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Robinson Staion Field Day Oct. 2nd

Goat Producer's Newsletter

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New Online Course Offered for New Producers

Interested in Sheep and Goat Production

Terry Hutchens, Univ. of Kentucky
Beginning a new venture is a challenge for anyone, especially if it involves livestock. Individuals wishing to explore the possibilities of sheep and goat production in Kentucky have a new resource. Extension programs of the University of Kentucky College of Agriculture and Kentucky State University are now jointly offering "Sheep and Goat Production in Kentucky," an online course that can be either self-taught or presented by county extension personnel. The development of this course was funded by a grant from the Southern Region Sustainable Agriculture Research and Education (SARE) Professional Development Project.

The course begins with an overview of resource requirements and covers land, building, and facility needs. In addition, this introduction helps new producers determine what type of operation they want and helps them assess labor needs, marketing resources, and input requirements for a start-up livestock operation. Another section covers forages, outlining the basics of good forage production, including soil testing, understanding the use of soil maps, differences in annual forage



Sheep and goat producers and trainers for the *Goat Production in Kentucky* Course. Left to right: Richard Van Sickle; Clark Co., Krista Brown; UK trainer, Karin Cooper; Grant Co., Ken Andries; KSU trainer, C.B. Cooper; Grant Co., Kathy Jones; Clark Co., Not seen in photo: Donna Puckett; Hart Co., Kevin and Stefanie Kidwell; Scott Co. and Terry Hutchens; UK trainer and photographer.

Go to: <http://campus.extension.org/>

Type in: "Sheep and Goat"

Click: "Login as a guest"

Type in enrollment key: "smrum"

types, and perennial forages and their uses in a forage-based system.

Two sections are dedicated to sheep and goat nutrition. *Nutrition—Anatomy* introduces rumen anatomy and function as well as the function of the small and large intestinal tracts. *Nutrition—Feeds and How to Feed Them* is very practical in content and provides, as the title indicates, a description of feedstuffs commonly fed to sheep and goats and how best to feed these feeds.

The last section, *Herd Health*, is dedicated to understanding common diseases affecting sheep and goats. This section goes into some depth about major health problems such as internal parasite management, common foot disease, infectious diseases, and reproductive diseases.

Instructions for Accessing the Course on Sheep and Goat Production in Kentucky

A. Go to the moodle Web site, where the course is housed. (**Click on or type in as shown**)

<http://campus.extension.org/>

1. In the *search courses* box found in the middle of the lower part of the page enter *Sheep and Goat* to bring up the course.
2. Click on the course, and you will be brought to a new page that prompts you to either enter your username or set up an account. At the bottom left side of the page you have the option to log in as a guest. **Click *login as a guest***.
3. Web navigation should take you a page for the sheep and goat course that asks for an *enrollment key*. The key is *smrum*
4. You should now be about to access the course and view all the content. You will not need to repeat all the steps again. Just enter the Web site, sign in as a guest, and enter the course.

If you have any questions contact Kaitlyn McClelland at kmcclelland@uky.edu

Managing Parasites in Goats

Ken Andries

Kentucky State University

Every goat producer is aware that parasites are a major problem and leading cause of death of goats in Kentucky. There is also a strong connection between animal health and performance. Kids that have higher parasite loads don't perform as well as those with lower loads. With the summer grazing season fast approaching, we need to consider getting started in a sound parasite management program to reduce problems.

It is important to remember that most of the products used for parasite control are not labeled for use in goats so **only a practicing veterinarian with a valid veterinarian - client relationship with you can make recommendations for off label use of any product**. Because of that I will not be talking about specific products or doses here but you need to check the recommendations to be sure you are following the latest information.

First you should be using selective treatment on your doe herd. This will allow you to keep track of who is most susceptible and start selecting for a more resistant herd. This will result in less parasite problems and is the only long term solution to the parasite problem. The FAMACHA system is well known and there are a number of people that can conduct FAMACHA trainings around the state. Both Terry and I can do the trainings and offered these trainings through county and regional associations each year on request.

You need to learn about the resistance status of your parasites. *H. contortus* also called the barber pole worm has developed a level of resistance to all chemical forms of control and we are seeing bigger problems each year. There are many reasons but over use and miss use of chemical

dewormers are the major causes of the problems.

To check for resistance you will need to conduct a fecal egg reduction test. This is the simplest way to test for resistance and you will need to collect fecal samples on several animals twice to conduct the test. First collect samples on animals the day of treatment, be sure to sample some non-treated animals as well as a control. Then 10 to 14 days later take a second sample from the same animals. Compare the egg counts for each animal and see what has happened. You need to see a reduction in the treated animals of 80% to consider the product somewhat effective. Less reduction and you may not see much improvement and will go to total resistance very quickly. We would like to see over 90% reduction as our primary product but that can be difficult today. Look at what has happened with the control animals as well. If their counts decreased without treatment you need to take that into consideration when evaluating the products.

