Spring Worm Webinars

A series of weekly webinars has been scheduled to help small ruminant producers understand and control internal parasites (worms) in their sheep and goats.

Anyone with a computer or similar device with an internet connection can participate (high speed internet connection recommended).

The webinars will be held on consecutive Thursdays in May, from 8 to 9 p.m.

May 5 – Understanding parasites and their life cycles: species, biology, pathogenicity

May 12 – Integrated parasite management (IPM): grazing, nutrition, genetics, management, host resistance

May 19 – Diagnostic testing: FAMACHA®, Five Point Check®, fecal testing

May 26 – Anthelmintics: products, chemistry, usage, refugia, resistance, alternatives, future.

For more information and to preregister for one or more webinars go to http://2011wormwebinars.eventbrite.com.

The webinars will be recorded and available online for later viewing at http://www.sheepandgoat.com/recordings.html.

Integrated Parasite Management Workshops

Integrated Parasite Management (IPM) workshops will be held at several locations in Maryland in 2011.

IPM workshops are four hours long. They consist of two hours of lecture/discussion and two hours of hands-on training (FAMACHA® and fecal egg analysis). Participants (must be at least 16) become certified in the use of the FAMACHA® eye anemia system and receive a FAMACHA® card for use on their own farms.

The Maryland Sheep & Wool Festival will host a workshop on Friday, May 6, 9 am to 1 pm, at the Howard County Fairgrounds in West Friendship, MD. Sheepon Supply Company (Frederick, Maryland) will host a workshop on Saturday, July 16, 10 am to 2 pm. Additional workshops are being scheduled for Baltimore County and Queen Anne’s County.

For information about IPM workshops, follow the Shepherds Notebook blog at http://mdsheepgoat.blogspot.com or contact Susan Schoenian at 301-432-2767 ext 343 or sschoen@umd.edu.

Workshops can be scheduled at any location where there is a group of interested sheep and/or goat producers and someone who is willing to serve as the point of contact.
Weaning is when the milk is removed from the diet of a young mammal. Usually – but not always - it coincides with separation of the young from their dam.

Weaning age varies greatly in sheep and goats, from as early as 14 days to natural weaning, at more than four months of age. Lambs have been successfully weaned as early as 14 days; kids as early as 28 days. Early weaning is usually defined as weaning prior to 90 days of age; 60 days is most common. Late weaning is anything after that.

**Wean by weight**

It is generally better to wean based on age rather than weight. A general recommendation is that lambs and kids not be weaned until they have achieved 2.5 to 3 times their birth weight. Artificially-reared lambs and kids should weigh at least 20 to 25 lbs. before being weaned. If lambs are being raised by their dams, they should weigh a minimum of 40 to 50 lbs. before being weaned.

Even more important than weight is dry feed consumption, as weaned lambs and kids need to be consuming enough dry feed to support their maintenance and continued growth – in the absence of milk in their diet. Their feed consumption should be at least one percent of their body weight at the time of weaning. Creep feeding is an aspect of most early weaning programs.

**Deciding when to wean**

There are many factors to consider when deciding at what age to wean lambs and/or kids. These include age, season of birth, potential parasite problems, predator risks, markets, labor, facilities, and forage resources.

There are pros and cons to different weaning ages. Early weaning eases the lactation stress of high-producing females and other females that may be highly-stressed, due to their age or physical condition. It helps prolific females raise their offspring. Early weaning enables females to return to breeding condition earlier. There is usually less worm burden and predator risk associated with lambs and kids that are early (continued on page 8)

**Webinar Recordings Available Online**

Recordings of the 2011 winter webinar series on Ewe and Doe Management are available on the web at http://www.sheepandgoat.com/recordings.html.

The page also includes links to other webinar recordings, as well as links to the PowerPoint presentations that accompany each recording.

The PowerPoint presentations have been uploaded to Slideshare, a presentation-sharing web site. Anyone can view presentations at Slideshare, but registration (free) is required for downloading.

A webinar is a seminar presented through the world wide web. To participate, all you need is a device that connects to the internet. High speed access is recommended.

