Have you heard of House Bill 432, that became the “Transportation of Swine” Law? If you produce and market swine in North Carolina, and transport hogs on public roads, you will want to be familiar with the details of this new law as of June 27th, 2011. The law takes effect October 1, 2011, and will very likely be a concern of some small and mid-sized swine producers.

Most producers identify all animals on their farm with some form of identification, whether an ear tag, tattoo, ear notch, or combination of these. However, after October 1, each animal that is transported either to another farm or a processing facility must be identified with a method approved by the State Veterinarian. Producers are invited to give input to determine which methods will meet requirements of the law, but also be of little hassle, cost, and inconvenience to them. In fact, the North Carolina Department of Agriculture Veterinary Division will be providing tags for identification, free to producers. Producers may contact the NCDA office to order these tags.

What has caused the need for this legislation? Feral swine is the sole purpose for this law. This new law is not intended to trace animals back to a particular farm, but is only intended to distinguish between domestic and feral swine. Feral swine have become a major problem in North Carolina, and identification of domestic swine is critical to identifying those that are transporting feral hogs.

It is important to note that even though the law is in effect October 1, 2011, the State Veterinarian’s office will be using this first year to educate producers and not penalize those unaware. However, anyone that is found blatantly conducting illegal activity and transporting feral swine will be fined, at a rate of $5,000 per feral hog being moved. This is why identification is so critical.

For more information on the Swine Transportation Law, to order tags, or give input to the State
As of right now, the last thing on everyone’s mind is winter pastures with the warm days and the warm nights that seem to follow. But now is the perfect time to prepare your pastures for the winter. The importance of a winter pasture is going to be even more important this winter due to the drought we have experienced this summer. Local hay is going to be short and the need to sustain your own animals will be greater.

For this article, the focus will be on winter annual ryegrass with the best dates being September 1 - September 30, and the possible dates being September 1 - October 31. But first things first, be sure to take representative soil sample of the field you want to seed/overseed with ryegrass and get that sent off to the lab for results as soon as possible. OR if you have taken a soil sample within the last three years those results can be utilized for gaining information about the pH. The recommended pH level for winter ryegrass is 6.5 which is the same as bermudagrass and fescue. The pH is the most important part of the equation when establishing pastures of any kind. Once this is completed and the results come back, apply the nutrients as the soil test indicates. Keep in mind if you are using an old soil test report and you have already applied lime at the recommended rates then lime may not be necessary and the other nutrients may not be the same for ryegrass as for other grasses.

Next, decide on the ryegrass seed that you want to plant. While at the store deciding on the different seed, be sure to look at the label on the seed bag for germination rate, percent of the desired seed, inert matter, and weed seed. Compare the different varieties of seeds based on those seed labels the right choice based on high germination rate, high desired seed, and low inert matter and weed seed. Getting the field (seedbed) ready to plant should be the next step. If there is a substantial amount of yield left on the perennial summer pasture be sure to graze it down to keep other grass competition down when seeding with ryegrass. If grazing is not an option, mowing the perennial summer pasture down is another way. Overseeding is a good option to keep a warm season stand of grass while utilizing the land for winter grazing. If overseeding is your preferred method, then using a grain drill will be the most beneficial way of establishment. When deciding on having a pasture that is solely ryegrass (no other grass being present), then total elimination of weeds will be necessary by applying Roundup (Glyphosate) at the recommended rates on the label for the weeds being controlled. Getting the seedbed prepared will be necessary by lightly disking and lightly packing the soil back. After this is completed, then broadcast the seed and lightly cover. When dragging over the seed keep in mind the seedbed needs to be clean and free of debris because it can cause more soil to cover the seed therefore making the chances of germination lower.

