



Wild & Woolly



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INSIDE THIS ISSUE:

On-Farm Performance	3
Testing of Meat Goat	
UMES Welcomes Dr. Enrique Escobar	5
Erroll Mattox and UMES's Small Farm Program	5
The Biggest Show Ever	6
Injection Techniques	7
Feed or Weed	8
Balance Sheep Rations Online	10
State Diagnostic Labs Closing	10
Test your goat IQ	10
Featured "Breed"-Cashmere Goats	11



Equal access programs

Western MD Goat Field Day and Sale

The 2nd Annual Western Maryland Goat Field Day and Sale will be held Saturday, October 3, 2009, at the Washington County Agricultural Education Center near Boonsboro, Maryland. The fairgrounds are adjacent to the University of Maryland's Western Maryland Research & Education Center.



Bucks from the Western Maryland Pasture-Based Meat Goat Performance Test that meet Gold, Silver, and Bronze standards for growth, parasite resistance, and parasite resilience, and minimum standards for reproductive and structural soundness will be offered for sale via public auction.

This year there are 60 goats on test. Last year, 10 out of the 58 goats on test qualified for the sale. To view pictures and data of the top-performing bucks (as of September 10), go to:

<http://www.sheepandgoat.com/programs/GoatTest/2009/09topbucks.html>.

Additional pictures and data can be found at <http://mdgoatstest.blogspot.com>. The goats will be worked for the last time on September 26, after

(Continued on page 2)

2009 Lambing and Kidding School

The 2009 Lambing and Kidding School will be held on Saturday, November 21, 9 a.m. to 4 p.m. at the Holiday Inn in Waldorf, Maryland.

The featured speaker will be Dr. Susan Kerr, an Extension Educator from Washington State University. Dr. Kerr received her Bachelor's Degree in Animal Science and Doctor of Veterinary Medicine Degree from Cornell University. She is engaged nationally with 4-H animal science curriculum development and educational outreach to small ruminant producers. Dr. Kerr will give several presentations at the school, including performing a live necropsy (of a baby goat and/or lamb).

Additional topics include: Preparing for lambing and kidding, lambing and kidding in the fall, lambing and kidding for the first time, composting animal mortality, medicating sheep and goats, general health care, raising orphans, first aid for sheep and goats, feeding the pregnant and lactating female, and anthelmintic (dewormer) resistance.



(Continued on page 2)

Skillathon

For ages 8 to 18

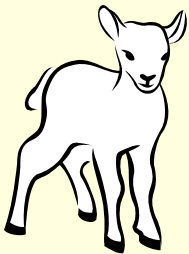
Running concurrent to the field day

October 3, 2009

Pre-register by: September 26

More information about the skillathon is available at:

[Www.sheepandgoat.com/programs/skillathon/goatskillathon.html](http://www.sheepandgoat.com/programs/skillathon/goatskillathon.html)



Western MD Goat Field Day and Sale (continued from page 1)

which time the sale animals will be selected. Thirty-four does have been consigned to the invitational doe sale. They include twenty-five fullblood, percentage and crossbred Kikos and nine fullblood and percentage Boers. Thirty of the does are doe kids. Four are yearlings.

Doe consigners include ALL Boer Goats (MD), Losch's Riverview Farm Boer Goats (PA), Caprine Genetics (VA), Cheyview Acres (KY), Cedar Creek Farm (DE), and Don Smith (VA). To see a list of the does, go to: <http://www.sheepandgoat.com/programs/goatTest/2009/09doeconsignments.html>. You can download a sale catalog of the does at <http://www.sheepandgoat.com/programs/GoatTest/2009/Doeconsignmentscatalog.pdf>.

All of the goats will be sold via silent auction. In a silent auction, bidding is done on paper. The goats are not paraded through a sale ring. A silent auction gives bidders more time to consider their purchases. The bidding period will be from 10 a.m. to 2 p.m. The person with the highest bid at 2 p.m. gets the goat.

The field day will be held from 9 a.m. to 12 noon. Dr. Richard Browning, a research animal scientist from Tennessee State University, will be the featured speaker. Dr. Browning is in the midst of conducting a multi-year breed evaluation study, comparing Boer, Kiko, and Spanish goats and their reciprocal crosses.



