Sheep & Goat News

May 2007

IN THIS ISSUE:

Calendar of Events ......................................................... 2
2007 Wool Pool Information and Dates ......................... 2
Lespedeza for Goats and Sheep ..................................... 3
Sericea Lespedeza Planting Suggestions ..................... 4-5
Management of Barber Pole Worm in Sheep and Goats in the Southern US ......................... 6-8
Foothills Meat Goat Producers Summer Goat Show .. 8
Summer Performance Test for Bucks and Does ............... 9

Be sure to visit The McDowell Cooperative Extension Commercial Agriculture Web page

http://mcdowell.ces.ncsu.edu for complete information on:

<table>
<thead>
<tr>
<th>Livestock and Grain Market Reports.</th>
<th>Soil Sample Reports.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Crops Pest Management Information.</td>
<td>Current Newsletters.</td>
</tr>
<tr>
<td>Management information on livestock field crops, forages and other agriculture.</td>
<td>Other Agricultural Information &amp; Resources.</td>
</tr>
<tr>
<td>Agricultural weather information.</td>
<td>NC Ag Chemical Manual for recommendations on all approved insecticides, herbicides, fungicide, fertilizers and more</td>
</tr>
</tbody>
</table>
CALENDAR OF EVENTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 5</td>
<td>Initial Weigh Day - Buck Performance Test (919/515-7722)</td>
</tr>
<tr>
<td>June 26</td>
<td>Wool Pool Albemarle, NC Steve Lemons/Ellen &amp; Joe Mabry</td>
</tr>
<tr>
<td>June 27</td>
<td>Wool Pool Williamston, NC Al Cochran</td>
</tr>
<tr>
<td>June 27</td>
<td>Wool Pool Asheville, NC Anthony Cole</td>
</tr>
<tr>
<td>June 28</td>
<td>Wool Pool Sparta, NC Charles Young</td>
</tr>
<tr>
<td>July 14-15</td>
<td>Summer Goat Show, Shelby Greg Treywick</td>
</tr>
<tr>
<td>July 19</td>
<td>Forage Field Day, Waynesville Research Station - Dr. Jim Turner (828/456-7520)</td>
</tr>
<tr>
<td>August 4</td>
<td>McDowell Jr. Livestock Show Mario DeLuca 652-7874</td>
</tr>
<tr>
<td>August 28</td>
<td>Final Weigh Day Buck Performance Test Dr. Brian Faris (919/515-7722)</td>
</tr>
<tr>
<td>September 1</td>
<td>Field Day and Buck Performance Test Sale (919/515-7722)</td>
</tr>
</tbody>
</table>

2007 Wool Pool Information & Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Contact Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 26</td>
<td>Albemarle, NC</td>
<td>Steve Lemons/Ellen &amp; Joe Mabry</td>
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<td>Asheville, NC</td>
<td>Anthony Cole</td>
</tr>
<tr>
<td>June 28</td>
<td>Sparta, NC</td>
<td>Charles Young</td>
</tr>
</tbody>
</table>

Mid-States is in the process of establishing the price for this year's wool. It looks as though cash prices will be a little higher than last years, probably in the .35/lb range. However, prices have not been set yet, so this is a best guess. The plastic wool bags are preferred, although wool in the old burlap bags will be accepted. Mid-States will offer plastic wool bags for sale at each pool ($2.50 per bag) to save producers shipping costs.

Remember that good wool handling practices will enable us to keep selling our wool. Keep black and colored wool separate. This means if you have a flock that has both white faced and black faced sheep, keep the wool separate. If you have dark colored sheep, keep that wool separate. That will help Mid-States to get the best price for the best use of the wool. You can pack the wool in the same bag if you don’t have enough of one kind to fill a bag, but put something between the types, like a paper feed sack or piece of cardboard. Eliminate plastic contamination, remove tags.

Make sure each bag is labeled with producers name and address. We do not repack any wool, so the bags it comes in should be able to handle shipping to Ohio. The Sparta pool doesn't accept tags; the price does not justify it. Black and colored wool counts for the LDPs, so I would weigh and record, even if it may be low or no price.