This test needs to be conducted every couple of years to evaluate resistance on your farm. If you notice that a treatment seems to not be working, run the test to be sure before changing products. Often we are down to 50 – 60% effectiveness by the time you can see a problem.

There has been a lot of work recently on alternative dewormers. These include copper oxide, copper sulfate, garlic, and other herbs. Much of the results are mixed. In some areas they seem to be very effective and in other cases they don't appear to work at all. We are not sure why this is at this time but a lot of people are looking into these issues. My advice is that if you want to try an alternative treatment, check its effectiveness using the fecal egg reduction test before relying on it totally. Also, resistance will build to these treatments as well over time so continue to check them every two years.

Forage height, alternative forages,

and medicinal plants have also been hot topics for parasite control. Forage height is helpful but it is not a cure all as the goats will graze close to the ground in some locations regardless. Alternative forages can be helpful in several ways. They break the parasite cycle, give us a place to run animals while resting primary pastures, and some have medicinal compounds that may help reduce parasite loads. Select your alternative forage carefully and realize that you will still have to manage your animals to take advantage of the benefits without sacrificing productivity.

Sericea lespedeza is one alternative forage that has been studied intensely for its impact on parasites. It has shown that it will reduce fecal egg counts and goats do well on it. The purity of the stand is important and often when goats are moved off the *lespedeza* their counts go back up rapidly so there is no carryover effect being observed.

Remember, use selective treatments and be sure the product you are using is effective. Alternative forages are helpful and can greatly improve the health of your animals. Goats that have more problems with parasites need to be removed from the herd so keep records and use them to cull the problem animals.

Producing Summer Annual Grasses for Grazing Sheep and Goats

Terry Hutchens, Univ. of Kentucky

Making livestock production profitable is usually dependent on producers' ability to grow their own feed. Sheep and goat producers usually depend on stored forages for winter feeding, grazing cool-season forages such as tall fescue and red clover in the spring and fall. However, during the hot months of July and August, there is often a shortage of good quality forage. Secondly, and perhaps most importantly for sheep and goat producers, is that by mid and late summer, the cool-season grasses are heavily infested with internal parasites.

Farmers can reduce this problem by taking the following steps:

1. Limiting the number of animals on the pastures to three to five head per acre, a safe number.
2. Renovating pasture with legumes to improve the pasture's nutritional value and improve dry matter productivity
3. Following a good soil testing and fertilizer program. (See your Co. Extension Agent)
4. Giving the forage a rest by practicing rotational grazing providing animals clean, fresh perennial pastures for mid and late summer grazing.

These pastures should be composed of pasture plants that thrive well in hot weather such as alfalfa, sericea lespedeza, and red clover/grass mixtures, and they should be rotationally grazed.

Summer annual grasses may be a temporary solution to the problem of summer forage deficiency. **They are expensive to produce, difficult to manage, and have a potential for prussic acid and nitrate poisoning of livestock**; however, when properly managed, summer annual grasses they can provide high yields of good quality forage in a short period. Generally, if water and fertilization are adequate, summer annual grasses can be seeded and established so that grazing can begin in 60 to 70 days. These grasses can be seeded from early May through July.

Plant types include sudangrass and sudangrass hybrids. These grasses are rapidly growing annual grasses of the sorghum family. They are medium in yield and well suited for grazing. They regrow quickly after harvest and can be grazed several times during the summer and early fall.

Sorghum x sudangrass (Sorghum-Sudan) hybrids grow more vigorously and are higher yielding than sudangrass. They also are more likely to contain toxic levels of prussic acid and are difficult to cure as hay. Prussic acid problems can be avoided by removing livestock when chance of frost occurs in the fall.

In addition, do not graze plants that have stopped growing during an extreme drought conditions. Slow growth or no growth will increase the potential for nitrate poisoning. Sorghum-type grasses can be regrazed in 14 to 24 days.

Millets are small-seeded, fast-growing summer annual grasses. They have smaller stems and are leafier than sorghum-type plants. They are slower growing and lower yielding but do not carry the danger of prussic acid poisoning. There are several types; pearl and foxtail millets are commonly used in Kentucky.

Pearl millet is higher yielding than foxtail millet and regrows after harvest if a 5-inch stubble height is left. Dwarf varieties that are leafier and better suited for grazing are available.

Foxtail millet, or German millet, is shorter growing and finer stemmed than pearl millet, which makes it easier to harvest as hay. However, foxtail millet is the lowest yielding of the summer annual grasses and will not regrow following the initial harvest.