Running concurrent to the field day will be a skillathon for youth, ages 8 to 18. In the skillathon, youth will be tested on their knowledge of meat, dairy, and fiber goats. Pre-registration for the skillathon is requested by September 26. Information about the skillathon can be found at <http://www.sheepandgoat.com/programs/skillathon/goatskillathon.html>.

Lunch will be available for purchase at the fairgrounds.

2009 Lambing and Kidding School (continued from page 1)

Pre-registration for the school is required by November 6.

The cost of participation is \$45 per person. The registration fee includes the program, morning refreshments, lunch, and resource material. Additional family or farm members are \$35. Extra resource material is \$10.

Checks should be made payable to the University of Maryland and sent to Lambing and Kidding School, c/o Pam Thomas, Western Maryland Research & Education Center, 18330 Keedysville Road, Keedysville, Maryland 21756.



For information about the school, contact Susan Schoenian at (301) 432-2767 x343 or sschoen@umd.edu or Pam Thomas at (301) 432-2767 x315 or pthomas@umd.edu. You can download a program tri-fold brochure form the web at <http://www.sheepandgoat.com/programs/09LKSchoolbrochure.pdf>.

On-Farm Performance Testing of Meat Goat

By: Richard Browning, Jr., Ph.D, Tennessee State University

Defining On-Farm Performance Testing

Performance testing is the comparative evaluation of goats for production traits of economic importance: reproduction, growth, and carcass merit. Ancestry (pedigree) and visual appraisal for conformation (appearance) have been the primary basis of animal selection in meat goat herds. Most resource inputs (i.e., herd expenses) go into doe management. In return, does are expected to become pregnant, deliver live newborns, and raise multiple kids with good growth to weaning. Reproduction is generally viewed as the most important trait of meat animal production. Reproductive output in a meat goat herd is defined as litter weight weaned per doe exposed to the buck. On-farm performance testing includes the comparative evaluation of does for reproductive output, the evaluation of individual kids for weight gain, and in multi-sire breeding programs, herd sire comparisons for progeny performance.

Objective, accurate recording of doe herd performance allows producers to make better selection and culling decisions and to measure performance responses to management changes. Producers can assess the production return (i.e., litter weight weaned) from the expenses incurred for doe management.

Conducting An On-Farm Performance Test

Performance records should be easy to use. They can be handwritten records in a notebook or on index cards. Each animal in the breeding herd should have a separate record. Alternatively, records can be maintained electronically on computer spreadsheets or herd management software. Electronic records allow easy handling of data for analysis or transfer to central processing centers such as industry organizations or universities, particularly for herds with large sets of data accumulated over several years. However, a hand calculator and a little time are all that may be required for processing data from smaller herds using handwritten records. Under any scenario, proper record keeping is essential to a successful performance-testing program.

Animal Identification

A prerequisite to performance testing is proper identification of animals. Ear tags and tattoos are the most common forms of ID for meat goats. Assign each herd member a unique and permanent ID number. Assign ID numbers to kids at birth when collecting early data such as birth weights, litter sizes, and neonatal deaths. Newborn kid data need to be matched with the correct doe. In herds

with many does kidding together on pasture or range, it can sometimes be a challenge to tell which kids belong to which does. Rejected kids, early newborn deaths, and the occasional swapping of kids by does make it important to properly and adequately ID kids soon after birth, preferably within 12-24 hours.

Scales.



Scales represent another requirement of a performance testing program. Body weight is undeniably important as a measure of meat animal performance as well as for some aspects of general herd management. A small handheld scale is sufficient to record birth weights. A larger livestock scale is needed for weaning weights. Scales may be bought, borrowed, or rented depending on the needs and resources of individual operations. A scale should be periodically checked to ensure that it is accurate and precise when weighing animals.

Contemporary Groups.

A contemporary group is a set of meat goat kids born and raised together under uniform conditions. Performance testing for genetic evaluation requires factors like age, nutrition, and location to be equal for all kids. Kids in a contemporary group are born within a 60-day period and managed together from birth to weaning. Dams should also be managed similarly to weaning. Data from kids born outside the 60-day window or managed differently (e.g. show circuit, bottle babies, kept in separate pastures) are excluded from the group. Contemporary groups for kids weaned at three months old are planned 8-10 months earlier at the start of breeding. Breeding seasons no longer than 6-7 weeks assure that kids will be within the 60-day age range at weaning.