If you would like to have your e-mail address added to an e-mail reflector list, to receive notification of upcoming webinars (pertaining to sheep and goats), contact Susan Schoenian at sschoen@umd.edu.
**Nominations Sought For 2011 Goat Test**

The nomination period for the 2011 Western Maryland Pasture-Based Meat Goat Performance Test is April 1 through May 15. There is a $20/ goat nomination fee. The total fee for testing a goat remains unchanged at $85 per goat.

Nomination forms and other documents pertinent to the test may be downloaded from the web at http://mdgoattest.blogspot.com. Nomination packets will be mailed to previous consigners in mid-March. Nomination packets may also be requested via mail from Pam Thomas at (301) 432-2767 x315.

The 2011 Western Maryland Pasture-Based Meat Goat Performance Test will be conducted from June 9 until September 15. Goats must be delivered to the test site on June 3 or 4. Goats that are not sold during the sale or to a commercial buyer must be picked up on September 24 from the test site.

The test is open to breeders from any state. A breeder may consign up to five goats. A maximum of 80 goats will be accepted for the 2011 test. If more than 80 goats are nominated, preference will be given to Maryland residents and previous consigners.

The test is open to weanling male goats of any breed or breed cross, with or without registration papers or registration eligibility. The goats must be born between December 15, 2010, and March 20, 2011 and weigh from 35 to 70 lbs. upon delivery to the test site on June 4. CD-T vaccinations are required.

Bucks meeting Gold, Silver, and Bronze standards of performance will be eligible to sell via public auction on Saturday, September 24 at the annual Western Maryland Goat Field Day & Sale. Last year, the top-performing buck sold for $1,350.

Consigners to the test will also be able to nominate does for a private treaty sale to be held in conjunction with the buck sale and field day. The sale and field day will be held at the Washington County Agricultural Education Center near Boonsboro, MD.

Dr. Ken Turner, an ARS Research Scientist from the Appalachian Farming Systems Research Center in Beaver, West Virginia, will be the featured speaker at the field day. Dr. Turner’s research emphasis is on low-input, foraged-based livestock production.

The Western Maryland Pasture-Based Meat Goat Performance Test was initiated in 2006 to evaluate the performance of weanling male meat goats on a pasture-only diet with natural exposure to internal parasites. The test is conducted at the University of Maryland’s Western Maryland Research & Education Center in Keedysville.

The test is ideally suited to meat goat producers who raise their goats mostly on pasture, with little or no grain supplementation. It is also useful to producers who want to raise goats that are more resistant to internal parasites.

While on test, the goats will be managed as a single group on pasture. They will be rotationally grazed among six paddocks (12.5 acres) planted in various cool and warm season forages. Other than free-choice minerals, the goats will receive no supplemental feed, unless drought conditions necessitate the feeding of nutritional tubs or grass hay.

**2011 carcass comparison**

In 2011, a carcass comparison study will be conducted, comparing the carcasses from pasture-fed goats (in the test) to goats pen-fed a diet of hay and grain. In order for the comparisons to be valid, it is essential that goats of similar size, age, and breeding be compared. Thus, some consigners to the pasture test will be asked to provide an additional goat (at no cost) for pen-feeding and carcass evaluation. The purpose of the carcass study is to determine yield.
"Floppy kids" Have Elevated D-lactate

German researchers discovered that goat kids with floppy kid syndrome have elevated D-lactate blood levels and provision of basic supplements seemed to cure this deadly disease.

A PhD student and her colleagues worked with a dairy goat farmer who was losing up to 60 percent of his newborn kids to floppy kid symptoms. The researchers examined affected kids and their dams and detected the elevated D-lactate levels.

They treated the affected kids by correcting the blood pH level via administration of sodium bicarbonate. After the kids recovered, they were fed their dam’s milk via a bottle.

This caused a reoccurrence of metabolic acidosis and prolonged their recovery, in comparison to kids that were weaned and fed milk replacer. Pasteurizing the milk before feeding it prevented occurrence of further cases. The researchers concluded that milk ingestion plays a central role in the pathogenesis of D-lactate elevation in newborn goat kids. They recommend that goat farmers hand-rear affected kids with milk replacer or feed them milk that has been pasteurized.

Source: Bayer Animal Health News, 12.23.10

Editor’s note: Goat kids affected with floppy kid syndrome are normal at birth but develop a sudden profound weakness at 3 to 10 days of age. They can swallow, but not suck. They show no other signs of disease. A significant percent of the kid crop can be affected. The disease is not known to affect lambs.