After deciding on the ryegrass and getting the field prepared, plant at the recommended seeding rates of 30-40 pounds per acre when broadcasting it and at 20-30 pounds per acre when drilling. The planting depth should be at only ¼ inch to ½ inch deep. Good seed-soil contact needs to be met when planting ryegrass but special care needs to be taken to make sure the seed is not too deep. The most common problem seen when trying to establish pastures is planting depth and planting when the soil is too dry. Adequate moisture needs to be in the soil when planting any type of seed.
When the ryegrass is getting established, keep live-stock/horses off of it until it reaches 6-10 inches in height and then grazing can be allowed until the ryegrass is 3-4 inches in height. When this level is met animals should be moved off the pasture to another area and fertilization with nitrogen is required for optimum re-growth. If overgrazed more than 3-4 inches, then grazing on the pasture will be a one time occurrence and money will be wasted. The total amount of nitrogen in the entire growing season is 80-100 pounds per acre so split applications of nitrogen after each grazing segment should not amount to more than 100 pounds at the end of the life cycle of the plant (until April).

Don’t wait too long to get your winter annual pastures established, remember the possible recommended dates for planting annual ryegrass is September 1st until October 31st. Waiting too late into the fall can affect yields greatly and reduce the chances of a stand. If assistance is needed to establish a winter pasture of any kind, please contact your local livestock agent for assistance.

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**Getting Your Goats Ready for the Breeding Season**

By Jean-Marie Luginbuhl, Extension Meat Goat Specialist

Submitted by: Margaret A. Bell, Craven & Jones Counties

Breeding is a very important aspect of any meat goat operation. But, preparing the breeding does and buck(s) for the breeding season could have a large influence on the outcome and the profitability of the operation.

**Will body condition influence breeding success?**

As the breeding season approaches, producers should be concerned with the body condition of their breeding does. Goat should not be allowed to become too thin or too fat. Failure in reproduction, low twinning rates and low weaning rates will result if does are too thin. Overly fat does can suffer from pregnancy toxemia, but fat does are rarely a problem.

The term body condition refers to the fleshing of an animal. Simply looking at an animal can easily be misleading. Rather, animals should be touched. The easiest area to feel and touch to determine the body condition of an animal are the rib areas, on either side of the spine, by running a hand over those areas and pressing down with a few fingers. In doing so, one is able to determine the amount of fat covering the ribs. In general, does in good condition will have a fat thickness of not more than 0.03 to 0.05 inches over the backbone. Other areas to monitor are the shoulders, the tail heads, the pins, the hooks, the edge of the loins and the backbone. Practice makes perfect, thus use your animals to get a feel for it. An easy way to start is to select a few animals that are over conditioned and some others that are thin to get a feel for extreme body condition. Then introduce a small group of animals and compare their body to the animals having extreme body condition. Producers should develop an eye and a touch for the condition of their animals and strive to maintain a moderate amount of condition on their goats.

One should also be concerned with the body condition of the breeding bucks. If bucks are overfed and become too fat, they may have no desire to breed does. Because of the increased activity and decreased feed intake during the breeding season, breeding bucks will most probably lose weight. Therefore, they need to be in good body condition and physical shape before the season starts.

**Body condition is also used to determine whether flushing will be of benefit to breeding does.**

Flushing means increasing the level of feed offered to breeding does, mostly energy, starting about one month prior to the introduction of the bucks. By increasing the amount of feed offered, does will put on weight. This in turn will signal to the body that the doe can afford to raise several kids and ovulation rate and litter size will increase. Increasing the level of energy offered to does should continue throughout the breeding season and for approximately 30 to 40 days after removing the bucks for adequate implantation of the fetuses in the uterus. Does in extremely good body condition will tend not to respond to flushing. On the other hand, does that are in relatively poor condition, that is on the thin side, as a result of summer pastures of poor quality, high worm loads, late kidding of twins or triplets, will respond favorably to flushing by improving their body condition.

Flushing can be accomplished by moving breeding
does to a lush nutritious pasture 3 to 4 weeks prior
to the introduction of the bucks. This cost-effective
flushing method or “feed flush” or “green flush” is
underutilized in the Southeast where forage is
abundant. Another method is feeding ½ lb/day of a
high energy supplement. Corn is the grain of choice
for flushing; whole cottonseed is another low cost,
high energy supplement. The goal being to increase
the intake and body weight, breeding does should
be grouped according to their body condition and
fed accordingly to first improve their body condition,
then to maintain it.