Performance Recording

Body Weight. Primary traits to record in a meat goat herd are the number of kids born and weaned for each doe exposed to bucks, kid birth and weaning weights, and dam weight at weaning. Birth weight is the starting point to determine pre-weaning growth rate. Recording birth weight also facilitates recording the birth date, identification of the dam, and tagging the newborn with a unique ID number. Record newborn weights within 24 hours of birth.

(Continued on page 4)

On-Farm Performance Testing of Meat Goat (continued from page 3)

Record weaning weights at around 90 days of age. Weaning weights are usually recorded on one calendar date for a group of kids that vary in ages. The ages within a contemporary group of kids at weaning should deviate from 90 days by no more than 28 days. It is also useful to weigh the dams when the kids are weaned. Dam weights are used to calculate the efficiency of doe production.

Litter Size. For each doe exposed to the buck, record the number of live births and the number kids weaned. Note still borns in a doe's file, but do use them for litter size and they need not be weighed. Artificially-raised kids are not credited to the dam for weaning litter size or weight. In cases when a doe adopts a kid from another doe, the adopted kid can be credited to the "foster" dam for weaning data. Failure to birth or wean a kid following buck exposure are recorded as zero (0) for the doe.



Animal Evaluations

Kid Evaluation. Because ages vary in a contemporary group of kids at weaning, weight comparisons can be biased. A 79-day-old kid cannot be expected to weigh as much as 112-day old kid. Therefore, weaning weights are converted to a standard 90-day age basis. Two equations are used to generate 90-day weights. First calculated average daily gain (ADG):



$$ADG = \frac{wwt - birth\ wt}{weaning\ age}$$

After the average daily gain is determined, the second equation gives the 90-day weight:

$$90\ Day\ Weight = (ADG \times 90) + birth\ wt$$

When birth weight is not available, ADG cannot be determined. In the absence of birth weight records, the previous equations can be replaced with the following equation based on weight per day of age:

$$90\ Day\ Wt = (wwt / weaning\ age) \times 90$$

Table 1. Correction values for 90-day meat goat kid weaning weights

Effect	Group	Value
Litter Size born & weaned	1 - 1	1.00
	1 - 2	1.14
	2 - 1	1.04
	2 - 2	1.18
	3 - 1	1.08
	3 - 2	1.23
	3 - 3	1.27
Age of Dam (years)	1	1.10
	2	1.09
	3+	1.00
Sex of Kid	Buck	1.00
	Doe	1.11
	Wether	1.08

Values courtesy of David R Notter, Ph.D., Virginia Tech

Adjustments are made to 90-day weights because litter size and age of dam can affect weaning weight. On average, weaning weights decrease as litter size increases and young does wean lighter kids than mature does. Multiply 90-day weights by the appropriate correction values (Table 1) to get adjusted 90-day weights. Buck kids are typically heavier than doe kids, but sex of kid adjustments are not required because comparisons are made within single sex groups. Buck kids are compared only to other buck kids and doe kids compared to other doe kids.

An additional step is generating weaning weight ratios. Within each sex group, individual kid weights are compared to the group average to produce ratios for relative evaluations. Ratios show the deviations of kid weaning weights from the contemporary group average. A ratio is calculated with the following equation:

$$WWT\ Ratio = \left(\frac{90\ day\ kid\ wt}{90\ day\ herd\ wt\ average} \right) \times 100$$

A ratio of 100 is equal to the group average. A kid with a weight of ratio of 122 is 22% heavier than the group average. Conversely, a kid with a ratio of 91 is 9% lighter than the group average.

Sire Evaluation.

In herds using multiple sires, kid weights and ratios can be used to compare sires for progeny performance if each kid's sire is known. Buck and doe kid ratios may be combined for sire evaluations. Adjusting doe kids to a buck kid weight equivalent (Table 1) is required to combine buck and doe kid weight records for sire evaluation.

