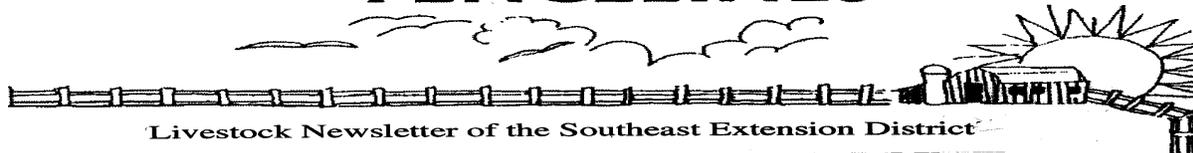


FENCELINES



Livestock Newsletter of the Southeast Extension District

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Systems for Beef Cattle Records

How are your records on your cow herd? If you're like a lot of people, they could probably be better! Do you know what your weaning weights are? What about birth weights? Do you know what your input costs are and how much money each cow is putting in your pocket each year? Do you know how old cow #92 is, how many calves she's had, and what pasture she's currently in? All these things are important because "you can't manage what you don't measure". If that spiral notebook that you keep in your shirt pocket or the one that slides around on your dashboard gets lost, you'd probably have little if any records on your cattle. A simple solution to minimize that risk of losing records is to keep them on your computer or manage them online so that they're backed up somewhere.

Computer record keeping systems have become more common over the years and most are surprisingly very user friendly. A lot of them even have a compatible App that you can download on your smartphone. Wouldn't it be nice to be out in the pasture and type in a cow's ID number on your phone and immediately have all her records in front of you? Likewise, you can make additions to those records. Some examples of management programs are; "Ranch Manager", "The Beef Cattle Firm", "CattlePro", "Cow Sense", and "CattleMax Online". They're all a little bit different, but the good thing is there is enough variety that you can find one that works the best for your operation. I know not everybody likes computer record keeping and some of you will always rely on that spiral notebook, but this is a great option for a lot of people.

If you're interested in learning more about computer systems for beef cattle, join us at the May 1st meeting of the Duplin County Cattlemen's Association. Gary Gregory from NCSU will be joining us to go over these programs in more detail and help anyone that wants to get started using them. The meeting will be at the Duplin County Extension Office at 6:30pm and anyone is welcome. If you plan to attend, please **RSVP** to Wanda Hargrove at **910-296-2143**.

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PEDv—What you need to know

By: Margaret Ross, Livestock Agent – Craven & Jones Counties

There is a lot of talk right now about **PED virus – Porcine Epidemic Diarrhea Virus**. (Porcine is the scientific name for swine.) I wanted to take a minute and share with you what information you should know as a consumer.

PEDv is a fairly new virus to the United States but is widespread in other parts of the world; it has been here for a little less than a year. The greatest effect is on baby pigs from birth to around three weeks of age causing nearly 100% mortality; however, it is not devastating to the sow (mother pigs) population. It is highly contagious between pigs and is typically fatal in very young animals. Older pigs will have acute diarrhea from which they will recover. The swine industry is working diligently to produce an effective vaccine, but there are multiple strains of the virus making that process very difficult.

This virus is not zoonotic, meaning it does not affect humans. It also does not affect pork quality. Consumers should not be concerned for their food safety, since it only affects growth and development of the pigs, not their meat quality or food safety. Many of you are probably wondering if this will affect prices at the grocery store for pork. At this time, it is not affecting pork prices, but it is likely to increase prices over the coming months due to the decrease in marketable pigs.

The virus likely spreads more easily in cold and wet conditions making biosecurity practices that limit the transmission of disease between farms even more important than usual. Biosecurity practices include things like foot baths when entering hog houses as well as making sure to wear different clothes / boots on each farm and shower in / shower out facilities. In addition, trailers / tires are sprayed with a disinfectant to lower the risk of the virus spreading. Individuals visiting multiple farms in a short period of time should be aware of each farm's status and try to visit PED-positive farms at the end of the schedule.

Some reports may have created confusion regarding the current strategy in place to deal with the virus. There is a veterinary-approved practice of taking pigs that already died from the virus and feeding their intestinal tissue back to the sows to allow her to build up antibodies to this virus, which she then passes on to her new piglets, in turn protecting them from the virus. Until there is an efficacious, FDA approved vaccine, this practice remains the best and only option for the industry in dealing with the virus and reducing the spread and future losses within the farm.