I would also remind you of the USDA price support program for wool, in the form of loans and LDPs. Most producers will opt for an LDP payment, and current rate is $0.42/lb. on ungraded wool. Details of the program and rates can be found at: http://www.fsa.usda.gov/FSA
Lespedeza for Goats and Sheep
Greg Traywick, Cleveland County Extension Director

Recent research has shown that the high concentration of tannin in lespedeza gives the crop a beneficial effect against gastrointestinal parasites in small ruminants. To reduce any confusion that apparently is out there, ALL PERENNIAL LESPEDEZAS have the name, “Sericea”; there are several varieties:

- Common lespedeza
- Serala
- Serala 76
- Interstate
- Interstate 76
- AU Donnely
- AU-Lotan (low tannins)
- AU Grazer (intermediate tannins)
- Appalow (low tannins)
- Caricea

AU Grazer, a new Sericea lespedeza variety, tolerates frequent and closer grazing than other varieties and should be the variety of choice. AU Grazer makes Sericea more useful by reducing the amount of management needed to make the crop persist in pastures.

Although Sericea lespedeza suffers from an image problem, it has a lot to offer. It’s a drought-tolerant, non-bloating perennial legume that’s resistant to diseases and is rarely attacked by insects. It’s much more tolerant of soil acidity than most other legumes and, though it responds to applications of potassium and phosphorus when they’re highly deficient, it’s also quite tolerant of low fertility.

It’s widely adapted in the Southeast, but is best-suited for use as a pasture plant on well-drained clay or loam soils from southern Ohio to central Alabama and from eastern Oklahoma to the Atlantic coast. Forage yields are good and forage quality of improved varieties is better than that of most warm-season perennial grasses.

Its ability to grow in poor, droughty soil makes it a popular choice for stabilizing critical areas such as road banks and mine reclamation sites. However, it can also fill a niche on many livestock farms in areas where most pastures are dominated by cool-season forages, especially on sites where other forages aren’t well-adapted.

One of the main disadvantages of using Sericea for pasture has been its sensitivity to heavy grazing. To avoid stand loss it’s been necessary to maintain a stubble height of at least 4” throughout the growing season, which requires a fairly high level of grazing management.

AU Grazer, the new grazing-tolerant variety from Auburn University, counters that problem. It was developed using breeding techniques similar to those used in the development of grazing-tolerant alfalfa varieties.

Tannins, compounds that naturally occur in Sericea lespedeza and some other forage plants, reduce the intake and digestibility of fresh forage. Consequently, forage-type Sericea varieties are often categorized as being high-tannin or low-tannin types. AU Grazer has higher tannin levels than low-tannin types, but this is not a serious problem. Livestock often show preference for grasses when first exposed to Sericea, but will eat it readily after a week or two.

Sericea lespedeza is normally planted at 20-30- lbs/acre in mid-spring. It has poor seedling vigor so it’s normally planted in pure stands. However, where adapted, a cool-season perennial grass such as tall fescue can be drilled into established Sericea with high probability of obtaining a mixed Sericea-grass
Sericea Lespedeza Planting Suggestions

http://www.scsrpc.org/SCSRPC/Files/Files/SL%20planting%20&%20weed%20control.pdf

1. Plant on upland soil.
2. Soil should be fertilized and limed according to a soil test.
4. Plant seed broadcast as soon as danger of killing frost had passed.
5. Weed Control in Sericea Lespedeza - You will find in Attachment 1 the herbicides and their dosages to be used in establishment and in established fields. The herbicides that give a better result in sericea lespedeza are NOT APPROVED FOR COMMERCIAL USE.
6. Firm seedbed just before planting.
7. Planting depth 1/4"
8. Planting can be done using
   a) a (plot) drill or
   b) a cultipacker-seeder (Brillion type) or
   c) broadcast the seed and firm it with a cultipacker
9. The following seeding rates are suggested:
   20 lbs./acre if a herbicide is used.
   30 lbs./acre if a herbicide is not used.
10. After planting, firm soil with a cultipacker or roller if not using a drill. Seed should not be covered with more than 1/4 inch of soil.