(Continued on page 9)

UMES Welcomes Dr. Enrique Escobar, Small Ruminant Specialist

Dr. Enrique Nelson Escobar has joined the University of Maryland Eastern Shore (UMES) as an Assistant Professor and Extension Specialist in Small Ruminants. He has worked with sheep and goat producers in Texas and Oklahoma and will provide leadership to the UMES Sheep and Goat Program.



Dr. Escobar obtained an Agricultural Engineer degree (equivalent to a B.S.) from the University of El Salvador, and M.S. and Ph.D. degrees from the University of Maryland, College Park. He has collaborated with local, state and national teams to develop projects managing goats to utilize unwanted vegetation, thus improving land vocation and value. In addition, he developed projects for field and laboratory studies to support a fair regulatory somatic cell count in goat milk and for the development of kits to detect antibiotic residue in goat milk.

Dr. Escobar's responsibilities as Extension Goat Specialist and Program Leader for Langston University in Oklahoma

included planning and implementing projects to develop the goat industry in Oklahoma and the country. Dr. Escobar also co-coordinated the Small Farm Program and Sustainable Agriculture Program in Oklahoma, collaborating with Oklahoma State University in developing training workshops for agriculturists, extension educators and farmers.

From 1999 to 2002 at USDA/Cooperative State Research, Education, and Extension Service (CSREES), Dr. Escobar assisted in supporting the activities of the CSREES Small Farms Program and also functioned as the Executive Director of the USDA Advisory Committee on Small Farms.

Dr. Escobar plans to continue the effort at UMES toward the research and adoption of Integrated Parasite Management practices in small ruminants. Also, he wants to find links among the production, marketing, and utilization of meat and meat products from small ruminant species.

Dr. Escobar is filling the position left by Dr. Niki Whitley, who went to North Carolina A&T University. For more information about the Sheep and Goat Program at UMES, contact Dr Enrique Escobar at (410) 651-7930 or enescoabar@umes.edu.

Erroll Mattox and UMES's Small Farm Program

Just outside the sleepy town of Princess Anne, MD is UMES (The University of Maryland Eastern Shore). UMES is an 1890 Land Grant school working hard to meet its triple mission of research, instruction and extension education.

I work as a Farm Management Specialist with the Extension Small Farm Program. When we say small, we mean the goat herder with 4 goats or the shepherd with 150 sheep, the market gardener with 500 row feet of flowers, the egg seller looking to increase direct marketing opportunities or the farmer seeking to become certified organic. I work with them all. I also make house calls if asked.

I raised sheep and had a certified organic farm for over 15 years. I don't know everything about farming, but I do know the people I can trust to have the answers.

Nelson Escobar, a small ruminant specialist has joined the Extension Program. His background includes working with small producers. We plan to continue the practical application work at the UMES farm. Dr. Escobar and I are seeking input on what you would like to see the Extension and Small Farm

Program doing to improve your knowledge base as well as make you more successful. We are thinking about topics such as marketing, disease control and general production issues for future workshops. In addition, we intend to bring back to life the Lower Shore Sheep and Goat Association with a broader geographic base.

The Small Farm Program offers workshops and one on one support to help farmers be more effective farmers. I have developed workshops that I would have liked to have been available when I was farming. What I need from you dear reader, is input for workshops in the future. Give me a call at 410-651-6206 or e-mail me eamattox@umes.edu with your thoughts and ideas.



The Biggest Show Ever!



From Left to Right: Makenzie Charles, Ashley Braun, Claire Bennett & Margaret Buckmeier



Far Right Cooper Bounds



Charles Sasscer and Austin Stoner



Ashley Bennett & Danielle Moore

The 2009 4-H/FFA Meat Goat Show was the biggest ever. It was judged by Dr. Brian Faris, Extension Sheep & Goat Specialist at Kansas State University.

Dr. Faris selected an 78-lb. fullblood Boer doe kid exhibited by Austin Stoner from Carroll County as the Grand Champion Market Goat. Charles Sasscer from Charles County exhibited the Reserve Champion Market Goat, which was also named Best Bred and Owned Market Goat. Class winners in the market goat show included Brianne Hevner (33 to 50 lbs.); Levi Lantz (57-64 lbs.); Shelby Sasscer (64-66 lbs.); Danielle Moore (67-69 lbs.); Austin Stoner (70-78 lbs.); Casey Bounds (80-87 lbs.); Cameron Mullinix (89-95 lbs.); and Claire Bennett (102-117 lbs.).

