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# Wild & Woolly



VOLUME 9 □ ISSUE 2

SUMMER 2009

## 60 Goats Begin '09 Pasture Test

Sixty (60) bucks began the 2009 Western Maryland Pasture-Based Meat Goat Performance Test on June 6 at the University of Maryland's Western Maryland Research & Education Center in Keedysville MD.



Consigner Don Smith

Education Center near Boonsboro, Maryland. Does, of various breeds and breed crosses, will also be available for purchase. Dr. Richard Browning from Tennessee State University will be the featured speaker at the field day.

While on test, the goats will be evaluated for growth (average daily gain), parasite resistance (fecal egg counts), and parasite resilience (FAMACHA® scores and number of anthelmintic treatments).

Bucks meeting gold, silver, and bronze-level standards of performance for the aforementioned traits will be sold at public auction on October 3<sup>rd</sup> at the 2<sup>nd</sup> annual Western Maryland Goat Field Day and Sale, to be held at the Washington County Agricultural

During the test period, the goats will be managed as a single group. They will consume a pasture-only diet, with no supplementation other than free choice minerals containing a coccidiostat. They will be rotationally grazed among five, 2-acre paddocks planted in chicory (2 acres), dwarf pearl millet with strips of brassicas (2 acres), sericea lespedeza (1 acre) and orchardgrass and MaxQ™ tall fescue (5 acres). They will always have access to a central

(Continued on page 2)

## 101 Compete in Sheep and Wool Skillathon

One hundred and one (101) youth (25 juniors, 35 intermediates, and 41 seniors) and 21 teams (4 junior, 9 intermediate, and 8 senior) from five states and ten Maryland counties braved the rain to compete in the 2009 Sheep & Wool Skillathon, held May 3<sup>rd</sup> at the Maryland Sheep & Wool Festival. The Sheep & Wool Skillathon tests youth's knowledge of feeds and forages, wool, hay, meat, diseases, breeds, and equipment. Participants take a written test and senior teams have a group problem-solving activity. This year, the sheep judging station had to be cancelled due to the rain.

### Juniors

Calvert County had the first place junior team. Members of the winning junior team were Jocelyn Abbott, Katie and Robert Burroughs, and Jaqueline Bowen. For the second year in a row, Katie Burroughs was

the first place junior individual. Teammate Jocelyn Abbott placed second and Kameron Dorsey from Frederick County placed third. The team from Howard County placed second. Third was a team composed of youth from St. Mary's and Calvert County.



### Intermediates

Members of the winning Montgomery County intermediate team included Caroline and Suzanne Kimble and Savannah Cook. Doug McGee from Cecil County was the first place intermediate individual. Caroline Kimble placed second. Ryan Hevner from Carroll County was the third place



Equal access programs

(Continued on page 5)

## Pasture Test (continued from page 1)



Fecal sample collection



Administering anthelmintic treatments



Evaluating fecal samples using McMaster slide



Taking carcass measurements using ultrasound



Measuring scrotal circumference

laneway containing port-a-hut shelters, a shade structure, water, minerals, and a handling system. New pens for isolation and treatment will be located outside of the grazing area.



The goats will be handled every two weeks using low-stress livestock handling techniques (no horn handling) to determine body weights, body condition scores, FAMACHA® eye anemia scores, and the need for deworming. Individual and pooled fecal samples will be collected every two weeks for fecal egg counting and fecal coproculture. In 2008, fecal egg counts peaked on August 29 when approximately 50 percent of the goats required anthelmintic treatment. The barber pole worm (*Haemonchus contortus*) comprised 96 to 100 percent of the worm load. After an initial deworming, 49 percent of the goats did not require an additional anthelmintic treatment.

Towards the end of the testing period, ultrasound carcass measurements will be taken. Some of the goats may be harvested

to collect actual carcass data. The goats will be evaluated for structural and reproductive soundness. Scrotal measurements will be taken. Goats not selected for the sale will be available for purchase via private treaty.

The bucks are consigned by 17 breeders from 11 states: Delaware -1; Kansas-1; Illinois -2; Maryland -3; Missouri -1; Ohio -1; Oklahoma -2; Pennsylvania - 2; Tennessee -1; Virginia - 2; and West Virginia - 1. They include 46 New Zealand, purebred or percentage Kikos; 5 Boer x Kiko crossbreds; 6 fullblood and percentage Boers, 2 Composite Tennessee Mountain Meat Goats, and 1 Myotonic.

To learn more about the test, visit the blog at <http://mdgoatstest.blogspot.com>. Contact Susan Schoenian at [sschoen@umd.edu](mailto:sschoen@umd.edu) if you wish to be added to the goat test e-mail list, so that you'll receive all blog entries via e-mail. All test reports will be posted to the blog, along with pictures and narratives of the test.

## Survey Takers Value Parasite Data in Goat Test

Fifty-five (55) people completed an online survey pertaining to the Western Maryland Pasture-Based Meat Goat Performance Test. The survey takers identified themselves as consigners; 35 percent; potential consigners, 36 percent; and potential buyers of bucks in the test, 35 percent.