The public should also not be concerned about groundwater; PEDv does not affect groundwater. Hog producers are following very strictly-enforced regulations on the burial and disposal of these animals. Producers are doing the best they can to make sure the pigs are comfortable and taken care of in the best manner possible.

North Carolina is number two in pork production in the nation, so this is a very important issue for us at this time. This industry accounts for over \$2.5 billion in North Carolina annually. The swine industry provides a wholesome, safe product for you and your family to eat. The United States food supply is extremely regulated and that will not change.

If you have any other questions, please contact your local Cooperative Extension livestock agent, your local swine veterinarian, the North Carolina Pork Council, the National Pork Board, the North Carolina Department of Agriculture Veterinary Division, or any other swine industry representative. Feel free to contact me directly with questions at Margaret_Ross@ncsu.edu.



Seeding and Managing Native Grasses

From the January 2013 edition of The Forager (publication of NC Forage and Grasslands Council) Written by Wistar Heald, Evergreen Seed Co.,

submitted by Eve H. Honeycutt, Extension Livestock Agent, Lenoir and Greene Counties

There has been a lot of rumors about using Native Warm Season grasses for forage in Eastern North Carolina. While these grasses can be beneficial to the soil and provide excellent forage, there are many characteristics of these grasses to consider before planting.

Native grass seeding is more challenging than using general purpose varieties, but the rewards of establishing a native stand are worth the effort. Native grass species have grown through evolution to develop resistances to many of the problems that the newer grass varieties haven't successfully been bred to handle. Planting warm season species of native grasses provide excellent winter cover for wildlife. These tall, stiff, upright grasses endure snow and ice very well. They also put most of their growth in the heat of the summer unlike the cool season grasses of your lawn which grow most in the spring and fall. After establishment, native grasses will live a long time but will generally be slow to establish like most long-lived species. Therefore, it is very important to establish these grasses properly and have patience when evaluating the results.

Warm season native grasses grow best during the warmest months of the year, typically from June to September. Big and Little Bluestem, Indiangrass, and Switchgrass are the most common warm season grasses sown in the Southeast. These varieties are deep rooted, long lived perennials with considerable tolerance to relatively low pH, low fertility, and drought. Before planting, it is essential to reduce competition from other vegetation that may be present such as other grasses and broadleaf weeds. Native grass seedlings are slower to establish, and can easily be overgrown by faster growing cool season grasses and weeds in the spring. For sites that need extensive preparation, most of the work can be done prior to late spring planting by mowing the fields and treating the area with a good herbicide. You can use a nonselective like glyphosate, or a selected like 2, 4-D to control broadleaves. If you do not want to use herbicides,

you will need to cultivate the field or planting site. However, cultivation is much less effective and can actually create a good seed bed for more weed growth.

There are several different types of native grasses that, because of their physical characteristics, must use separate drills to plant the seed. Big Bluestem, Little Bluestem, and Indiangrass have fluffy or chaffy seeds that are best planted by using a native grass drill. This drill has a picker wheel in the seed box that stirs the seed and pushes it down into the large drop tubes. Switchgrass and Wildryes are relatively clean seed that can be planted using a conventional no-till grass drill or seeder. Eastern gamagrass has a large, clean seed and can be planted with an acorn planter. Only as a last resort should you broadcast plant into a seed bed that has been prepared because it is very difficult to get good seed placement in the soil. Warm season natives have a recommended seeding date of April 15 to July 15 at a rate of 6-8lbs. PLS per acre.



Apply lime and fertilizer according to needs determined by a soil test. These native grasses prefer a firm seedbed to ensure good soil to seed contact. Native grasses need very little nitrogen. Applying nitrogen at the time of planting will only encourage the growth of other grasses and weeds. Most growers of native grasses are convinced that they have a failure the first year. Most of the time they actually have a good stand. These grasses grow down instead of up during the establishment year. The top growth amounts to a narrow, straight leaf until late summer. These seedlings can be hard to see at first so be patient. Native grasses usually take 2-3 years to be fully established. For the first growing season be sure to not allow grazing. Proper grazing use allows the land to be grazed at an

intensity that maintains enough cover to protect the soil while maintaining and improving the quantity and quality of the desired vegetation. Growing season for these grasses is defined as April 1-October 15. A grazing rule of thumb is ‘take half and leave half’ during a growing season of the available forage.

Establishing these species can take a lot of time and patience. If you feel you have acreage and animals that could benefit from planting these grasses, contact NRCS or Soil and Water Conservation in your county for potential cost share options.