Goat Browsing or Invasive Shrub and Internal Parasite Control

By Dahila Obrien,
Delaware State University

Last summer, Delaware State University collaborated with Delaware Department of Transportation (DelDOT) to use goats on one of their sites for biological management of three invasive shrubs including Autumn Olive, Multiflora Rose, and Japanese Honeysuckle.

It was also decided that we would monitor and compare the fecal egg counts (FEC) and FAMACHA® scores of browsing verses grazing goats since we had the capability of grazing some at the University farm, Hickory Hill, simultaneously.

The graduate student working on this project is Jenna Warren. Approximately five acres of land at this DelDOT site was divided into five fenced paddocks with 3 treatment (with goats; 1.1 acres each) and 2 control (without goats; 0.7 acres each) paddocks.

At Hickory Hill, 3.3 acres of mixed grass/legume pasture was also divided into three fenced paddocks (1.1 acres each). Seventy crossbred meat type goats, mixed sex and age, from our Hickory Hill goat herd were used in the experiment so that there were 35 goats at each location on the study.

Goats at the DelDOT site were used to browse each treatment paddock for 14 days, after which they were moved to the next treatment. At Hickory Hill, goats grazed paddocks in the same 14-day rotations along with goats at the DelDOT site.

On rotation days (every two weeks), all DelDOT paddocks (treatments and controls) were analyzed and visual estimates of percentage ground cover were made. In addition, a visual technique to describe botanical composition of pastures, the double DAFOR scale, was used to describe Autumn Olive, Multiflora Rose, and Japanese Honeysuckle presence in each paddock.

Simply, this technique rates plants/shrubs as dominant (covers most of the area), abundant (covers 50-75% of the area), frequent (less than 50% of area), occasional (present a few times in area) and rare (present once or twice in area) in a pasture/paddock.

On rotation days, animal body weight and FAMACHA® scores were measured and recorded, and fecal samples were collected to determine FEC in eggs per gram (epg) using the modified McMaster’s technique at both sites.

Goats were dewormed with Cydectin® sheep oral drench, at twice the recommended

(Continued on page 5)
Goat Browsing For Invasive Shrub and Internal Parasite Control (continued from page 4)

...dose for sheep, if FAMACHA® scores were 4’s and 5’s or 3’s with other visual symptoms of parasitism (diarrhea, weight loss, bottle jaw, etc.) and number dewormed at each site recorded. The study lasted 112 days (9 sample dates from June to October).

The results from the DelDOT site indicated that the goats were only effective in managing the growth of Japanese Honeysuckle when the treatment paddocks were compared to the controls. There were no differences in the botanical composition of Autumn Olive or Multiflora Rose in the treatment versus control paddocks using the double Da-FOR technique utilized above.

Additional plant abundance data were collected, but are currently being analyzed and so specific conclusions about management of these invasive shrubs cannot be made at this time.

In terms of visual estimate of groundcover, by the end of the browsing period, the control pasture had more groundcover when compared to the treatment paddocks (averaging 35% for both at the start of the study and by the end averaging 26% for the browsed paddocks and 41% for the control paddocks).

At the beginning of the study, the body weight of goats at Hickory Hill and DelDOT averaged 92 lbs and by the end of the 112 day period Hickory Hill goats increased to 97 lbs while DelDOT decreased to 88 lbs.

This was due to the DelDOT goats losing weight during the last 4 week period (late September to early October), due to lack of vegetation. They were supplemented with hay as soon as this was realized but were removed and brought back to Hickory Hill when they failed to gain weight by the next sample date.

FAMACHA® scores of all animals averaged 3.2 at the start of the study and were 2.8 after the 112 day period. At most times over the study period DelDOT goats (mostly browsing) had lower FEC than the grazing goats at Hickory Hill even though average FEC barely went over 600 epg during the study.

This was due mostly to the rotational grazing or browsing at both sites. In addition, goats had to be dewormed on 26 occasions at Hickory Hill while at the DelDOT site goats were dewormed on 14 occasions indicating the benefits of mixing in browsing at any opportunity to help with parasite control.

With springtime getting close, we are looking towards kidding and lambing and the start of two studies at Hickory Hill (natural dewormers and breed resistance in parasite control) as well as a continuation of the study described in this article.