Forty-seven percent of the survey takers raise Boer goats; 38 percent, Kiko goats; 29 percent, meat x dairy crosses; and 20 percent, Boer x Kiko. Two thirds of the survey takers consider their goat operations to be commercial, for-profit.

More than 90 percent of the survey-takers

agree with the size and age requirements for the goats on test: 3 to 5 months of age and weighing 35 to 70 lbs. Three quarters of the survey-takers are interested in having some of their goats slaughtered in order to collect carcass data. The traits valued most by survey takers were parasite resistance, 85 percent; parasite resilience (FAMACHA® scores and the need for anthelmintic treatment); and growth performance on pasture, 78 percent.

Eighty-nine (89) percent of those completing the survey value the copious parasite data that is collected from the bucks in the test.

## Pumpkin Seeds: Do They Control Worms?

By *Dahlia Jackson-O'Brien*  
*Delaware State University*



Worldwide reports of dewormer resistance in small ruminant parasites have led producers to seek alternative parasite control strategies, such as the use of natural plants. Plant or plant products have been used to treat cases of parasitism in animals in many countries; however, results reported have been in the form of observations rather than from controlled studies. The seeds of pumpkins and many other vine crops are believed to contain a deworming compound called cucurbitacin which has been used to expel tapeworms and roundworms in domestic livestock species for years.

Therefore, last summer (2008), it was the goal of one of our research projects to investigate a number of natural plants, including pumpkins, in reducing fecal egg counts (FEC) in goats.

For our study, we used 22 goat kids to evaluate the effect of pumpkin seeds in reducing parasite loads. All 22 goats were individually penned on solid concrete floors and received a commercially pelleted meat goat feed daily for a 3 week study. Eleven animals were also given ground pumpkin seeds mixed into feed at a rate of 6 ounces per 75lbs of body weight daily. The other eleven were not supplemented and used as a control to allow us to better interpret our results.

We measured body weights, fecal egg counts (FEC), and packed cell volumes (PCV; to determine anemia which is indicative of barber pole worm infection) weekly for 3 weeks to determine if the pumpkin seeds were in fact causing an effect. Under the conditions of our study, however, pumpkin seeds were not effective in reducing FEC in meat goat kids. Feeding pumpkin seeds did not have an effect on body weight or PCV. The FEC averaged 5965 eggs per gram (epg) at the start of the study,

6411 epg on day 7, 3425 epg by day 14 and 3655 epg on day 21 (see graph for individual group FEC). However, we did observe that goat kids were sorting through feed and leaving behind a substantial amount of

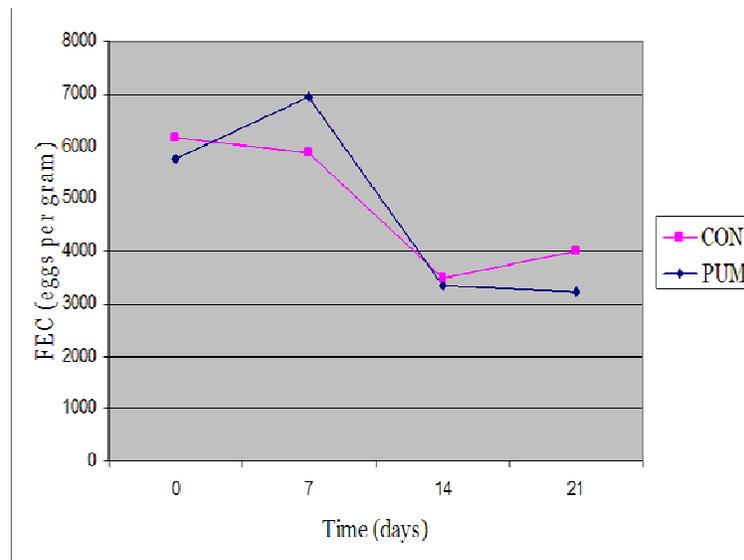
the ground pumpkin seeds (not surprising since we all know goats can be picky eaters!). Therefore, an alternative means of administering the pumpkin seeds might be more effective in ensuring that kids are consuming an amount of pumpkin seeds necessary to see a reduction in FEC. A preliminary study conducted at Delaware State University previously had indicated that a single pumpkin seed drench (using a similar amount of

pumpkin seeds) was effective in preventing a rise in FEC. When compared to an untreated group, the FEC of the group drenched once with the pumpkin seed drench decreased by 11% while the FEC of the untreated group increased by 56% after seven days of drenching. Future studies will be done to evaluate testing for longer periods (just in case the effect is not as quick as we'd hope) as well as looking at alternative methods of administering the pumpkin seeds (powder form or

drench) in order to determine any possible deworming properties that pumpkin seeds might have.

