Contact Us:

Emily A. Walton,
Ext. Agent, Livestock -
Onslow County
4024 Richlands Hwy.
Jacksonville, NC 28540
(910) 455-5873
(910) 455-0977 Fax
http://onslow.ces.ncsu.edu

Vacant
Ext. Agent, Livestock
Craven & Jones Counties
300 Industrial Dr
New Bern, NC 28562
(252) 633-1477
(252) 633-2120 Fax

Eileen Coite,
Ext. Agent, Livestock
Wayne County
208 W Chestnut St
Goldsboro, NC 27533
(919) 731-1521
(919) 731-1511 Fax

Eve Honeycutt,
Ext. Agent, Livestock
Lenoir & Green Counties
1791 Highway 11 55
Kinston, NC 28504
(252) 527-2191
(252) 527-1290 Fax

Emily Herring,
Ext. Agent, Livestock
Pender County
801 S. Walker St.
Burgaw, NC 28425
(910) 259-1235
(910) 259-1291 Fax

We can all look at getting ready for the winter season in different ways. If you are in the cattle business, is your cow herd ready for the approaching winter months? I guess what I am really asking is: Do you have enough to feed your herd through the winter? There are other factors to consider but this is the primary means of getting through the cooler months of the year, when forages will be limited and more energy is needed to grow, lactate, and stay warm.

The first question to answer is “How much does a cow eat?” According to Dr. Matt Poore, Extension Beef Specialist at NC State University, a mature lactating cow needs approximately 2.3% of her body weight in dry matter. Since most hay contains 90% dry matter, she will need 2.6% on an “as fed” basis. We also need to consider that she will waste about 15% of what is fed, so it’s best to calculate for 3% of her body weight when planning. For example, a 1200 pound cow will eat approximately 36 pounds a day. Multiply this across 165 days (the typical feeding period for the winter months—October 15 to April 1—and you get 5940 pounds or about 3 tons! Considering the typical 4x5’ round bale weighs about 750 pounds, she will need about 8 bales.

Dr. Poore has provided us with an additional tool to assist you with planning a feed budget during this time or really anytime throughout the year. He has developed a feed budget calculator for estimating cattle feeding needs. Contact your county livestock agent for assistance with calculating and we can help you make sure to have enough forage and/or feed for getting through the winter.

Some of the items we will need to know are as follows:

- number of cows, both dry and lactating
- date the dry cows will start calving
- average weight of cows
- number and average weight of bulls
- number of weaned heifers/steers and weight of them
- dates of feeding period
- feed you have available: forages, concentrates
Now is a great time to make sure you can carry your herd until the spring and if not, purchase hay, by products or concentrate feeds to make it through. Feel free to contact us to plan your feed budget for the winter. If you are not a cattle producer, but rather in the sheep or goat business, we can certainly help you with a feed budget as well. Similar information will be needed as with the cattle feed budget listed above.

### NC PORK COUNCIL EDUCATOR

It’s a tough time to be a pork producer. Historically high production costs, attacks from activist groups and misinformation about our industry all conspire against us. The North Carolina Pork Council’s mission is to “promote and educate to ensure a socially responsible and profitable North Carolina pork industry”. That’s a pretty tall order these days. Along with promoting our product, defending our industry, explaining the truths of modern pork production to regulators and representing producers to lawmakers; the North Carolina Pork Council works to educate pork producers. With that in mind, the North Carolina Pork Council has contracted with Jan Archer to help fulfill this part of its mission. Jan Archer brings over 30 years of pork production and education experience to her role as director of Producer Education and Outreach.

A graduate of Michigan State University, Jan has worked in all facets of the pork industry and is involved in her family’s sow farm in Wayne County. Jan is certified as a Pork Quality Assurance Plus (PQA Plus) and Transport Quality Assurance (TQA) advisor so she is able to go on farms to certify producers and production employees in these important national programs. She is also able to walk producers through their PQA Plus site assessments that are increasingly being required by local packers. She is available to bring topical seminars to producer groups including, euthanasia recommendations and requirements, creating an acceptable barn culture on your farm and workforce development. To reach Jan, contact the North Carolina Pork Council at (919)781-0361 or email Jan directly at jarcher3@nc.rr.com.

### MINERALS FOR GOATS


Minerals are often overlooked in goat production, but production would not be possible without them. While most minerals are provided in the diet of a grazing goat, sometimes goat producers need to provide a few supplements. In order to achieve maximum production levels, it is necessary to provide a free choice complete goat mineral supplement or a 50:50 mix of trace mineralized salt and dicalcium phosphate.