If you would like more information on these studies being conducted at DSU, or have any comments about the type of research and programs that you would like to see conducted at Delaware State University, please contact me at (302) 857 – 6490 or djackson@desu.edu.
**Research Gleanings: New Selenium Supplement**

Joshua "Bret" Taylor, an ARS research scientist at the U.S. Sheep Experiment Station in Dubois, Idaho, teamed up with researchers at North Dakota State University to discover a new natural selenium supplement for sheep that's longer lasting and more cost-effective than inorganic forms of selenium.

Taylor isolated a portion of wheat grain found during milling to produce flour. The organic, selenium-rich co-product, a form of selenomethionine, was fed to sheep during their last 40 to 50 days of gestation and first 18 days of lactation. The pregnant sheep passed the supplemental selenium to their fetuses, and the lactating ewes delivered it to their offspring through their milk.

As a result, Taylor reports, the long-term selenium status of both groups was boosted for an entire year - 6 to 10 times longer than that the impact seen in animals that received inorganic sodium selenite, a mineral that's the most common form of selenium supplement. The sheep that received the natural selenium supplement didn't need any additional selenium supplements until they returned for lambing the following year.

Selenium is essential for normal growth in the development of sheep and other animals. Therefore, it is a common supplement in their diets. In sheep, selenium is necessary for reproduction.

Selenium deficiency reduces conception rates and increases neonatal mortality, and lambs that do survive suffer from increased disease, reduced weight gain, impaired performance and greater mortality.

Inorganic sodium selenite is inexpensive, but it doesn't last long, according to Taylor. It absorbs readily in the body, but must be provided frequently to animals living in selenium-deficient regions.

Source: USDA ARS News and Events, 12.22.10

**2011 Junior Sheep & Wool Skillathon**

The 2011 Junior Sheep & Wool Skillathon will be held on Sunday, May 8 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 is open to any youth between the ages of 8 and 18. Individuals and teams (of 3 or 4) from any county, state, or province may participate. Youth will compete according to their age as of January 1, 2011.

Last year’s skillathon stations included: feed and forage identification, breed identification, equipment identification, meat identification, a “potluck” category, hay judging, wool judging, sheep judging, a written test, and a senior team problem.

The top ten individuals in each age division will receive a ribbon and premium. Members of the top three teams in each category will receive a festival t-shirt. These awards are provided by the Maryland Sheep Breeders Association. The Small Ruminant Extension Program will provide additional awards to the top three individuals in each age division.

For more information about this year’s skillathon or to pre-register, please contact Susan Schoenian at (301) 432-2767 x343 or sschoen@umd.edu. Pre-registration is requested by April 25. Teams must be pre-registered.

For more information, visit the skillathon web site at http://www.sheepandgoat.com/programs/skillathon/skillathon.html.

**2011 Goat Skillathon**

There will be Junior Goat Skillathon on Saturday, September 24, 2011, at the Washington Agricultural Education Center in Boonsboro, MD. The goat skillathon will be held in conjunction with the annual Western Maryland Goat Field Day & Sale. Contact Susan for more information.

**Online quizzes**

A series of online quizzes has been developed to help youth study for sheep and goat and other livestock skillathons. The url for the quizzes is http://www.sheepandgoat.com/onlinequizzes.html.
The University of Maryland campus farm welcomed a new farm manager. Crystal Caldwell comes to the University of Maryland with nine years of experience in animal agriculture, largely at university farms. She was the livestock manager at the University of Maine campus farm.

Crystal has a Bachelor of Science degree in Animal and Veterinary Sciences from the University of Maine and a Master’s of Science degree in Animal Science from the University of Idaho. She was raised in Washburn, Maine. You can contact Crystal at crystalc@umd.edu.

Previous campus farm manager Lindsay Callahan left in May 2010 to pursue a degree in Veterinary Medicine at St. Matthews University in Grand Cayman.