We (at DSU) would love to include producers in our trials using natural dewormers (others being tested include garlic, ginger and papaya seeds). If interested in this project or any others at DSU, please do not hesitate to contact me at (302) 857-6490 or [djackson@desu.edu](mailto:djackson@desu.edu). In addition, please contact me if you'd like to give your opinion about the type of research and programs that you would like to see conducted at Delaware State University.

*Average FEC (eggs per gram) of meat goat kids fed pumpkin seeds (PUM) or not (CON) over a 21 day period*



## Finishing Grass-fed Lambs on Forage Brassicas

By Hans Kefauver, Hagerstown, Maryland

Our experience finishing lambs on pasture and brassicas was a positive one. We wanted to be able to raise and finish lambs on an all-forage diet. This would eliminate the cost of grain and the facilities associated with the traditional way of finishing lambs and provide us with a lamb that would grade choice or better and meet the needs of the grass-fed niche market.

### A little background on why we decided to finish lambs on forage

My wife Laura and I have both had the opportunity to be involved with raising sheep for a number of years through the 4-H program. We decided that we should not let that knowledge go to waste. The only problem was that we did not own any land or buildings to raise sheep. We figured the only way we could make this work would be if we could raise everything on rented pasture so that we could reduce our expenses by not having an investment in buildings, feeders, etc., which is usually required when traditionally feeding lambs out on grain.

We decided that the Katahdin breed would work best for us in obtaining this objective due to their high resistance to internal parasites, heat tolerance, excellent carcass quality, plus I would not have to shear them! We also wanted to make sure that we would have a quality product to sell. Therefore, after researching various forages, we decided to incorporate brassicas into a grazing program to finish our lambs.

According to Webster's Dictionary, a brassica is a genus of plants embracing several species and varieties differing much in appearance and qualities: such as the common cabbage (*Brassica oleracea*), broccoli, cauliflowers, etc.; the wild turnip (*Brassica campestris*); the common turnip (*Brassica rapa*); the rape or coleseed (*Brassica napus*).

For grazing purposes, the most common brassicas used are turnips, swedes, rape, and kale. These are annual crops which continue to grow during the fall months. They are highly productive and digestible and contain relatively high levels of crude protein. Because forage brassicas are very highly digestible and high in energy, the amount of brassica in the total diet should not exceed 75%. Therefore, it is recommended that forage brassica be supplemented with hay, silage, or pasture. Annual rye, oats, or other cereal grains are excellent companions to mix with forage brassicas at planting.

The variety of brassica we decided to use was Pasja, which is a



Photo by Hans Kefauver

hybrid of forage turnip and forage rape. We decided to use this variety because it did not grow as tall as other varieties and we could get more than one grazing from the planting. Our local Washington County Extension Agent had experience working with dairy operations grazing Pasja and thought it would be the best fit for what we were trying to accomplish. Because brassicas are very highly digestible we decided to plant oats as a companion crop with the Pasja.

We killed an old stand of alfalfa using glyphosate herbicide and then planted the Pasja/Oat mix on August 2nd at a rate of 3-4 pounds of Pasja and 60 pounds of oats per acre. We also applied 142 pounds of Urea per acre with a safener to limit the amount of nitrogen lost into the atmosphere. No additional phosphorous and potash were added based upon soil test recommendations.

The 20 lambs that were finished on the Pasja/Oat mixture were Katahdin Hair sheep, composed of 50% ewe and ram lambs born during the month of May. Lambs were born and raised entirely on grass/legume pasture. The flock was rotated to a new pasture every 4 to 7 days from May until September. Lambs were weighed and weaned on August 31<sup>st</sup>. They grazed a mixture of alfalfa and orchardgrass until they started grazing the Pasja/Oat planting on September 28, 2008.

The Pasja/Oat field was split into 5 different paddocks and the lambs were moved approximately every 7 days to a new paddock. This kept the lambs from grazing the Pasja/Oat mix below 4 inches in height. This is critical so that the plant will be able to re-grow. Orchardgrass hay was provided free choice to help prevent bloat and digestive upset, along with water and sheep trace mineral salt.

Each paddock was grazed twice and the Pasja/Oat mix persisted up until November 20 and then the lambs were removed and placed on alfalfa/orchardgrass hay aftermath. Lambs performed well and seemed to have no problem adjusting to the Pasja/Oat diet after grazing a typical clover/grass pasture during the spring and summer.

The lambs did seek out and graze all of the oats first before they started grazing the Pasja. The lambs predominately ate the leafy part of the Pasja plant in the early part of the grazing and then started to consume the bulb/root part of the plant on the second grazing of the field. Even after consuming part of the bulb/root, the Pasja was still able to produce leaf area to be re-grazed.

*Continued on page 10*

## Just For Youth

### New State 4-H Program Leader

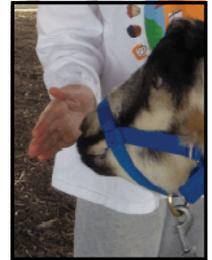


Dr. Jeff Howard has joined University of Maryland Cooperative Extension as the new Assistant Director for 4-H Youth Development and State 4-H Program Leader. He brings a wealth of experience and enthusiasm to the position and will provide excellent leadership for the state 4-H program.