Champion rate-of-gain was awarded to Ashley Hevner from Carroll County. Her 102-lb. wether gained 0.67 lbs. per day. Danielle Moore from Howard County had reserve champion rate-of-gain with a goat that gained 0.55 lbs. per day.

Claire Bennett from Carroll County exhibited the Champion Commercial Doe. Levi Lantz from Garrett County had the reserve champion commercial doe. Cooper Bounds from Carroll County had the Champion Registered Doe. Cameron Dorsey from Frederick County had the reserve champion registered doe. Cooper's doe was the Grand Champion Doe in the show. Cameron's was reserve champion. Cooper Bounds exhibited the Grand Champion buck of the show.

And the Best Bred and Owned Breeding Goat (doe kid). The champion junior showman was Makenzie Charles from Charles County. Reserve champion was Jacqueline Bowen from Calvert County. Intermediate champion was Ashley Braun from Charles County. Reserve champion was Evan Charles from Charles County. Claire Bennett was the champion senior showman. Cooper Bounds was reserve champion. In the Dean's Showmanship Challenge, Margaret Buckmeier from Frederick County, last year's champion showman, successfully defended her title.

Ten market goats sold in the 4-H/FFA Livestock Sale. The champion market goat brought \$450 and was purchased by the Mill of Bel Air. The champion rate-of-gain goat brought \$300 and was purchased by The Baalands (Susan Schoenian). The Maryland State 4-H Office purchased two goats in the sale.

Awards for the 2009 4-H/FFA Meat Goat Show were donated by the Maryland Agricultural Fair Board, Frey's Livestock Supply, and the University of Maryland Small Ruminant Extension Program.

Special Thanks!

Special Thanks To Everyone who helped with the show:

Dr. Nelson Escobar, Shannon Uzelac, Dwayne Murphy, Willie Lantz, Jeff Hevner, and Carla Eastburn,

Injection Techniques

by Dr. Clive Dalton & Dr. Majorie Orr
New Zealand

General hygiene

- When giving injections always get veterinary advice to make sure the products are appropriate and you know the correct procedure. A loaded syringe can be a dangerous weapon for both you and any helpers. If anyone does get injected, then seek immediate medical help and take the product with you to the doctor.
- Keep your tetanus vaccinations up to date too.
- Follow the manufacturer's instructions to the letter for storage and use of the product.
- Make sure you take care to dispose of old syringes, needles and packaging in a safe place. Needles are especially dangerous and should really go into a special "sharps" rubbish container.
- Various pathogenic bacteria are present on the surface of the skin and these may produce infection if injected with the medication.
- Therefore; when time allows or for valuable animals, or if the environment is very dirty, take every care to clean and disinfect the skin before injecting.
- If the injection is made on the side of the neck and the site is covered by wool, close clipping of the skin is ideal, but careful separation of the fleece and scrubbing the skin with a disinfectant may be possible.
- There are lots of disinfection preparations on the market which are satisfactory. Tincture of iodine is satisfactory and is better than methylated spirits which though commonly used, is not effective as a disinfectant.
- A fresh swab of disinfectant should be used for each animal.
- Single syringes are mainly disposable these days but if a multiple-injection gun is used it must be disinfected when practical.
- The gun, including all parts coming in contact with the drug or the product to be injected, should be placed in a large container such as a pressure cooker or saucepan and thoroughly boiled with the lid on.