1. Calcium - Major functions include blood clotting, membrane permeability, muscle contraction, nerve function, cardiovascular functions and enzyme activity. Adequate levels of calcium for lactating goats are necessary to prevent parturient paresis (milk fever). In browsing or grain-fed goats, the addition of a calcium supplement (dicalcium phosphate, limestone, etc.) to the feed or to a salt or trace mineral-salt mixture usually meets calcium requirements. Legumes (e.g., clover, alfalfa, kudzu) are also good sources of calcium.

2. Phosphorus - Works in combination with calcium bone formation and is essential for cell growth, energy utilization, acid:base balance, and is required by rumen microbes for optimal growth and activity. Phosphorus deficiency results in slowed growth and an unthrifty appearance. Lactating goats can maintain milk production on phosphorus-deficient diets for several weeks by using phosphorus from body reserves, but during long periods of phosphorus deficiency, milk production was shown to decline by 60%. The calcium:phosphorus ratio should be maintained between 1:1 and 2:1, preferably 1.2-1.5:1 in goats due to their predisposition for urinary calculi.

3. Magnesium - Its primary function is in carbohydrate and fat metabolism and is a component in many enzyme systems. Magnesium deficiency is associated with grass tetany, but ordinarily this condition is less common in grazing
4. Potassium - Functions to keep the correct fluid balance throughout the body and has an important role in metabolism. Forages generally are quite rich in potassium, so a deficiency in grazing goats would be extremely rare.

5. Iron - Important role in cellular respiration and oxygen transport via hemoglobin. Iron deficiency is seldom seen in adult grazing goats, but more commonly in kids fed in complete confinement. Iron deficiency can be prevented by access to pasture or a good quality trace mineral salt containing iron. In severe cases, and for kids reared in confinement, administer iron dextran injections at 2- to 3-week intervals (150 mg, IM).

6. Iodine - Associated with the thyroid hormones that regulate the rate of metabolism. Conditional iodine deficiency may develop with normal to marginal iodine intake in goats consuming goitrogenous plants such as cottonseed and soybean meal. Severe deficiency of iodine results in an enlarged thyroid; poor growth; small, weak kids at birth; and poor reproductive ability. Iodine should be provided in stabilized salt.

7. Zinc - Important factor in stress management, immune response, enzyme systems and protein synthesis. Zinc deficiency results in parakeratosis, stiffness of joints, smaller testicles, and lowered libido. A minimal level of 10 ppm of zinc in the diet, or a trace mineral salt mixture of 0.5-2% zinc prevents deficiencies. Excessive dietary calcium (alfalfa) may increase the likelihood of zinc deficiency in goats.

8. Selenium - Deficient in most areas of the Southeast. Many commercial trace mineralized salts are devoid of selenium. Selenium and vitamin E work together to prevent white muscle disease, retained placentas and to reduce susceptibility to worms and disease.

9. Water Requirements - Water is involved in almost all of the body’s normal functions. As with the other nutrients discussed, needs vary with age and stage of production. A good rule of thumb is that does early in lactation typically have the highest requirements along with times of intense environmental heat where forages are extremely dry. Other factors that may affect individual water requirements include water content of forage consumed, amount of exercise, and salt and mineral content of the diet. Since water is crucial for optimal production, growth and performance it is vital that all goats have access to unlimited amounts of fresh, clean high quality water.

DON’T FORGET THE MINERAL SUPPLEMENT THIS WINTER

Emily Herring, Livestock Agent, Pender County

With winter approaching us quickly it is important to keep in mind the nutritional status of your cattle. Having plenty of hay on hand, a mineral supplement program, adequate pastures, reasonable feeding rations and ample shelter are all important items to remember when going into this colder season.

Forages may provide the energy and protein that a cow needs, but most of the time they are always deficient in one or more mineral. The two major minerals that have been shown to be the most deficient in the southeast are salt and magnesium. While the three main trace minerals to be most likely deficient across the country are zinc, copper, and selenium.

Using trace mineralized salt blocks (“red salt”), sulfurized salt (“yellow salt”), or plain white salt blocks as the mineral program is not sufficient enough for cattle because salt is the only mineral being received. For example, the trace mineralized salt block contains salt and some other trace minerals. Granted it helps, but it’s still not providing magnesium or selenium or enough levels of zinc or copper to help.