Dr. Howard holds a B.S. in Horticulture, an M.S. in Agricultural Education with an emphasis in child psychology, and a Ph.D. in Agricultural Education with an emphasis in youth leadership. He has worked over twenty years in Extension as a county agent, state specialist, and associate professor. For the past four years, Dr. Howard served as the Associate State 4-H Program Director with Texas AgriLife Extension. Dr. Howard replaces Dr. Richard Byrne, who retired in 2008.

### Packgoat Project

On Sunday, May 17 2009 members of the Packgoat Project attended an interesting Event, Clicker Training, taught by Kim Yocklin. Kim is a Certified Pet Dog Trainer, the leader of the Washington County 4-H Dog Club (Tailwaggers). Kim thought it might be fun to see if we could apply the same principles of clicker training she uses with dogs to our group of eager and smart goats.



The Packgoat crew first tried to get their goats to recognize the sound of the clicker as a reward. We were thrilled to learn that not only can the goat figure it out, they can do it exceptionally well!

Interested in learning more about the Packgoat Project? Send an email to: [4hpackgoat@gmail.com](mailto:4hpackgoat@gmail.com).

- By *Rhiannon Talbert*

*Source: Frederick County 4-H Newsletter*

### 101 Compete (continued from page 1)

individual. The second and third place intermediate teams were Calvert and Carroll, respectively.

#### Seniors

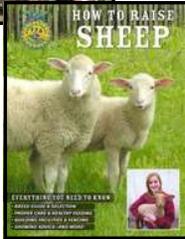
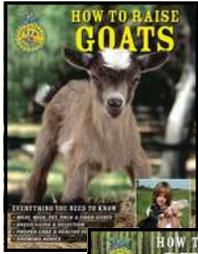
Ashley Blum from Baltimore County was the first place senior individual. The winning senior team was the Calvert/St. Mary's County team composed of Roger Arminger, Anne Marie Lewis, and Shelby Sasscer. Jeanne Herbert from Charles County was the second place senior. Hannah Goodmuth from Howard County was third. Washington and Charles County placed second and third in the team competition.

#### Thanks

The Skillathon would not have been possible without the assistance of so many Extension educators and volunteers. Nor the support of the Maryland Sheep Breeders Association (Maryland Sheep & Wool Festival). The festival provides premiums and ribbons for the top ten individuals in each age category and Festival t-shirts for members of the top three teams in each age category. Maryland Cooperative Extension awarded first place individuals a copy of the new book, "How to Raise Sheep," published by National FFA.

Special thanks is also extended to sponsors of some of the skillathon stations: Frederick County Sheep Breeders Association, Baltimore County Sheep & Wool Producers, and Sheepman Supply Company. George Ruppertsberger and Sons, Inc., Maryland's largest lamb processing plant, donated lamb for the Meat ID station. Dr. Les Vough, retired forage crops specialist, organized the hay judging station.

Congratulations to all the winners, participants, and coaches. Next year's skillathon will be held at the Maryland Sheep & Wool Festival on Sunday, May 2. A Goat Skillathon has been planned for October 3, 2009 at the Washington County Agricultural Education Center near Boonsboro, MD (held in conjunction with the Western Maryland Goat Field Day & Sale).



**FUN FACT:**  
Typically, goats live 10 to 12 years—some have lived as long as 15 years



## New Books

### How to Raise Goats

If you're thinking of acquiring a goat or starting a herd, for whatever reason, *How to Raise Goats: Everything You Need to Know* might be the book for you. Written by Carol Amundson, the former editor of the Minnesota Dairy Goat Association newsletter, this approachable guide covers every component of raising goats for fun or profit, meat, or milk.

Beginning with the basics, history and behavior, types, and breeds, *How to Raise Goats* answers all a prospective owner's questions about getting a goat, from land requirements and regulations to choosing or assessing particular animals or breeds.

### How to Raise Sheep

Anyone interested in raising sheep, one or two hobby animals, or a full scale herd, will find *How to Raise Sheep* an indispensable resource filled with useful information and advice. With details on everything from par-

ticular breeds to feed requirements, fencing, general care, showing, breeding, and marketing, this handy expert guide tells you all you need to know to raise healthy sheep.



Author Philip Hasheider, himself a successful farmer, offers reliable directions for getting started and being successful and discusses the merits of various breeds, of different farming methods, organic, sustainable, and conventional and which approach can best meet the needs of prospective sheep owners.

Both books are published in association with the National FFA Organization, formerly known as Future Farmers of America. They are available at bookstores everywhere, from [www.Amazon.com](http://www.Amazon.com), or through <http://www.voyageurpress.com/>.

*Editor's note: These are full-size, high-quality paperback books with slick color photographs. They are well-written and easy to read, good additions to any sheep or goat producer's library.*

## Lamb Check-Off Re-Approved

By an astounding margin of 85.1 percent, the U.S. sheep industry voted to continue the deduction on sheep sales to support the marketing of American lamb. In the volume vote, a record setting 93 percent supported the referendum.

