners that provide bucks for the comparison study may still consign up to five bucks to the pasture test. Consigners will be given first preference for providing goats for the study.

Providing bucks for the study will be a great way to get carcass data on goats that are half-sibs to those on test.

If you have any questions about the study and/or providing goats, please contact Susan at (301) 432-2767 x343 or sschoen@umd.edu.

The pen vs. pasture-fed study is being funded by a grant from the Maryland Grain Producers Utilization Board.

### **Calendar of Events**

#### April 1-May 15

Nomination period W MD Pasture-Based Meat Goat Performance Test Info: Susan Schoenian at (301) 432-2767 x343 or schoen@umd.edu

#### April 20-21

North Eastern IBGA Shows Delaware State Fairgrounds, Harrington, DE Info: www.delmarvagoat.com

#### April 21

4-H/FFA Goat, Lamb & Hog Sale Berkeley County Fairgrounds, Martinsburg, WV Info: www.tfbboergoats.com

#### May 4

Integrated Parasite Management (IPM)/
FAMACHA© Workshop
Maryland Sheep & Wool Festival
Howard County Fairgrounds, West Friendship, MD
Register online at www.sheepandwool.org

#### May 4-5

Goat Artificial Insemination Clinic Delaware State University Info: Dr. Dahlia Jackson O'Brien 302-857-6490 or djjackson@desu.edu (Calendar of Events - continued from page 11)

#### May 5-6

Maryland Sheep & Wool Festival Howard County Fairgrounds, West Friendship, MD Info: office@sheepandwool.org or www.sheepandwool.org

#### May 6

Junior Sheep & Wool Skillathon Maryland Sheep & Wool Festival - Dining Hall Info: Susan Schoenian at (301) 432-2767 x343 or schoen@umd.edu - Register online at www.sheepandwool.org

#### June 2

W MDPasture-Based Meat Goat Performance Test Bucks delivered to test site Info: Susan Schoenian at (301) 432-2767 x343 or schoen@umd.edu

#### June 13)

Maryland Wool Pool Maryland State Fairgrounds, Timonium, Maryland Info: Richard Barczewski at rbarczewski@desu.edu

#### September 15

Western Maryland Pasture-Based Meat Goat Performance Test Sale of top-performing bucks and pick-up of non-sale bucks Info: Susan Schoenian at (301) 432-2767 x343 or schoen@umd.edu



#### Solutions in your community

Wild & Woolly is published quarterly by University of Maryland Extension. It is written by Susan Schoenian, Sheep & Goat Specialist, and edited by Pam Thomas, Administrative Assistant. You may contact Susan or Pam at the Western Maryland Research & Education Center (WMREC), 18330 Keedysville Road, Keedysville, MD 21756; (301) 432-2767 x343 (Susan) or x315 (Pam); sschoen@umd.edu or pthomas@umd.edu. The cost to receive the newsletter via US mail is \$10 per year (payable to the University of Maryland). The newsletter can be accessed for free online at www. sheepandgoat.com. Internet users can ask to have their e-mail address added to a list so that they'll receive an e-mail message when a new newsletter has been posted to the web. Comments and suggestions pertaining to the newsletter are always welcome. References to commercial products or trade names are made with the understanding that no discrimination is intended or no endorsement by University of Maryland is implied.

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