Attachment 1

Weed Control in Sericea Lespedeza

*** The ONLY APPROVED HERBICIDE FOR SERICEA LESPEDEZA is EPTAM (preplant incorporated but it is difficult to find and it does a poor job). 2,4-DB amine is recommended for any legume seedling. Pursuit is registered for POST-EMERGENCE applications at 71 g/ha to either recently established seedlings or perennial stands of forage legumes including alfalfa, clover, crownvetch, birdsfoot trefoil and lespedeza.

Pursuit: apply at recommended dose. Can be applied PRE- during seeding or POST-EMERGENCE to mature stands. It has not been evaluated post-emergence in the year of establishment. Controls many weeds and is specially good for control of nutsedge.

Establishment (sericea ½ in. in height, 14 days after planting) and Summer Growth of Older Plantings - To control grasses

Apply Poast 0.3 # a.i./acre mixed with Agridex 1 quart/acre (or any crop oil with a conc. of 86% petroleum oil and 16% nonionic surfactant). Agitation is needed or Fusilade 0.2 # a.i./acre mixed with Agridex 1 quart/acre. Agitation is needed.

- To control broad leaf weeds

If you have controlled grasses with the above herbicides wait 2 days before applying Butyrac for control of broad leaf weeds

Apply Butyrac, use the amine formulation if sericea is near cotton, 0.5 # a.i./acre mixed with X77 0.25 % v/v.

Repeat 2 weeks later or as needed.

2,4-D does not cause a major damage to sericea. It can be used in experiments when damage to
other crops is unlikely.

Established fields (at least one year old)
To be applied right before Spring growth (February-March):

- Fields infected with bermudagrass, crabgrass, broadleaf weeds, nutsedge
  Apply a mixture of Paraquat, 0.5-1.0 # a.i./acre
  Aatrex, 2 # a.i./acre in sandy soils or 3 #a.i./acre in fine soils.
  If nutsedge is present you may use Zorial, 1-2 # a.i./acre (agitation
  is particularly important. Sericea can be severely damaged). A better choice is Pursuit

Control of dodder in sericea lespedeza.

Roundup at the rate of 0.15 lb. of a.i./acre, equivalent to about 5 oz. of product per acre
has been reported to control dodder in sericea. HOWEVER, there is a chance that you may loose
the sericea that year and/or that you may not be able to harvest seed. It may be wise to try this
treatment in a small surface such as one acre before spraying a whole field to test the effect of the
herbicide on both the crop and the weed.

Remember: Herbicides work well when a) there is GOOD SOIL MOISTURE and
b) weeds are SMALL

Agridex: oil wetter
ButyraB: 2,4-DB
Paraquat: for defoliation and dessication
Aatrex: atrazine, for broad leaf weeds
Zorial: norflurazon, for nutsedge and many other weeds

Management of Barber Pole Worm in Sheep and
Goats in the Southern U.S.

By Joan Burke
Research Animal Scientist, USDA, ARS, Dale Bumpers Small Farms Research Center,
Booneville, AR

This publication will address management of Haemonchus contortus or barber pole worm,
which is the parasitic nematode responsible for anemia, bottle jaw, and death of infected sheep and
goats mainly during summer months in warm, humid climates. Recommendations are based on
current research findings and are subject to revision as we learn more about the biology of the
parasite and host and alternative products that
may act as anthelmintics.

Biology of H. contortus
First a little background on what is known on the biology of H. contortus. This parasite has a
relatively short life cycle of approximately three weeks and thrives in warm, humid conditions.
Grazing animals pick up infective larvae on forages that are relatively short. Early to mid-morning
forages contain the most larvae on its dew covered tips. As the forage dries, the larvae migrate back
to the moist soil or coil up and slowly dry out (but
can survive for a relatively long period of time in this dehydrated stage and once moistened can re-
hydrate and become motile again). Once in the rumen the larvae continue development, travel to the abomasum, or true stomach, and become adults. The adult female can lay thousands of eggs daily and can consume 200 microliters of blood daily. An average of 10,000 adults is enough to kill a sheep or goat. The female’s prodigious output of eggs is partly responsible for the explosive nature of outbreaks, especially in favorable weather conditions. The eggs are deposited in the feces, hatch on pasture and the life cycle begins again. Outbreaks are worst when warm summer rains break up the fecal pellet and create a moist environment for the hatched larvae. During drought or very cold conditions, a majority of larvae become dormant or die and transmission to the animal is very low.