"This is the second referendum since the inception of the program in 2002 and both have recorded overwhelming approval for an industry-funded lamb promotion," remarked Peter Orwick, Executive Director for the American Sheep Industry Association (ASI). Only 11 people voted in Maryland, 9 for and 2 against, representing 1,376 sheep. No states voted against the referendum.



The lamb program is the only livestock check-off program that has producers, feeders and meat packers all contributing funds to the promotion effort. A 13-member volunteer board, known as the American Lamb Board, representing these segments of the industry, collects the funds and administers all the programs.

*Source: ASI News Release, April 23, 2009*

*Editor's note: All sheep are subject to the check-off (all feeder and market lambs, breeding stock, and cull animals) when sold. The assessment is one-half cent per pound of live animal, sold by producers, seedstock producers, feeders, and exporters, plus an additional 30 cents per head of sheep purchased for slaughter by first handlers (the entity that takes possession of the sheep for slaughter, including custom or ethnic slaughter).*

Assessments must be remitted to the: American Lamb Board, 23029 Network Place, Chicago, IL 60673-1230. Assessments must be sent with Form LS-81, the Monthly Remittance Report.

## Upcoming Events

### Integrated Parasite Management (FAMACHA®) Workshops

Three Integrated Parasite Management (IPM) Workshops have been scheduled in Maryland and Delaware. The workshops last approximately four hours and include two hours of classroom instruction and two hours of hands-on training using the FAMACHA® system and doing fecal egg counts.

The first workshop will be held on Saturday, June 20, 9 a.m. to 3 p.m. in the Food Science Building at the University of Maryland Eastern Shore (UMES) in Princess Anne, MD. To register, contact Erroll Mattox at (302) 628-0471 or threemaplesfarm@comcast.net. For those under 16 years of age, a concurrent workshop will be held from 9 a.m. to 12 noon. Contact Maegan Perdue at (410) 651-1350 or mperdue@umd.edu to register.



A workshop will be held on Saturday, June 27, 10 a.m. to 3 p.m., at the Smryna Outreach & Research Center (Delaware State University). To register, contact Dr. Dahlia Jackson-O'Brien at (302) 857-6490 or djackson@desu.edu.

A third workshop will be held on Saturday, August 1, 9 a.m. to 1:30 p.m., at the Washington County Agricultural Education Center near Boonsboro, MD. To register, contact Jeff Semler at (301) 791 or jsemler@umd.edu.

Registration fees (per farm or family) include a FAMACHA® chart and IPM reference booklet.

### Lambing and Kidding School

Maryland Cooperative Extension holds a biannual lambing and kidding school at different locations in Maryland. The 2009 school will be held on Saturday, November 21 at the Holiday Inn in Waldorf, Maryland.

This year's main speaker will be Dr. Susan Kerr, an Extension Educator from Washington State University. Dr. Kerr earned a Doctor of Veterinary Medicine from Cornell University and received a Ph.D. in education from Kansas State University. She has been engaged nationally with the 4-H animal science curriculum.

All topics will relate to lambing and kidding. The program will be suitable for youth and adults and beginning and experienced sheep and goat producers.

### Goat Field Day and Sale

A Goat Field Day and Sale will be held Saturday, October 3 at the Washington County Agricultural Center near Boonsboro, Maryland. The sale will feature the top-performing bucks from the Western Maryland Pasture-Based Meat Goat Performance Test, along with does consigned by breeders who participate in the test. Sale bucks will be mostly Kiko and Kiko x Boer. Does will be Kiko, Boer, and various crosses. The sale will start at 1 p.m. The bucks will be sold via a silent auction.



#### Field Day

The field day, 9 a.m. until 12 noon, will feature Dr. Richard Browning, a Research Animal Scientist from Tennessee State University. For the past several years, Dr. Browning has been conducting a breed evaluation project, utilizing Kiko, Boer, and Spanish goats. Dr. Browning also conducts an on-farm herd performance evaluation program for meat goat herds.

#### Youth Goat Skillathon

This year's event will include a goat skillathon in which youth are tested on their knowledge of goat breeds, feeds and forages, diseases, meat, dairy, and fiber.. The skillathon is open to any youth between the ages of 8 and 18. Youth will compete according to their age on January 1, 2009 (4-H age). The skillathon will run concurrently with the field day.

## Anthelmintic Alley

### Administering Anthelmintics to Goats

There are many ways to administer anthelmintics (dewormers) to livestock: orally, via a drench or oblet (bolus); in the feed or mineral; via an injection; or via a pour-on. However, all methods are not equally effective or suitable for all livestock. Nor are they FDA-approved for use in all livestock.

The general recommendation for goats is to administer anthelmintics orally (in the mouth). The reason for oral administration varies by anthelmintic. In addition, there is an exception to the recommendation.

Fenbendazole (SafeGuard®) and Albendazole (Valbazen®) are administered orally to goats because there are no other suitable formulations for these anthelmintics.