The eastern portion of the US is known for its fertile, lush pastures and because of this a “high mag” complete mineral is recommended to be used at all times unless in an area where grass tetany is rare. If grass tetany is rare, it is still recommended to use the “high mag” block from 30 days before the cows calve with the end of the abundant growth in late spring.
A “high mag” complete mineral contains 8-12% magnesium. Producers should buy a product that is labeled for consumption at 4 oz/day per cow. It should have 8% or higher magnesium, at least 0.09% copper (900 ppm, from copper sulfate or chloride), at least 0.18% zinc (1800 ppm), and at least 0.0026% selenium (26ppm). The supplement should be available free choice at all times. It should be in a covered feeder, kept fresh and dry. The daily intake should be monitored to ensure the cows are consuming the recommended amount. Also, your cattle could be used to the high levels of salt in the beginning, so don’t worry if your cows seem to consume a large amount when first put out in the feeder. They should start minimizing their consumption levels after several weeks to the suggested target levels. If you are having problems getting the recommended levels of intake, consider mixing in dry molasses or grain to encourage initial consumption. If you are not satisfied with the levels of consumption, either being too much or too little, consider contacting the manufacture for advice or consider changing products.

DEADLINE FOR ANIMAL WASTE CREDITS

Emily A. Walton – Livestock Agent, Onslow County

The December 31st deadline is quickly approaching for those certified animal waste operators whose recertification periods expire in 2009. Remember that you must have your 6 hours of continuing education credits by this date in order to maintain your certification. Here is a list of the upcoming “last chance” recertification classes being offered in southeastern NC.

**DEADLINE FOR ANIMAL WASTE CREDITS**

**November 19th - Southeast Regional Pork Conference**
**PRE-REGISTRATION REQUIRED**
Session One: 10:00 AM; 6.00 Hours Credit
Session Two: 2:00 PM; 6.00 Hours Credit
Contact: Eve Honeycutt 252-527-2191

**November 20th - Wilson Area Pork Conference**
10:00 AM; 6.00 Hours Credit
Contact: Dan Bailey 910-592-7161

**December 1st - Bladen County Animal Waste Classes**
Session One: 10:00 AM; 2.00 Hours Credit
Session Two: 1:00 PM; 2.00 Hours Credit
Session Three: 3:00 PM; 2.00 Hours Credit
Bladen County CES Center, Elizabethtown
Contact: Becky Spearman 910-862-4591

**December 7th - TBA: 6:00 Hours Credit, 9:00 AM**
Duplin County Cooperative Extension Office
Contact: Amanda Hatcher 910-296-2143

**December 8th - Robeson County Animal Waste Classes**
Session One: 10:00 AM; 6.00 Hours Credit
Session Two: 1:00 PM; 6.00 Hours Credit
Robeson County CES Center, Lumberton
Contact: Michelle Shooter 910-671-3276

**December 9th - Pitt County CEC Training: 3.00 Hours Credit**
Pitt County Ag Center, Greenville; 2:00 PM
Contact: Phillip Rowan 252-902-1703

BIOSECURITY TO PROTECT AGAINST H1N1

Emily A. Walton – Livestock Agent, Onslow County - Source: National Pork Board Public Health Fact Sheet, Influenza: Pigs, People, and Public Health

According to the National Pork Board, here are some biosecurity measures that are potentially useful to reduce transmission of influenza viruses between people and pigs:

■ **Influenza virus vaccination of pigs** - While the swine influenza virus vaccines used today may not induce sterilizing immunity nor completely eliminate clinical signs of infection, vaccination of pigs can reduce the levels of virus shed by infected animals, and thus reduce the potential for human exposure and zoonotic infections.

■ **Influenza virus vaccination of swine farm workers** - The vaccines produced on a yearly basis for the human population contain only human, not
swine, strains of influenza viruses. Nonetheless, these vaccines are likely to provide some level of protection against infection with swine viruses of the same hemagglutinin subtype. Conversely, vaccination of farm workers will reduce the amounts of viruses they shed if infected during human influenza outbreaks, and thereby limit the potential for human influenza virus infection of their pigs.

**Sick-leave policies** - To further reduce the chances for infection of pigs with human influenza viruses, the farm owner should provide sick-leave policies for employees that encourage them to remain away from work when they are suffering from acute respiratory infections. People typically shed influenza viruses for approximately 3-7 days, with the period of peak shedding correlated with the time of most severe clinical illness.

**Ventilation** - Ventilation systems in containment production facilities should be designed to minimize re-circulation of air within animal housing rooms. This is important to reduce the exposure of pigs to viruses from other pigs, to reduce their exposure to human influenza viruses, and conversely, to reduce exposure of workers to swine influenza viruses.