Drug Resistance
Different populations of the parasite have developed resistance to all available pharmaceutical dewormers, ranging from low to complete resistance. This means that dewormers are not effective in reducing the adult worm population. The highest resistance has been observed with ivermectin (Ivomec®) and albendazole (Valbazen®) or fenbendazole (SafeGuard® or Panacur®) and low to moderate resistance has been observed with levamisole (Levasol®, Tramisol®). Resistance to moxidectin (Cydectin®) is prevalent and increasing on many farms. Moxidectin should not be used on farms unless selective treatment (treatment of a limited number of animals) is practiced. If moxidectin is used on all animals at once, development of resistance will be accelerated.

Resistance has developed because past recommendations did not consider refugia, which is the proportion of a population of worms that are sensitive to dewormers or in “refuge” from a dewormer. When treating all animals in a flock/herd, as has been practiced in the past, only resistant worms survive. If these animals are moved to a “clean” pasture (one that has not been exposed to sheep/goats for four to six months or longer or has had hay removed from it) only resistant worms can develop in that pasture. However, if only animals in need are treated, and they then go back to a “dirty” pasture of low to moderate level of pasture infectivity, as now currently recommended, the resistant worms can breed with sensitive worms and maintain a worm population that should still respond to dewormers. In other words, the population of worms in refugia provides a pool of genes to dilute the resistant genes. This is the most important component of maintenance of a population of worms that will remain susceptible to dewormers. Past recommendations included deworming over winter. We now know that this leads to survival of resistant worms and in the spring an outbreak of a more resistant H. contortus can occur. Current recommendations include treatment of only animals in need (selective treatment). Untreated animals will harbor sensitive worms.

Selective Treatment/FAMACHA
Selective treatment or deciding which animals to deworm can be decided by the use of FAMACHA. FAMACHA was developed by a group of veterinarians and scientists in South Africa and was validated in the southern U.S. by members of the Southern Consortium for Small Ruminant Parasite Control (SCSRPC; www.scsrpc.org). A complete description of FAMACHA can be found on the website. Briefly, FAMACHA is a tool used by farmers that consists of examining the color of the lower eyelid, matching the color on a chart that ranges from red or healthy to almost white or anemic. The lighter the color, the more anemic an animal is. Anemia occurs as a result of the adult worm removing more blood than the animal can replace. There may be other causes of anemia, so the farmer must be aware of the health and nutrition status of the flock/herd. Animals with red color can be left untreated, whereas paler scores indicate that an animal should be treated. Determining the need for deworming based on other criteria is being researched and include measures such as fecal egg counts (FEC), body condition scores (BCS), or weight change. Research indicates that 20% of the flock/herd carries 80% of the worms. Or in other words, 20% of the animals consistently are more susceptible to
infection with *H. contortus*, carry the worms, and distribute the eggs in the pasture. Identification of these animals is possible partly through the use of FAMACHA and these animals can be culled or removed from the population. It is possible to develop a more resistant group of animals that need less frequent treatment for parasites.

FAMACHA examination should occur more frequently on weaned lambs/kids and late pregnant/early lactation ewes/does. The immune system becomes depressed around the time of lambing/kidding, which leaves the animal more susceptible to parasites. Also, watch for signs of an infection such as bottle jaw or animals that lag behind.

**Other Control Methods**

There are a variety of other parasite control measures farmers can use in addition to anthelmintics. Farmers may use a combination of methods and must be thoroughly familiar with the advantages, disadvantages, and risks of each. Some of these include the use of tannin-rich forages such as sericea lespedeza, mixed species grazing, grazing browse rather than grass, and supplemental feeding. Recently there has been some success in reducing FEC and perhaps the adult worm numbers by feeding sericea lespedeza, either fresh or as hay (this may depend on harvesting or variety of sericea lespedeza). Animals prefer the young plant, but it should not be grazed until it is at least six inches in height to preserve the plant. Over-mature plants may lose the ability to reduce infection with *H. contortus*. More research is being conducted in these areas.