Though currently not available, levamisole (Prohibit®) should be administered orally because it is safer this way. Because it is short-acting and quickly eliminated, levamisole has a lower margin of safety than other anthelmintics, especially with goats (since they require a higher dosage than sheep). There is less chance for toxicity when levamisole is administered as a drench.

Ivermectin should be administered orally because there is less drug persistence this way, thus less selection pres-

sure for resistance worms. Slowly decreasing concentrations of anthelmintics in the animal as is characteristic of persistent products, select for drug resistance.

Here's the exception (for goats, not sheep): Moxidectin (Cydectin®) should be administered as a subcutaneous injection because pharmacokinetics studies indicate that the bioavailability of moxidectin is

3.7 times greater when injected than when given orally in goats. Pharmacokinetics is the study of the action of drugs in the body.

Because moxidectin is so persistent in the tissues, there is no difference between routes of administration on the development of drug-resistant worms. Elimination curves between oral and injectable administration is the same. Meat withdrawal in goats for Cydectin is 30 days. A milk withdrawal has not been established, but 56 days should be sufficient (Kaplan, e-mail).

Pour-on anthelmintics are not recommended for small ruminants because they are poorly absorbed and promote drug resistance. Before Cydectin sheep drench and Cydectin cattle injectable were available, the Cydectin pour-on was administered orally (extra-label) to sheep and goats. This is no longer necessary nor recommended.

**ant•hel•min•tic**  
an agent that destroys or causes the expulsion of parasitic intestinal worms.

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### Levamisole Update

Levamisole is currently unavailable for purchase. For how long is anybody's best guess. The company that makes the active ingredient is no longer producing the product. A new manufacturer is being sought by Agri-labs, the company that markets Prohibit® and Levamisole®.

An alternative to levamisole is morantel (Rumatel®). Morantel is in the same chemical class as levamisole. It is not quite as effective as levamisole and data pertaining to efficacy and resistance are lacking. Rumatel® is FDA-approved for goats but not sheep. Slaughter withdrawal (for goats) is 30 days.

Rumatel® is a feed-based product. Rather than feeding the entire herd, it is recommended that animals be fed (treated) individually. Pyrantel (Strongid®) is another anthelmintic in the same chemical class as levamisole, but its use is not FDA-approved for any food animal. On farms where levamisole is the only effective anthelmintic, a moxidectin/benzimidazole combination treatment may be effective. To prevent resistance, this combo treatment should only be given to animals with poor FAMACHA© scores.

## New Anthelmintic — Zolvix®

Zolvix® (monepantel) is a revolutionary, new sheep drench that kills gastrointestinal worms, even those resistant to existing drenches. It is the first product of a new class of resistance-breaking anthelmintics called the Amino-Acetonitrile Derivatives (AADs). It has a unique mode of action and it is highly effective against sheep gastro-intestinal nematodes, including those resistant to other anthelmintics.

The active ingredient (monepantel) acts on a newly identified receptor found only in parasitic worms and is a response to the widespread global problem of anthelmintic resistance. Zolvix is an innovative brand that offers high efficacy and an impressive safety profile and a very short withdrawal period, which will put worm control firmly back in the hands of farmers and veterinarians. Zolvix is manufactured by Novartis Animal Health. It is the first novel drench for livestock for more than 25 years.

### Research from New Zealand

Eighteen farms located throughout the North and South Islands of New Zealand were used to test the efficacy and safety of Monepantel (Zolvix®), the first compound from the recently discovered amino-acetonitrile derivative (AAD) class of anthelmintics to be developed for use in sheep.

On each farm, sheep naturally infected with the target nematodes were randomly assigned to groups, which were then treated with either monepantel, at a minimum dose rate of 2.5 mg/kg, or one of five other anthelmintics.

Fecal samples were collected from all sheep pre-treatment, at

the time of treatment, and approximately 7, 14, and 21 days after treatment. Fecal egg counts (FEC) were measured in all samples. All sheep were inspected at least daily to check for any adverse effects of treatment.

On all 18 farms, on days 7, 14 and 21, the efficacy of the monepantel solution was greater than 95 percent. At days 7 and 14 post-treatment, efficacies greater than 99 percent were recorded in 15 flocks. At day 21 post-treatment, efficacies over 98 percent were recorded in 13 flocks.

Monepantel was as effective, or more effective, than the registered anthelmintics with which it was compared. Moreover, it was effective against strains of nematodes resistant to one or more of the currently available broad-spectrum anthelmintics.

*Source: New Zealand Veterinary Journal Volume 57 Issue 1*

### Zolvix in the United States (If and when?)

According to Novartis's global communication manager, "Novartis plans to bring the brand ZOLVIX to as many sheep markets as possible including USA, however, we cannot predict the time of any market introduction as this is dependent upon completing the research and development work specifically to meet each countries requirements and then upon the regulatory authorities assessment of the dossiers. Currently, the product is only registered in New Zealand."