- Bringing to the boil will kill all normal bacteria and boiling for 15 minutes will ensure the destruction of most bacterial spores.
- After boiling, the saucepan or container should be tipped sideways with the lid on so that the water drains out (like pouring off potatoes).
- With all the water out, the syringe and the plunger may be picked up by external parts only and carefully fitted together without touching any part which will contact the material injected. Wash and dry your hands before picking up and assembling the injection equipment.
- Equipment that cannot be boiled cannot be adequately disinfected. The best you can do is to soak it in a solution of disinfectant. Pour this off and then flush with cold boiled water. The latter should have been boiled in a lidded container and allowed to cool with the lid on.
 - If they are not washed through thoroughly with water, injecting guns and syringes may contain some of the disinfectant, and this may inactivate the vaccine, or cause irritation and damage of the tissues when injected.
 - To remove vaccine or other medication from the bottle in a clean manner, swab the neck and stopper of the bottle with a solution of suitable disinfectant. If sealed with a rubber or plastic seal, the material may be withdrawn using a syringe and two needles (one needle to allow air in as the vaccine is sucked out).
- On large farms, the above comments may be hopelessly impractical. For example, if you have to vaccinate 500 ewes with 5-in-one vaccine, you will not have time to disinfect the skin of each sheep.
- You may simply proceed down the race injecting each sheep in a clean part of the neck, taking care to keep your hands clean (and washing them if they become dirty), and taking care to keep the needle clean (and replacing it if it becomes dirty).
- Generally, use the smallest needle that is suitable, i.e. the needle with the narrowest bore, such as a 19-gauge needle. In tough-skinned animals a stouter needle may be necessary, e.g. a 16-gauge.

(Continued on page 11)

Feed or Weed?

By Jeff Semler

As you know a plant can be the apple of one person’s eye and the bane of another. One needs to remember that a weed is simply a plant out of place. When it comes to livestock producers, whether a plant is a weed will depend on what type of animal the producer is raising.

To a dairy farmer, fescue can be a weed, but to a beef producer it is high quality winter feed. When it comes to small ruminants such as sheep and goats the weed designation gets even more unclear. However, if you ask the average farmer if they consider marestail, chicory, lambsquarter and foxtail weeds, the almost unanimous response would be yes. The possible exception would be if you had a goat producer in the group.

Currently at the Western Maryland Research and Education Center, there are 60 goats which are part of the Western Maryland Pasture-based Meat Goat Performance Test. These bucks belong to seventeen different consignors and hail from twelve states.

The goats are maintained in a ten acre pasture consisting of five paddocks. The paddocks contain some of the usual suspects such as orchardgrass and fescue but two paddocks are planted in unusual species. One paddock contains two annual forages: turnips and pearl millet. The other paddock was seeded to perennial forage chicory three years ago.

Finally, there is a paddock that was seeded to sericea lespedeza this spring and was a complete failure but that is where things get interesting.

Since this behavior, which was not totally unexpected since goats are really browsers and not grazers, piqued my interest I took some forage samples of these perceived weeds and had them analyzed. I didn’t have the thistles tested but I will get back to that later.

Below is the analysis of these forages. As you can see these “weeds” are of higher quality than most of the hay that is fed to our test bucks herd mates during the winter. As a matter of fact the chicory tests higher than alfalfa hay which would be the envy of every dairy farmer.

Why didn’t I take a sample of the thistles? The goats beat me to them. In the chicory field there is a rock outcropping that was rife with thistles. When the goats were turned into that paddock they ate the thistles first. This I believe had more to do with behavior than with nutrition.

The rock outcroppings are the high ground in the paddock and this was the preferred position for the goats to set up camp. Below you can see the before and after pictures of the rock outcroppings.

Table 1: Forage Analysis

Plant	Protein	TDN	Relative Feed Value
Mixed Weeds	14.1%	65.8	111
Chicory	14.3%	75.3	184
Lambsquarter	23.2%	89.6	289



Before



After

So is that plant a weed or is it feed? I guess it depends on your point of view.

(On Farm Performance Testing *Continued from page 4*)

Doe Evaluation.

For each dam, add the weights of all kids she weaned. Actual or go-day weights can be used for doe evaluations. Actual weights are preferred because they credit the ability of does to breed early and raise kids for a longer period of time, weaning off more weight on average compared to does bred later in the season. When comparing young and mature does, correct kid weights for age of dam (Table 1). A sex of kid correction can also be made to put doe kids on a buck kid weight equivalent for unbiased litter weight evaluation. Litter size corrections are not made to kid weights for doe evaluation. Zero (0) is recorded for litter weight weaned of does not weaning a kid.



Litter size at birth and weaning should be assessed for each doe. After two or three production years, a certain average number of kids weaned by does should be expected such as 1.5 kids weaned per buck exposure.