Copper oxide has also been used with mixed results in goats to reduce infection with *H. contortus*. Copper oxide appears to be effective in reducing FEC for at least a four week period and does not appear to be effective in reducing other intestinal worms. It may not be effective in all animals and it is sometimes too slow to work in severe cases. If producers want to consider this option they **must** seek professional advice to assess farm conditions, feeding programs, and other management and environmental factors that will affect copper oxide metabolism.

In drier weather, wet patches around leaky drinking troughs, marshy areas or grass pens there animals are kept regularly may lead to an unexpected buildup of worms. Eliminate these factors or fence off.

There are several grazing strategies that can minimize pasture contamination of larvae. Mixed species grazing is effective in reducing the population of worms on pasture. An example of an effective grazing strategy would be to allow cattle to graze pastures before sheep or goats. Mixed species does not include a mix of sheep and goats because they are both affected by *H. contortus*. Grazing resistant breeds of sheep (St. Croix, Barbados Blackbelly, Gulf Coast or Florida Natives, mature Katahdin) with susceptible breeds, may act to “sweep” pastures and reduce contamination to susceptible animals. Goats were evolved to graze browse rather than grass. Larvae cannot reach browse plant species and goats can be maintained with a low level of parasites using this management. Goats can be extremely susceptible to parasites if grazing only grass pastures. Rotational grazing has been used successfully to minimize pasture contamination, but more research is needed for southern pastures to make proper recommendations. Overgrazing or overstocking can quickly lead to parasite problems by creating large numbers of infective larvae on pasture. **Avoid overstocking!** Try to leave a grazed pasture rest for as long as possible if it has to be grazed again by sheep or goats.

Supplemental feeding should not be overlooked as a means to control parasites. By increasing dietary energy, protein, or both, lambs and late pregnant or lactating ewes can become less affected by parasites. The health of the animal is improved and animals consume less infected pasture. The body condition score (an index of nutrition; 1 = emaciated, 5 = obese) should be above 2. A complete ration has been fed to lambs at the Booneville station resulting in nearly complete reduction in fecal egg counts and reduced anemia. More research is being conducted on this diet as a deworming ration.
Smart Drenching
Remember, if use of chemical dewormers becomes necessary, use proper dose by knowing how much an animal weighs, administer drench in the back of the mouth (not on the tongue), and if possible, withhold feed from animal prior to treatment for more effective worm kill. It may sound a bit overwhelming to control internal parasites without complete reliance on chemical dewormers, but with a few changes in management, it is possible to control the parasites and be productive. As always, contact a veterinarian, or extension agent, or other animal professional for help or advice if necessary. To schedule a FAMACHA training session contact the McDowell Cooperative Extension Office at 652-7874 or visit www.scsrpc.org for more information.

Mention of trade names or commercial products in this manuscript is solely for the purpose of providing specific information and does not imply recommendation or endorsement by the U.S. Department of Agriculture. Many thanks go to the contributors of this information, Drs. Ray Kaplan, James Miller, Tom Terrill, and other members of the Southern Consortium for Small Ruminant Parasite Control.

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**Foothills Meat Goat Producers**

**Summer Goat Show**

**July 14 & 15, 2007**

Cleveland County Fairgrounds
Shelby, NC

*Featuring...*
ABGA-Sanctioned Boer Goat Show, Junior Meat Goat Show, Showmanship Contest

**Schedule of Events**

**Saturday, July 14, 2007**

8 AM—12 N  Check-In for Open Meat Goat Show and Showmanship Contest (optional check-In for Boer Goat Show entries that will be staying overnight)