**What other measures will increase reproductive performance?**

Several other important measures will affect
breeding indirectly, such as trimming feet, the
grouping of animals, deworming, using the
“buck effect” to synchronize does, and vaccina-
tion.

1. **Trimming feet.** Feet and legs should be exam-
ined closely for sores, overgrown hooves and
sources of strange smells that could be associated
with infections or foot rot. Start trimming the feet of
your animals several weeks before the breeding
season to make sure that they will be in top shape
during that period of increased activity. The buck in
particular will cover a lot of territory. A lame buck
will cover does only sporadically, or might give up
altogether. Similarly, limping does may not let bucks
breed them.

2. **Grouping of animals.** Goats are very social ani-
mals and should be grouped together several
weeks before the breeding season so that the peck-
ing order of the animals is established. Forming
groups just prior the breeding season will disrupt
the pecking order of the animals. The fighting that
will ensue to establish a new pecking order within
the newly-formed groups will be a source of stress
and will influence reproductive performance.

Young does should have reached approximately 70
to 75% of their estimated mature body weight to be
bred successfully without adversely affecting their
mature size.

3. **Deworming** the breeding does and the buck(s)
before the start of the breeding season is an impor-
tant management tool. If flushing is planned, it is
advisable to deworm prior to flushing. Wormy does
will not increase their body condition during the
flushing period and therefore flushing may not in-
crease ovulation rate. In addition, wormy does will
not breed well or may not breed at all, or may con-
ceive and abort later.

4. **The “buck effect”**.
Keeping the does away from bucks is important in
the development of sound breeding programs that
should be paralleled with feed resources and mar-
et demands. The best approach to separate does
from bucks is to develop a secure buck pasture.
The buck pasture should be far enough from the
breeding doe herd, otherwise scent emitted by
glands located behind the base of the bucks’ horns
will induce estrous in does. Due to this “buck ef-
fect” does will come into heat approximately 7 to 10
days after the introduction of the buck. It is a good
strategy to use to naturally synchronize breeding
does at the start of the breeding season.

5. **Vaccination.** Although some producers have
had no problems so far without implementing a vac-
cination program, it is recommended that goats be
vaccinated against overeating disease
(enterotoxemia) and tetanus prior to the start of the
breeding season.

**Is the buck ready for breeding?**

Bucks may be easily overlooked but one cannot
assume that they are reproductively sound. A buck
that was sound one year may not be the next. The
results of using a reproductively unsound buck will
be reduced kidding rates and profits. It is a good
idea to watch bucks for normal urination and also
for signs of sexual behavior as the breeding season
approaches. For a more thorough breeding evalua-
tion, immobilize the buck and examine the testes.
They should be roughly the same size, fairly firm to
the touch and devoid of lumps. The presence of
testicular abnormalities could indicate that the buck
is unsound for breeding. Next, examine the sheath
(also called the prepuce) and the penis if you can
protrude it. It requires some experience to push the
prepuce down to reveal the penis. The penis should
be checked for sores and the pizzle (the thin worm-
like process at the end of the penis) should not be
hard anywhere. The presence of hard, small lumps
could be an indication of urinary stones (a condition
also called urinary calculi). A buck suspected of re-
productive problems, whether in its testes or any
part of the penis, should be examined by a veteri-
narian before allowing it to breed does.
Common Cattle Diseases and Treatments
Eve H. Honeycutt, Lenoir & Greene Counties

There are many common cattle diseases that occur in eastern North Carolina cow/calf herds. Below is a discussion of two of these diseases, possible treatments, and advice on veterinary care.

PINKEYE
Pinkeye is one of the most common diseases in cattle. It can affect all ages of cattle and it is highly contagious. Multiple strains of bacteria can cause the disease, and it can be difficult to determine which one is the culprit in your herd. In the early stages of pinkeye, the animal will be very sensitive to light, and you may see a bluish spot on the lens of the eye, followed by watery discharge. Once the animal has pinkeye, it will be bothered easily by vectors such as flies, dust, and tall grass seedheads.