## Chinese Goat Specialist Visits Maryland



*Jeanne Dietz-Band & Dr. Jun Luo*

Dr. Jun Luo, a Chinese dairy goat specialist from Northwest Agricultural & Forestry University (NWAUFU) in Yangling, China (Shaanxi province) visited Western Maryland goat farms on May 19th.

Dr. Luo visited the site of the Western Maryland Pasture-Based Meat Goat Performance Test. Management of the goats in the test differs significantly from the manner in which dairy goats are raised in China. In China, dairy goats (on the larger farms) are raised in confinement and fed in fenceline bunks.

Dr. Luo gained insight into U.S. meat goat production when he visited Many Rocks Farm in Keedysville. Many Rocks Farm, operated by Jeanne Dietz-Band, raises mostly Kiko goats. The farm markets branded goat meat products and goat milk soap at various farmer's markets.

Dr. Luo visited one of the few certified goat dairies in Maryland: Caprikorn Farms, Gapland, operated by Alice Orzechowski and Scott Hoyman. Cheese is made from the milk from their 50 does and sold at various farmer's markets. The farm has some of the highest-producing Saanen goats in the U.S.

Dr. Luo spent several years at E (Kika) de la Garza Institute for Goat Research at Langston University. You can visit his web site (Chinese) at <http://dairygoatnet.nwsuaf.edu.cn/>. The University of Maryland College of Agriculture and Natural Resources and NWAUFU are cooperating on various programs of mutual interest.

## UMES Kidding and Lambing Update

By Mark Gooden, UMES graduate student

When Dr. Niki Whitley took a job in North Carolina, she was not sure when UMES would be able to replace her. So, all the "hard keepers" were sold to make a more manageable herd for the farm manager (Earle Canter) and research specialist (Harry Taylor, Jr.) along with the farm staff and graduate students. In addition, both the sheep flock and goat herd numbers were decreased dramatically.

The adult does that were bred to the 100% Boer buck to kid in Spring 2009 consisted of 20 animals, all but five of which were Spanish, Spanish crosses or Kiko crosses. Because Dr. Whitley is still collaborating with UMES faculty and students for research, we needed to assess potentially available animals for studies by analyzing the kidding and lambing data.

This article keeps alive the yearly tradition of providing a UMES kidding and lambing update for the newsletter.

Kidding occurred in February with the 20 does bred at UMES having an average of 2.2 kids born live each (4 out of 49 were stillborn or died shortly after birth), with 24 female and 21 males. The average kid birth weight was 9.2 pounds.

The Katahdin ewes that lambed had some issues because of over-conditioning. Those lambing successfully (21 ewes) had an average of 2.1 lambs each (live) and the lambs averaged 10.7 pounds.

We feel confident that UMES will soon have someone to fill Dr. Whitley's position and hopefully the small ruminant program will continue successfully at UMES.

Good luck with your own sheep and goats this year (and in the future)!



### **Brassicas** (continued from page 4)

#### **What would we consider doing differently to improve the production of grass-fed lamb?**

- We would have planted the Pasja/Oats at least one week earlier. In 2008 due to dry weather in August, we were not able to begin grazing the Pasja until September 28<sup>th</sup>. An earlier planting date may help move this ahead to early September.
- Begin lambing around the middle of April and separate the ram lambs from the ewe lambs to graze in different groups or castrate the ram lambs at birth. We did not get to a final live weight of 105 lbs. until December. Grazing that late into the Fall could be problematic some years due to an early hard killing frost. We noticed the ram lambs riding the ewe lambs during the later stages of grazing which affected the daily gain of the ewe lambs.

#### **What would we do the same?**

- Supplement the Pasja/Oats with free choice hay. We had absolutely no digestive upsets, loose stools or bloat during the grazing.
- Rotationally graze the Pasja/Oats so that it was not grazed below 4 inches for maximum regrowth. We were very

pleased with the amount of re-growth from the Pasja which extended the grazing period until late November.

#### **Unanswered questions:**

- Would other types of brassicas or other forages such as an alfalfa/grass or clover/grass mixture have worked as well in finishing the lambs as the brassica?
- Since we planted into an old stand of alfalfa would we have gotten the same amount of yield without additional nitrogen fertilizer?
- How much more would the lambs have gained if the ewe lambs had been separated from the ram lambs?

Overall finishing lambs on the brassica worked very well for us. It allowed us to raise and finish the lambs on an all-forage diet. Grazing eliminated the cost of grain and the facilities associated with the traditional way of finishing lambs. It reduced the labor requirements in feeding lambs on a daily basis and provided us with a lamb that graded choice and met the needs of the grass-fed market.

## Maryland Wool Pool

The 56th Annual Maryland Wool Pool will be held on Wednesday, June 17, at the Maryland State Fairgrounds in Timonium. The Pool will run from 8:30 a.m. to 2:30 p.m.



There will be three lines to accept wool. Consigners with wool baled in square bales will be pulled out of line to unload at the third line. The other two lines will accept loose wool. Consigners are expected to unload their own wool.