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**Recipe**

**Pulled Lamb Sandwiches With Goat Cheese**

**Ingredients**
- 2-3 Lamb Shanks (3 lbs)
- 1 qt Chicken Broth
- 2 tsp Chili Powder
- 2 Medium Onions
- 2 tbsp Olive Oil
- 8 Slices rustic bread, or 4 Crisped Tortillas
- 1 Container (5-6 oz) Spreadable Goat Cheese
- 2 cups Argula or Spinach Leaves
- 2 Tomatoes sliced or 4 bottled Roasted Red Bell Peppers drained

**Preparation**

In a kettle, combine lamb shanks with broth, chili powder and 1 onion, sliced. Cover; bring to a boil. Simmer 2 hours or until lamb is tender.

Remove shanks from broth and when cool enough to handle, pull meat off bones into shredded pieces.

Slice remaining onion; gently sauté in oil over medium heat until sweet and caramelized.

Spread bread with goat cheese. Stack 4 slices with arugula, tomatoes, shredded lamb and caramelized onions. Close sandwiches. If preferred, stack all ingredients on tortillas.

*Recipe and picture courtesy of American Lamb Board and Superior Farms*

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

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**Small Ruminant Dairy Conference**

A Small Ruminant Dairy Conference has been scheduled for Saturday, October 8 at the Carroll County Ag Center in Westminster, MD.

The conference will have concurrent sessions to serve multiple interests: persons wanting to establish commercial goat or sheep dairies, as well as hobbyists or 4-Hers milking a few goats or sheep in the backyard.

More information, including how to register, will be included in the September issue of Wild & Woolly.

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**2011 Lambing and Kidding School**

The 4th Biennial Lambing and Kidding School will be held Saturday, November 19, at Chesapeake College in Wye Mills, MD. Dr. Susan Kerr from Washington State University will be the featured speaker. Dr. Kerr is both a 4-H educator and a veterinarian.

This year’s Lambing and Kidding School will feature a separate educational tract for youth. Youth sessions will be hands-on.

More information, including how to register, will be included in the September issue of Wild & Woolly.
Weaning

Weaned and fed in dry lot.

From an economic standpoint, it is less expensive to feed lambs and kids than to feed dams and their offspring. Young animals convert feed very efficiently.

On the other hand, early weaning causes stress to both females and their offspring. There is a greater risk of mastitis with early weaning, as weaned females may still be producing significant milk.

Early weaning usually requires more facilities, pasture fields, and pens. It requires a higher degree of management.

Early weaning is most commonly associated with early, winter, and shed lambing. After weaning, lambs and kids are usually finished on hay and/or grain diets. Early weaned lambs and kids are usually creep fed. Early weaning is probably best suited to prolific breeds and breeds that have high genetic potential for growth.

Early weaning is also associated with certain production systems and scenarios. In a dairy sheep enterprise, it is common to wean lambs when they are 30 to 35 days of age. Lambs and kids that are artificially-reared are usually weaned by the time they are 6 to 8 weeks of age. Show stock are usually weaned early, so that the offspring can be pushed for rapid growth.

Late weaning

It goes without saying that late weaning is more natural. It is less stressful to lambs and kids. The risk of mastitis is much less. Late weaning usually allows producers to take advantage of available forage to finish their lambs and kids. Pasture gains are often more economical than those achieved on hay and grain diets. Management is simpler, as females and offspring can be maintained in a single group for a longer period of time.

On the other hand, late weaned lambs are more likely to become parasitized or killed by predators. Summer temperatures may restrict weight gains. Lambs and kids have to compete with their dams for the forage resource. Depending upon species, breed, and age at weaning, it may be necessary to castrate or remove male offspring.

Late weaning is most commonly associated with late lambing, spring lambing, and pasture lambing. Lambs and kids are typically finished on pasture diets. Creep feeding is less common, though creep grazing may be a advisable practice. Late weaning is probably best suited to less prolific breeds and breeds with less potential for growth.

Stress at weaning

Regardless of weaning age, efforts should be made to reduce stress at the time of weaning. Creep feeding reduces the stress of early weaning. Dams should be weaned from their offspring, not the other way around. Lambs and kids should remain in familiar surroundings and in their pre-weaning groupings.

The diet of lambs and kids should not be drastically changed two weeks before or after weaning. Vaccinations and other management tasks should be performed at least two weeks prior to weaning. In cattle, fenceline contact has been shown to reduce the stress at weaning.