3 PM  Open Meat Goat Show  
  a) Junior Showmanship Contest  
  b) Commercial Does  
  C) Market Wethers

**Sunday, July 15, 2007**

8 AM—12 N  Check-In for ABGA-Sanctioned Boer Goat Show

3 PM  Sanctioned Boer Goat Show  
  a) Percentage Does  
  b) Fullblood Does  
  c) Fullblood Bucks

**Location:** All shows will be held in Weathers Livestock Arena on the Cleveland County Fairgrounds, located at 1751 E. Marion Street (US 74 Business) in Shelby, NC. The telephone number for the Fair is (704) 487-0651.
The primary purpose of this program is to serve as an educational aid for the genetic improvement and promotion of the meat goat industry. The purpose of the test is to standardize environmental conditions and feed for evaluating post-weaning performance and to provide useful records for the consignor to use in evaluating and planning a breeding program.

**Buck test**
- This test will be for buck kids only.
- Commercial or registered and fullblood or percentage meat goats will be accepted.
- All bucks will be grouped together and located approx. 300 yards from the Replacement Does.
- There will be a field day and sale held in conjunction with this test period.
- Breeders will have the opportunity to pull any eligible animals from the sale. If these animals will be “For Sale” at some point, they cannot be sold prior to the sale on September 8th.
- Floor prices: Registered bucks = $500; Commercial bucks = $300
- Any animals not qualifying for the sale can be sold “private treaty” with the breeder.

**Replacement Doe test**
- This test will be for doe kids only.
- Commercial or registered and fullblood or percentage meat goats will be accepted.
- Replacement Does and Terminal Market goats will be grouped individually if pasture is available; otherwise, these animals will be penned as a group.
- There will be a field day and sale held in conjunction with this test period.
- Breeders will have the opportunity to pull any eligible animals from the sale. If these animals will be “For Sale” at some point, they cannot be sold prior to the sale on September 8th.
- Floor prices: Registered does = $250; Commercial does = $150
- Any animals not qualifying for the sale can be sold “private treaty” with the breeder.

**Important Dates:**
- Deliver goats Tuesday, June 5, 2007 (9:00 am) Initial Weigh Day
- Tuesday, July 3, 2007 (9:00 am) 2nd Weigh Day
- Tuesday, July 31, 2007 (9:00 am) 3rd Weigh Day
- Tuesday, August 28, 2007 (9:00 am) Final Weigh Day
- Saturday, September 1, 2007 Field Day and Sale

**Sale details**
This year a Field Day and Sale will be held at the NCDA Umstead Research Station. The goal is to offer an educational program that will be useful to commercial and purebred breeders and allow breeders a place to purchase bucks and does that have been performance tested and may improve a producer’s herd as well as improve the meat goat industry. The number of animals sold will be determined after all animals have been placed on test. All animals will be given a visual appraisal score and evaluated for structural soundness by a committee of five members during the final weigh period. Any animal with a visual appraisal score below “2” or a structural problem that the committee feels may compromise the breeding performance or potential of the buck or doe will be sifted from the sale. Producers do not have to sell their animals if they wish to take them home and use them in their own breeding programs. The location of the Performance Test Web site is: http://www.cals.ncsu.edu/an_sei/extension/animal/4hyouth/Bucktest.htm. Information will continue to be updated on this site as soon as it is available.

For more information contact Dr. Brian Faris (919/515-7722 or Dr. Jim Turner (828/456-7520)
Sheep and Goat News

IN THIS ISSUE:

<table>
<thead>
<tr>
<th>Event/Information</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar of Events</td>
<td>2</td>
</tr>
<tr>
<td>2007 Wool Pool Information and Dates</td>
<td>2</td>
</tr>
<tr>
<td>Lespedeza for Goats and Sheep</td>
<td>3</td>
</tr>
<tr>
<td>Sericea Lespedeza Planting Suggestions</td>
<td>4-5</td>
</tr>
<tr>
<td>Management of Barber Pole Worm in Sheep and Goats in the Southern US</td>
<td>6-8</td>
</tr>
<tr>
<td>Foothills Meat Goat Producers Summer Goat Show</td>
<td>8</td>
</tr>
<tr>
<td>Summer Performance Test for Bucks and Does</td>
<td>9</td>
</tr>
</tbody>
</table>

Compiled and edited by:
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Secretarial support by Cheryl Mitchell