Black and gray wool and fleeces from hair sheep or hair x wool crosses will not be accepted. Wet wool will not be accepted. Wool delivered in polypropylene bags will be refused. Wool delivered in burlap will be reduced by 3 cents per pound.

This year's pool has been purchased by Chargeurs, Inc. of Jamestown, South Carolina. Due to the faltering economy, wool prices are lower than last year.

Choice white-face - \$0.55 per lb.  
 Medium white-face - \$0.46 per lb.  
 Coarse white-face - \$0.40 per lb.  
 Non white-face - \$0.38 per lb.  
 Short - \$0.30 per lb.

The price received for wool will be the above prices minus a deduction for wool pool expenses (usually between 5 and 8 cent per pound). Maryland Sheep Breeders Association dues (\$25) will be deducted on wool sales over \$40. Payment checks will be mailed within several weeks of the pool.

Questions or concerns should be directed to Pool Manager Rich Barczewski at (302) 857-6410 or (302) 659-1211 or [rbarczewski@desu.edu](mailto:rbarczewski@desu.edu).

### Calendar of Events (continued from back page)

#### July 25

**West Virginia Performance Tested Ram and Buck Sale**  
 WVU Reymann Memorial Farm, near Wardensville, WV  
 Info: Brad Smith at (304) 257-4689 or  
[Brad.Smith@mail.wvu.edu](mailto:Brad.Smith@mail.wvu.edu) or Sara Hare at (304) 874-3561  
 or [Sara.Hare@mail.wvu.edu](mailto:Sara.Hare@mail.wvu.edu).

#### August 1

**Pennsylvania Performance-Tested Ram and Buck Sale**  
 PA Livestock Evaluation Center, PA Furnace, PA  
 Info: Glenn Eberly at (814) 238-2527 or [geberly@state.pa.us](mailto:geberly@state.pa.us)

#### **Integrated Parasite Management (IPM) Workshop**

9 a.m. to 1 p.m. at the Washington County Agricultural Education Center, Boonsboro, Maryland  
 Info: Jeff Semler at (301) 791-1304 or [jsemler@umd.edu](mailto:jsemler@umd.edu)

#### August 29

**Virginia Performance Tested Ram Lamb Sale**  
 Shenandoah Valley Agricultural Research & Education Center, Steele's Tavern, Virginia  
 Info: Dr. Scott Greiner at (540) 231-9159 or  
[sgreiner@vt.edu](mailto:sgreiner@vt.edu)

#### September 5

**Virginia Tech Sheep Center Production Sale**  
 Alphin-Stuart Arena, Virginia Tech, Blacksburg, Virginia  
 Info: Dr. Scott Greiner at (540) 231-9159 or [sgreiner@vt.edu](mailto:sgreiner@vt.edu)

#### September 11-12

**Scott County (Virginia) Hair Sheep Association Field Day and Private Treaty Sale**  
 Natural Tunnel State Park and Cove Ridge Center, near Duffield, Virginia.  
 Info: Ted Fletcher at (276) 940-4051 or [www.hairsheep.us](http://www.hairsheep.us)

#### 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](mailto:sschoen@umd.edu)

#### October 24

**Annual Mid-Atlantic Hair Sheep Sale**  
 Mifflin County Fairgrounds, Reedsville, Pennsylvania.  
 Info: <http://hairsheepsale.blogspot.com>

#### November 21

**2009 Lambing and Kidding School**  
 Holiday Inn, Waldorf, Maryland  
 Info: Susan Schoenian at (301) 432-2767 x343 or  
[sschoen@umd.edu](mailto:sschoen@umd.edu)

## Calendar of Events

### June 16-18

#### **Wool Educational Event**

Maryland State Fairgrounds, Timonium, Maryland.

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

### June 17

#### **Maryland Wool Pool**

Maryland State Fairgrounds, Timonium, Maryland.

Info: Dr. Rich Barczewski at (302) 857-6410 (day time) or (302) 659-1211 (evenings, before 9 p.m.) or rbarczewski@desu.edu

### June 20

#### **Integrated Parasite Management (IPM) Workshop**

9 a.m. to 1 p.m. at the Food Science Building at the University of Maryland Eastern Shore, Princess Anne, Maryland.

Info: Erroll Mattox at (302) 628-0471 or threemaplesfarm@comcast.net

### July 6-8

#### **Maryland 4-H Livestock Roundup**

Frederick County 4-H Camp, 5 miles south of Frederick, Maryland

Info: Contact your local Maryland 4-H Extension office

### July 11

#### **Improving Small Ruminant Grazing Practices**

Appalachian Farming Systems Research Center in Beaver, West Virginia (near Beckley)

Info: Dean Myles at (304) 929-1687 or dmyles@mountainstate.edu

*See page 11 inside for additional dates*



*Wild & Woolly*, is published quarterly by the University of Maryland Cooperative 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 or Pamela Thomas, Administrative Assistant, 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.

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

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

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

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