Recently weaned lambs and kids are very vulnerable to coccidiosis. Coccidiotats should be administered in the feed, mineral, or water prior to and after weaning. Early weaned lambs should have received their first vaccination for CD-T (overeating disease and tetanus) prior to weaning. The second vaccine should be given four weeks after the first.

To prevent mastitis in early-weaned ewes and does, high quality feed should be added to the female’s diet prior to weaning. By the time weaning occurs, females should be consuming a low quality forage diet. Some producers will restrict water intake to help halt milk production in the female.

Under no circumstances, should recently weaned ewes and does be turned out to lush pasture. Poor producing females should be removed from the flock after weaning. It may pay to improve their body condition prior to taking them to a sale barn.
Maryland livestock require intra-state health papers in order to go to a Maryland show, fair, or other exhibition.

Starting this year, there is no requirement for review, approval, and stamping of the Certificate of Veterinary Inspection (CVI) prior to the animals going to the fair or show.

The new form (MDA-E-16 (REV1/11) is to be completed and signed by an accredited veterinarian after inspection of the animals listed on the form. The veterinarian is required to send the original top (white) copy to Maryland Department of Agriculture Headquarters, the middle (yellow) transport copy is to be retained by the owner of the livestock, and the bottom (pink) copy is for the veterinarian’s records.

Because the new form is a carbon copy and color-coded, it is not available at MDA’s web site. The new forms for 2011 will be available for pick-up only at the Frederick or Salisbury laboratories and available for pick up or mailing from Animal Health Headquarters in Annapolis.

The older two page form (MDA-E-16(REV11/09)) will be accepted for use during this transition year if the new forms are not readily available.

Please call (410) 841-5810 or e-mail animal-health@mda.state.md.us to request that forms be mailed to you. Any comments or questions should be directed to Annapolis headquarters at (410) 841-5810.

All out-of-state livestock (entering Maryland) must be accompanied by an Interstate Certificate of Veterinary Inspection. An approved copy of this certificate must be forwarded by the State of Origin to the MDA Animal Health Section.

Add meat to your lambs with the Texel

If you’re looking for a way to put more meat into your lambs, one breed should automatically come to mind: the Texel. The Texel is the heaviest-muscled breed of sheep in the United States.

They originated on the island of Texel, the largest of the Friesian Islands, off the coast of the Netherlands. The exact origin of the breed is unknown, though it is thought to be a cross between various English breeds. The original Old Texel was probably a short-tailed variety of sheep.

The Texel breed was first imported into the United States in 1985 by the U.S. Meat Animal Research Center in Clay Center, Nebraska. The breed was publically released in 1990.

Texels are a medium-sized, white-faced sheep, with no wool on their head or legs. They have a short, wide face with a black nose and short, widely-spaced ears with a nearly horizontal set. Their hooves are black. Their wool is of medium grade, 46’s to 56’s.

The most outstanding characteristic of the Texel is their superior muscle development and leanness. Texel-sired lambs show an advantage of one full leg score in breed comparisons and less total carcass fat, especially seam fat.

Research from Clay Center and the University of Wisconsin showed that Texel-sired lambs typically have a 6 to 10 percentage advantage in loin eye area, as compared to conventional blackface sired lambs.

Texel-sired lambs usually grow slightly slower than blackface sired lambs, but their feed efficiency is superior. In a pasture-based finishing systems, Texel-sired lambs may be better than blackfaced sired lambs, due to their easy fleshing and good foraging ability.

The Texel has become the dominant terminal sire breed in Europe. Their popularity has increased in England, New Zealand, and Australia, as the emphasis in sheep production has moved away from wool and more towards lamb. In the U.S., more and more sheep producers are using Texel rams to sire crossbred market lambs.

For more information about the Texel breed, visit the breed society’s web page at www.usatexels.com. Source: Oklahoma State University Breeds of Livestock at http://www.ansi.okstate.edu/breeds/sheep/texel/
Managing High Feed Costs

Not only are sheep and goat prices high, but so are feed costs. For some producers, high feed costs are squeezing the profits right out of small ruminant production. At the same time, there are many ways to reduce feed costs and improve the bottom line of a sheep or goat enterprise.

Sheep and goats need to be fed balanced rations. There are economic consequences to both overfeeding and underfeeding. For example, it’s better to feed $7 per bushel corn to meet a pregnant or lactating female’s increased needs for energy than to underfeed her.