Fertilization is by soil test recommendation with 60-100 lbs of actual nitrogen/acre applied at seeding. Broadcast seeding rates for sudangrasses and its hybrids and for pearl millet and foxtail millet are 30-40 lbs/acre, 15-20 lbs/acre and 20-30 lbs/acre, respectively. If the seeding operation is by drilling, reduce the sudangrasses and hybrids to 15-20 lbs/acre, pearl millet to 8-10 lbs/acre, and foxtail millet to 15-20 lbs/acre. **See Annual Grass Reports**
<http://www.ca.uky.edu/agc/pubs/pr/pr585/pr585.pdf>

Perennial Lespedeza (Sericea)



Sorghum Sudangrass



Pearl Millet



Summer Annuals Sorghum Sudangrass, Soybean



Animal Performance and Profitability

Ken Andries
Kentucky State University

There is an old saying that you cannot manage what you don't measure. This adage applies to all types of business enterprises, even livestock.

As most of you realize, I like looking at performance data. I know that many producers are not keeping records on their herd. As a result, a lot of goatherds out there are neither profitable nor moving towards profitability. To be profitable in goat production, you must know how much product you produce, pounds of goat in your commercial meat goat herd, and what it costs you to produce it. With these two figures, you can then calculate the cost per unit of production and determine the break-even price on your animals. Keeping track of your production costs and budget figures is critical. Most producers have some idea of cost due to tax records; they simply need to utilize the information in a different way to determine cost of production. Without production information, cost tells only half the story at best.

Consider this: if it costs you \$80 per doe per year to take a kid to weaning (which is what I would consider low-to-moderate input with today's feed and fuel costs), each doe in your herd must generate \$80 to break even. That \$80 per doe must be generated even if one doe generates little or no income—if she raises a single, doesn't wean a kid, or you keep the kids as replacements. If we consider an average weight of 50 lbs for kids at market, we will need to obtain \$1.60 per lb for a single kid to break even point.

Without records, how would you know which doe produced enough kid weight to cover her cost and which ones picked up the slack for others? How would you know which doe cost you money, and why you are keeping her around? Records allow you to answer these questions. For several years, I have been offering a program to help producers with record-keeping records and have had limited participation. The program is called the Goat Herd Improvement Program (GHIP). Currently I have records from 14 herds representing five states in the combined data set. A quick look at that data set shows

the following average performance of herds in pounds:

Kids:

Birth WT = 7.5; Adjusted Birth WT = 8.2

Wean WT = 36.5; 90-day WT = 36.4; Adjusted Weaning WT = 42.4; Average Daily Gain to weaning = 0.30 lbs/day

Dams:

1.82 kids per litter; 1.6 kids weaned/doe that kidded

Birth WT = 13.8; Adjusted Birth WT = 15.1; Weaning WT = 59.6; 90-day WT = 60.8; Adjusted Weaning WT = 70.1

Almost every participating producer has indicated that he or she has found a doe or two that was either outperforming or not performing according to expectations.

The importance of participating in a program like GHIP is that the information it yields allows us to adjust for known factors that impact preweaning growth. These include age of dam, sex of kid, type of birth, and rearing. Such a program can also provide easy-to-use summaries that help identify which does and sires are doing the best job and which ones should be considered for culling. To learn more about GHIP or to participate, contact me at ken-neth.andries@kysu.edu, or by phone at 502-597-5094. I can work with any amount of data and will work with you to get started. I can come out and help you obtain weaning weights on your herd and can bring a portable scale if it's needed.

As the goat industry starts to mature, it becomes more important that you know your productivity. With a records program, you will be able to select and move your herd in a more profitable direction.

What is Happening and What is Going On?



Carter Co. Beef Cattle and Goat Grazing Trial

Myron Evans; Carter Co. Extension Agent (right above) and beef and goat producer, Mick Franks (left above) are working with the University of Kentucky and Kentucky State University in an effort to identify specific economic advantages for co-grazing cattle and meat goats. Franks has a great deal of experience in this area and has been co-grazing for ten year. He feels his primary advantage is weed and brush control on his 800 acre cattle range.

This effort will look at the disappearance of woody plants like Multiflor Rose, wild blackberry, hawthorn and others as influenced by goat browsing activity as well as succession evidence of re-establishment of desirable pasture grasses and legumes. A total production of marketable pounds per acre of grazed area will be determined. This will be a multi-year project.

Fecal Egg Count Workshop

A fecal egg count workshop will be conducted at the Hardin Co. Extension starting at 7:00 EST.

For more information contact Doug Shepherd, Hardin Co. Extension Office, dshepher@uky.edu



Kathy Jones'

Artificial Insemination Clinic Oct. 16, 2010

Kathy Jones; of Slatewoods Farm (above) will hold her annual A.I. Clinic October 16, 2010. This is a very comprehensive clinic including doe reproductive physiology, nutritional management, estrous synchronization, proper semen handling, heat detection and insemination. For more details contact Kathy Jones at:

slatewoods@inthehills.com

Or Terry Hutchens, UK, at:

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For more information:

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[Http://www.uky.edu/Ag/AnimalScience/goats/goat.html](http://www.uky.edu/Ag/AnimalScience/goats/goat.html)

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