Treating Pinkeye:
Pinkeye can be treated with over the counter medication such as LA-200 or penicillin. If these treatments do not improve the eye, a vet should tend to the eye in order for the animal to recover. Over the counter treatments or home remedies that involve powder, sprays, or salt should not be used due to the irritating nature of these products. Cancer eye should not be confused with pinkeye, since cancer eye is much more serious and usually is first noticed by lumps or bumps growing around the eye. Animals with cancer eye or pinkeye should not be taken to a stockyard in order to safeguard the human food supply and prevent other animals from contracting the diseases.

CALF DIARRHEA/SCOURS
Calf scours is one of the most common diseases in newborn calves. Contrary to popular belief, it is impossible to tell what bacteria is affecting the animal based solely on the color of the feces. However, a good guess can be made about the possible bacteria present based on other factors. If the scours occurs in a calf less than 10 days old, the bacteria present is probably E. Coli, Rotavirus, or Coronavirus. Cryptosporidium is a protozoa that can cause scours in calves at 5-35 days of age. Salmonella is severe bloody diarrhea and a high body temperature. Calves less than 21 days old will not be troubled by Coccidia because of the incubation period of the disease in the calf’s body. When treating calf scours, it is important for the animal to continue to drink (or be forced to drink) milk to prevent further dehydration and provide adequate nutrition. Because of the diarrhea, metabolic acidosis may occur which will cause the animal to breathe heavily. If the calf is lying on the ground and willing to accept your intervention, then it should be treated. If the animal readily gets up to follow its mother, even with diarrhea, then it will most likely recover quickly.

Treating Calf Scours (Clell V. Bagley, DVM, Extension Veterinarian, Utah State University):
There are a variety of fluid and electrolyte formulas available and most will work to some extent. Consult with your veterinarian about his choice and why. If the products are not working, re-evaluate with him again. Some formulas also contain a gel substance which helps to add bulk and may absorb some toxins (poisons) from the gut. Most calves with scours tend to be acidicotic (their system is too acid). It will help these calves to receive electrolytes that are alkaline (basic) in nature for 24–36 hours. After that they should be changed to non-alkaline electrolytes.

If being used with or near milk feeding, an acetate form should be used. If this is not a problem them bicarbonate or lactate can be used. The use of systemic antibiotics by injection may also be of benefit if a bacterial infection has become generalized in the calf’s body. The major problem encountered in treatment with fluids and electrolytes is that producers give too little, too late. Plan to give 2 qts., 2–4 times per day. Determine the frequency of treatment needed by the amount of dehydration present; this is evidenced by sinking of the eyes and elasticity of skin on the neck and withers. Don’t mix the fluid and electrolytes with milk; that prevents curd formation and the milk is then of no benefit. If you are feeding milk, wait for 15–20 minutes before giving the fluid and electrolytes.
Calendar of Events

- Sept. 29th thru Oct. 8th - Wayne Regional Agriculture Fair
- Oct. 27th 6:30 pm - Cattlemen’s Meeting & BQA Certification, Cherry Research Farm
- Nov. 10th & 11th - Buck Collection, Johnston County Livestock Arena contact Dan Wells at (919) 989-5380
- Nov. 12th - Goat Producers Field Day, Johnston County Livestock Arena, contact Dan Wells at (919) 989-5380
- Nov. 17th 9 am to 4 pm - Southeast Pork Conference, Lenoir County Extension Office, $5.00 registration, for more information call (252) 527-2191

Forage Management Tips

September

- Fertilize and lime cool season grasses.
- Keep the grazing pressure on the summer grasses and completely use them before grazing cool season forages.
- Continue to watch for armyworms on established and seedling stands of forages.
- Overseed or no-till winter annuals onto summer perennial grass after they have been closely grazed.
- Make a winter feed supply inventory so deficiencies can be avoided now (by purchasing hay or planting more winter pasture).

October

- Finish using summer grasses before grazing the cool season ones.
- Overseed bermudagrass and other warm season grasses with winter annuals such as rye if you haven’t already done so.
- Sample soils to be overseeded or planted next spring so the limestone can be applied early enough to react; two to four months are required for lime to effectively neutralize soil acidity.

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