If you can’t afford to feed your livestock properly, you need to cut back on the number of livestock you have, not on what you are feeding them.

On the other hand, feeding too much of any feedstuff can have dire consequences. Fat is expensive to put on and is a detriment to efficient reproduction. Not too many consumers like paying for excess fat.

Feed rations do not need to be complicated. In fact, simple rations are usually best. Many different feedstuffs can meet the nutritional needs of sheep and goats. There are no “best” feeds or feeding programs. Different feedstuffs can substitute for one another, so long as the combined ration meets the nutrient requirements of the livestock being fed.

When considering different feedstuffs, it’s important to compare “apples to apples.” This usually requires some simple calculations to determine how much it costs for a particular feedstuff to provide a certain amount of a nutrient to the ration. For example, due to differences in weight and nutritive content, $7 per bushel corn is still a cheaper source of energy (TDN) than hay that costs more than $250/ton or $5/bale (40 lb. bales). But it is not a cheaper source of energy than hay that costs $150/ton or $3/bale (40 lb. bales). Barley is almost always a more economical source of energy than corn, while also contributing a few extra percentage points of protein.

Of course, individual feedstuffs must be combined properly to create balanced rations containing the proper amounts and proportions of nutrients for a specific class of livestock. Producers who lack the knowledge or initiative to properly balance rations for their livestock should stick to sacked feeds and high quality hay.

A tremendous amount of hay gets wasted by livestock producers, during both the storage and feeding period. Hay that is stored outside without cover deteriorates rapidly in quality. Sheep and goats will waste a great deal of hay if it is not fed in well-designed feeders. They will also tend to eat more hay than they need, if they are given free choice access to the feedstuff.

Having access to feed storage, for both hay and grain, can greatly reduce feed costs. Feed ingredients can be bought in bulk and in advance of when they are needed. Feed prices tend to increase after harvest. This is true of both grain and hay.

Maximizing the pasture resource will go a long way towards controlling feed costs. Anything that can be done to increase pasture productivity and utilization and extend the grazing season will reduce the amount and cost of stored feed.

It doesn’t cost that much more to maintain a female that produces twins (or triplets) vs. one that produces a single or fails to raise an offspring. Poor-producing livestock should be culled, especially when you consider today’s exceptional prices for cull stock. We shouldn’t make excuses for poor producing livestock. They are too expensive to feed!

In addition, it’s important to select replacement stock from the most productive members of the flock or herd. Records pay for themselves and will help to identify the animals that are producing the most profit.

High prices cover high feed costs for some producers, but should not be a reason to raise and feed sheep and goats inefficiently. Prices won’t always be high and feed prices may not come down much in the future.
The University of Maryland Extension at the University of Maryland Eastern Shore is sponsoring an Artificial Insemination Clinic on May 6 and 7, 2011. Ms. Teresa Wade, from BIO-Genics, LTD., will be the instructor for the two-day event. The first day, the Artificial Insemination (AI) Clinic students will spend the day in the classroom learning the following:

- The effects of management, stress, and environmental influences on AI success
- Proper feed, care, and management of AI candidates and semen donors
- An overview of semen abnormalities and stress-related conditions of cells and their affects on viability
- Basic instruction on the doe’s hormonal process during estrus and the hormonal effects causing the “rut” in the buck
- Basic anatomy of both the female and male caprine reproductive tract and how fertilization occurs
- The selection of appropriate AI candidates
- Effective record keeping
- Proper storage and thawing techniques of frozen semen
- Available AI equipment, its proper care, and suggested use
- Hands-on training in the operation and practical applications of AI tools and equipment

The second day, the AI Clinic students will practice artificial insemination with does and will apply the techniques learned the day before. AI students will use does from the herd at the UMES - Small Ruminant Farm.

**REGISTRATION DETAILS**

The number of AI Clinic students is limited to 14 to ensure that the learning experience is a rewarding one for each of the participants, including the hands-on practice on the second day. The registration fee is $175 per student. The AI Clinic will be held at the UMES Small Ruminant Farm. The precise location will be announced to the AI students in another communication. If interested please contact Dr. E.N. Escobar (enescobar@umes.edu or 410-651-7930) to receive a registration package and more detailed information.
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More information on sheep, goats, and upcoming events can be accessed at:
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