MATCHING FORAGES TO THE NUTRIENT NEEDS OF MEAT GOATS

J. Paul Mueller, Matthew H. Poore, Jean-Marie Luginbuhl, and James T. Green, Jr.

FORAGE FOR GOATS

Goats offer an alternative to utilizing forage and vegetation which is otherwise “wasted”, while producing a healthful food product (meat) currently marketable and in demand by a growing segment of the US population. In addition, because of their preference for “browse” goats offer the potential for using idle land that is currently unproductive, and for biological control of unwanted vegetation in pastures and forests without use of pesticides.

Goats consume only the best parts of a wide range of grasses, legumes, and browse plants. Browse plants include brambles, shrubs, trees, and vines with woody stems. The quality of feed on offer will depend on many things, but it is usually most directly related to the age or stage of growth at the time of grazing.

GRAZING BEHAVIOR

Goats are very active foragers that exhibit a high degree of selectivity. They are able to cover a wide area in search of scarce plant materials. Their small mouths and split upper lips enable them to pick small leaves, flowers, fruits and other plant parts, thus choosing only the most nutritious available feed.

The ability to utilize browse species, which often have thorns and small leaves tucked among woody stems and an upright growth habit, is a unique characteristic of the goat compared to heavier, less agile ruminants. Goats frequently will stand on their hind legs and stretch up to browse tree leaves or pull down saplings to bring the tops within reach. The feeding strategy of goats appears to be to select grasses when the protein content and digestibility are high, but to switch to browse when the latter overall nutritive value is higher. This ability is best utilized under conditions where there is a broad range in the digestibility of the available feeds, giving an advantage to an animal which is able to select highly digestible parts and reject those materials which are low in quality.

Grazing goats have been observed to:

- select grass over clover.
- prefer browse over grazing.
- prefer foraging on rough and steep land over flat, smooth land.
- graze along fence lines before grazing the enter of a pasture.
- graze the top of the pasture canopy fairly uniformly before grazing close to the soil level.

In a pasture situation goats are “top down” grazers. This behavior results in uniform grazing and favors a first grazer-last grazer system using a goat flock as the first group and cattle as the last group. This management is most appropriate with lactating does or growing kids.

Goats naturally seek shelter when it is available, and do not like to get wet. They seem to be less tolerant of wet cold conditions than sheep and cattle because of a thinner fat layer. A wet goat can easily become sick. Therefore, it is usually necessary to provide natural or artificial shelters, such as open sheds.



NUTRIENT REQUIREMENTS

Goats must consume a more concentrated diet than cattle because their digestive tract size is smaller relative to their maintenance energy needs. When the density of high quality forage is low and the stocking rates are low, goats will still perform well because of their grazing behavior, even though their nutrient requirements exceed those of most domesticated ruminant species. Comparing the nutrient requirements to the chemical composition of feeds should give producers an idea of how to match needs with appropriate forages. For comparison, low quality forages have 40 to 55% TDN, good quality forages have from 55 to 70% TDN, and concentrates have from 70 to 90% TDN.

High quality forage and/or browse should be available to does during the last month of gestation, to lactating does, to developing/breeding bucks, and to weanlings and yearlings. Female kids needed for reproduction should be grazed with their mothers during as much of the milk feeding period as possible and not weaned early. When the quantity of available forage and/or browse is limited or is of low quality, a concentrate supplement may be considered to maintain desired body condition, depending on cost:benefit. Whole cottonseed makes an excellent supplement for goats when fed at no more than 0.5 lb/head/day. Dry does and non-breeding mature bucks will meet their nutritional requirements on low to medium quality forage (10-12% protein and 50-60% TDN).

A complete goat mineral or a 50:50 mix of trace mineralized salt and dicalcium phosphate should be offered free choice during the first 90 days of lactation in herds with a controlled breeding season (or year round for those without controlled breeding) and for young goats. Selenium is marginal to deficient in all areas of North Carolina. Therefore, trace mineralized salt or complete minerals containing selenium should always be provided to the goat herd year around. It is sometimes advisable to provide a mineral mix that contains 20-25% magnesium oxide to reduce the risk of grass tetany when heavy milking goats are grazing lush small grain or grass/legume pastures in early lactation.