Doe production efficiency can be measured by how much total litter weight a dam is able to wean relative to her own body weight. A heavier doe (e.g., 150 pounds) tends to require more management inputs than a lighter doe (e.g., 100 pounds). However, the heavier doe may or may not be able to convert the greater inputs into a correspondingly heavier litter weaning weight. The following equation provides the efficiency of doe production:

Doe Production Efficiency = (litter wwt/dam wt at weaning) X 100

Nutritional resources are used by does for self-maintenance, reproduction to produce kids, and milk production to raise kids. In young does, growth must also be supported. Forage and feed inputs may be available in limited or unlimited supply to does and usually represent the primary expense of herd management. Doe production efficiency values vary widely, ranging from less than 50% to over 100%. Does with consistently higher production efficiency values within a given set of environmental management condi-

tions are considered better converters of management resource inputs to marketable litter weight weaned; these does are more efficient, profitable herd members.

RECORDING OTHER

Important Traits.

Other production-related traits may be of interest to meat goat producers. Growth rates after weaning can be evaluated on-farm when goats are retained to heavier post-weaning market weights or when developing replacement breeding stock. Keep detailed health records on each animal in the herd. A periodic evaluation of records is recommended for traits associated with internal parasitism, lameness, abortions, mortalities and other health concerns to help in making selection and culling decisions and reviewing various herd management procedures. Although the primary focus has been on performance testing for pre-weaning kid growth and doe reproductive output, animal evaluation for other economically important performance traits is encouraged in meat goat herds.

Summary

On-farm performance testing of the doe herd is important in crossbred, commercial meat goat operations expecting good doe kid performance with minimal management inputs. On-farm performance testing is important in purebred, seed stock operations that expect to provide genetics to commercial meat goat producers. Each producer will set specific performance levels for animal selection and culling decisions. Performance records, when used with visual appraisal and pedigree, facilitate genetic improvement for economically important traits. Performance records allow for the evaluation of management procedures and how changes in herd management affect animal performance. Performance records, when coupled with financial records, provide the basis of assessing the economic status of an operation and the likelihood of making a profit or incurring a loss from year to year. Performance and financial targets should provide direction to breeding programs. On-farm performance testing helps to achieve herd goals.

Dr. Browning will be the featured speaker at the Western Maryland Goat Field Day and Sale on October 3.

Test Your Knowledge: Is the following statement true or false?

Goats and sheep have the same number of chromosomes.

Answer: False

Balance Sheep Rations Online

Montana State University's Sheep Ration Program (www.msusheepration.montana.edu) is designed to assist producers in matching available feedstuffs with the animal's nutritional needs. With the program, you can:

- View sheep nutritional requirements
- View the standard nutrient content of more than 300 feeds
- Enter custom feed values based on laboratory results
- Balance a ration for sheep at various life cycle stages
- Find answers to frequently asked nutritional questions.

MSU Feed Ration is a free on-line program that does not require any specific type of software. To use the program all you need is a computer capable of accessing the Internet.

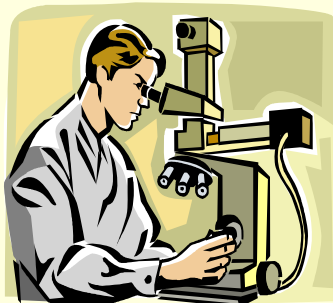
The program is based in part on nutritional recommendations adapted from "Nutrient Requirements of Sheep," Sixth Revised Edition, 1985, by the National Research Council.

Goat rations can be balanced online using Langston University's nutrient requirement calculators at http://www.luresext.edu/goats/research/nutr_calc.htm.

State Diagnostic Labs Closing

Due to budgetary issues, the Maryland Department of Agriculture is closing three of its diagnostic laboratories: College Park, Oakland, and Centreville. Effective September 8, 2009, livestock samples, specimens, and live or dead animals from the entire state and non-commercial poultry samples from the Western Shore should be sent or delivered directly to the Frederick Animal Health Diagnostic Laboratory.

The address of the Frederick laboratory is:
1840 Rosemont Avenue
Frederick, MD 21702
Phone: (301) 600-1548
Fax: (301) 600-6111
email: AHFFrederick@mda.state.md.us



Test your goat IQ

To help youth study for goat skillathons, an online quiz has been developed. The quiz is composed of mostly multiple choice questions, with a few true/false, matching, and sequencing questions.