**Basic hygiene practices** - Workers should change clothes prior to leaving swine barns for office facilities, food breaks or their homes. In addition, hand-to-face contact should be minimized and hand-washing stations should be available throughout the animal housing areas. Influenza viruses spread not just by inhalation of aerosolized virus, but also by eye and nose contact with droplets of respiratory secretions.

**Interspecies transmission among pigs and birds:** The global reservoir of influenza viruses in waterfowl, the examples of infection of pigs with waterfowl-origin influenza viruses, the risks for reassortment of avian viruses with swine and/or human influenza viruses in pigs, and the risk for transmission of influenza viruses from pigs to domestic turkeys all indicate that contact between pigs and both wild and domestic fowl should be minimized. The following factors are potentially useful to reduce transmission of influenza viruses between birds and pigs:

- **Bird-proofing** - All doorways, windows and airflow vents in swine housing units should be adequately sealed or screened to prevent entrance of birds. Although small birds such as sparrows, swallows, finches, wrens etc. are not thought to be important in the overall ecology of influenza viruses, they may carry influenza viruses from waterfowl feces into barns on their bodies.

- **Water treatment** - Do not use untreated surface water (because of waterfowl fecal contamination with influenza viruses) as either drinking water or water for cleaning in swine facilities. Likewise, it may be prudent to attempt to minimize waterfowl use of farm lagoons.

- **Separation of pig and bird production** - Do not raise pigs and domestic fowl on the same premises.

- **Feed security** - Keep pig feed in closed containers to prevent contamination with feces from over-flying waterfowl.

- **Worker biosecurity** - Provide boots for workers that are worn only within the pig housing units, thus eliminating the chance to carry bird feces into housing units from outdoors.

These recommendations clearly cannot apply to production units in which pigs are raised outdoors. Outdoor housing places pigs at increased risk for infection with avian influenza viruses.

### Forage Management Tips

**November**

- To improve feeding efficiency, test forages before winter feeding begins.
- As winter feeding begins, separate the herd into lactating and dry cows so the best quality pastures and hay can be fed to the cows with nursing calves.
- Do not graze fall-planted perennial pastures, such as tall fescue/ladino clover, until growth reaches 6 to 8 inches.
- Winter annual pastures that were planted early (September) may be responsive to an additional application of nitrogen (30 to 50 lbs per acre).
Bermudagrass should have 3 to 4 inches of growth to serve as an insulation against winter damage.

**December**

- Ovoid overgrazing by feeding hay on pasture or restricting acres available to animals.
- Feed hay stored outside before using hay that is stored inside.
- Sample soils to be overseeded or planted next spring so the limestone can be applied early enough to react; two to four months are

**Upcoming Events**

**NOVEMBER**

19th - Animal Waste Operator Training – Southeast Pork Conference – Time and Location TBA - 6 Hour CE

24th – Animal Waste Operator Training – Wilson County – 5:30 -8:30 pm - 2.5 Hour CE

Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by the North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage and examine a current product label before applying any chemical. For assistance, contact an agent of the North Carolina Cooperative Extension in your county.

“HELPING PEOPLE PUT KNOWLEDGE TO WORK”

**CHRISTMAS CHEER TIME IS HERE AGAIN**

Onslow County 4-H County Council is again participating in the Elder Cheer Program. Since 1996 the Onslow County Adult and Family Services unit at the Department of Social Services has coordinated the Elder cheer program. This program places an emphasis on elderly and disabled population who are in resident care facilities, while giving our community the opportunity to share their holiday spirit.

On December 8th, join us at 6:00 pm for refreshments and at 6:30 pm the social gathering and assembling of items. Please plan on attending and completing a wonderful community service project.

In the meantime, please tell everyone you know that we are collecting the following items. All of these can be dropped off at the Cooperative Extension, 4024 Richlands Hwy. Please remind our staff that they are for the Elder Cheer Holiday Program. Items requested by Onslow County Elder Cheer are: lotion, candy (diabetic), aftershave, fruit baskets, socks, cassette tapes, key chains, watches, blankets, deodorant, electric blankets, combs, perfume, slippers, hair brushes, night gowns, batteries, gospel tapes, holiday novelties, toothbrushes, writing paper, stationery, support hose, powder, pajamas, disposable razors, personal care items (soap, shampoo, etc.), small flashlights, fashion jewelry, live plants, pens, window mounted bird feeders.

County Council is also in need of baskets, tins and gift bags to help wrap these items. All of these items are due in the 4-H office by December 4th. For more information, contact Wanda Mills, 455-5873.