BODY CONDITION SCORING

Body condition scoring is a procedure that has been used successfully with cattle as a management aid to indicate nutritional status of the animal during various physiological stages. This system has not been widely adapted by meat goat producers, but it offers potential to aid producers in assessing the nutritional management of the flock. Because the greatest potential for goats is when run in combination with beef cows, we have adapted the same system for goats. A 1-9 system where one is extremely thin and nine is extremely fat is used for beef cattle in North Carolina. A 1-3 system (thin, moderate and fat) has been proposed for goats. In our system, this is simply expanded to where thin is 1-3, moderate is 4-6 and fat is 7-9. Visual evaluation is not adequate for goats so scoring should be done in a chute where the animal can be felt. Table 1 lists different body condition scores and describes them. In most situations goats should be in the range of four to seven. Scores of 1 to 3 indicate a problem, and scores of 8 to 9 are almost never seen in goats.

USING BODY CONDITION SCORES

Body condition scores are the best way to monitor your nutritional program. With underfeeding, goats will become thin, and with overfeeding, goats will become fat. Using body condition to help fine tune feeding or to “head off” a developing parasite problem is relatively simple and should prove useful. Does should be in good condition in late pregnancy (5 or 6) and body condition should not drop off too rapidly after kidding. In no case should a goat be in thin (1-3) condition. This is most critical in late pregnancy as weak kids may result. Pregnancy toxemia could occur in late pregnancy if does are too fat (7-9). It is critical to have animals in good condition (5 or 6) during the breeding season to maximize the number of kids born.

TABLE 1. BODY CONDITION SCORING CHART

BCS 2

Extremely thin but not weak.

BCS 3

Very thin. All ribs visible. Spinous processes

prominent and very sharp. No fat cover felt with some muscle wasting.

BCS 4

Slightly thin. Most ribs visible. Spinous processes sharp. Individual processes can be easily felt. Slight fat cover can be felt over the eye muscle.

BCS 5

Moderate. Spinous processes felt but are smooth. Some fat cover felt over eye muscle.

BCS6

Good. Smooth look with ribs not very visible. Spinous processes smooth and round. Individual processes very smooth, felt with considerable pressure. Significant fat cover felt over eye muscle.

BCS 7

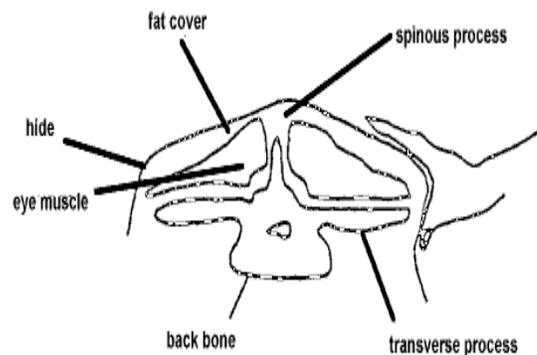
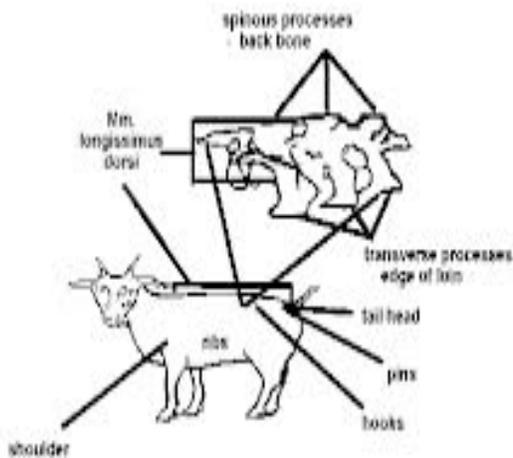
Fat. Ribs not visible, spinous process felt under firm pressure. Considerable fat felt over eye muscle.

BCS 8

Obese. Animal is very fat with spinous processes difficult to feel. Ribs can not be felt. Animal has blocky obese appearance.

BCS 9

Extremely obese. Similar to an eight but more exaggerated. Animal has deep patchy fat over entire body.



SPOTLIGHT FOR APRIL

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- Cutting trees that release oxygen for our environment
- Energy usage and environmental impact in pulp and paper industry
- Fuel consumption by air, rail, and road transport distributing reams of paper
- Fuel consumption sending paper documents via ground & air courier services

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- Paper consumption has tripled since 1960 and Americans generate 85 million tons of paper into the waste stream
- The U.S. pulp and paper industry is the 2nd largest consumer of energy
- EPA estimates that more than 400 million ink and 100 million toner cartridges end up in landfills each year
- The average U.S. office worker prints 10,000 pages per year

Consider the environmental impact of just 10 million pages:

- 2,500 trees

- 56,000 gallons of oil
 - 450 cubic yards of landfill space
 - 595,000 KW (kilowatts) of energy
- (Data Source: www.epa.gov)

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