Pictures accompany each question. Some questions allow multiple "guesses." The quiz covers all aspects of goat production: dairy, meat, and fiber. Sixty percent is a "passing" grade.

Adults can take the online quiz to test their goat IQ. Many of the questions are equally applicable to sheep.

The url for the quiz is <http://www.sheepandgoat.com/programs/GoatSkillathon/GoatQuiz.html>.

(Injection Techniques *Continued from page 7*)

Filling a syringe

- If you have to draw liquid from a new bottle of product into a syringe, it's often hard to suck out because there is no air in the new bottle or container.
- All you need do is to draw into the syringe the amount of air that will be replaced by the injection, and inject this air into the bottle through the rubber cap.
- This will put enough air into the bottle and allow you to fill the syringe.
- You may have to do this every now and again if you find it hard to fill the syringe.



- Or you can put another needle in the cap of the container to act as an air entry while you are drawing product out.
- Try to keep everything as clean as possible and free from contamination.

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Next issue: Learn Techniques For Different Types Of Injections.

Featured "Breed" – Cashmere Goats

By Elaine Murray

Did You Know That Cashmere Goats:

- Produce soft, luxurious cashmere fiber.
- Eat wild rose, poison ivy, honeysuckle, brambles and other weeds.
- Are smart, gentle, and friendly.

Cashmere in America

All cashmere comes from goats. Until recently, cashmere came from goats living in the cold regions of Central Asia.



In the early 1970s, a breeding program was begun on a line of goats that would produce cashmere in our climate. Wild goats from Australia were crossed with Spanish goats from the American Southwest. After years of selective breeding, American Cashmere Goats were born. Because they were developed from wild and tough domestic stock, Cashmere Goats tend to be harder than dairy or meat goats.

Cashmere Fiber

The natural color of cashmere fiber—the goats' undercoat—is light to chocolate brown, cream, white, or grey. This consistently fine and extremely soft fiber grows from early summer to mid winter. By New Year's, the goats look like four-legged puff balls! The cashmere is harvested in spring by combing or shearing.

Diet

Cashmere Goats eat weeds, brush, pasture plants, and hay. In pasture settings, the goats mix well with cattle, sheep, and horses, which prefer different plants. The only time the goats need grain is when the does are pregnant or nursing, the kids are young, or the weather is extremely cold.

Local Farm

Although Cashmere Goats can be hard to find, especially in our region, a herd of Cashmere Goats (and Crabbet Arabian Horses) can be seen at Harley Farm in Middletown, Maryland. To learn more about these animals, go to the farm's Web site at www.harleyfarm.com. To arrange a visit or ask about obtaining a Cashmere Goat of your own, contact Elaine Murray by e-mail at ezwriter@hughes.net or by telephone at 301-371-6201.

Calendar of Events

October 3

Western Maryland Goat Field Day, Sale and Skillathon

Washington County Agricultural Education Center, Boonsboro, Maryland.

Info: Susan Schoenian at (301) 432-2767 x343 or sschoen@umd.edu

October 24

Pennsylvania Sheep Symposium "Surviving the Economy"

Livestock Evaluation Center, PA Furnace, PA

Mifflin County Fairgrounds, Reedsville, Pennsylvania.

Info: <http://hairsheepsale.blogspot.com>

Cornell Sheep & Goat Symposium

Morrison Hall, Cornell University, Ithaca, NY

Info: <http://www.sheep.cornell.edu/calendar/sgsymposium/program.html>

October 25

Beginning Shepherd's Workshop

Penn State Sheep Center, University Park, PA

Info: Joanne Evans at (717) 485-0532 or genetic@innernet.net or

Kathy Soder at (814) 669-1374 or kbarkfarm@earthlink.com

November 21

2009 Lambing and Kidding School

Holiday Inn, Waldorf, Maryland

Info: Susan Schoenian at (301) 432-2767 x343 or sschoen@umd.edu

January 20-23, 2010

American Sheep Industry Association (ASI) Annual Convention

Sheraton Nashville Downtown, Nashville, TN

Info: www.sheepusa.org



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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-Cooperative 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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