Upcoming Computer Classes for Farmers

Basic Computer Classes - We are setting up computer classes for farmers. Classes will meet weekly for 6-10 weeks from 6-9pm at Bladen Community College. Classes will start this fall and next January. The classes will cover computer basics such as word processing, spreadsheets, recordkeeping, the internet and email. You will get hands-on training at the computer lab, so class size will be limited. Classes will be taught by computer instructors, but there will be an emphasis on farm skills.

Webpage Design Workshop - Saturday, September 30 from 9am - 3 pm at Bladen Community College. Producers will learn how to create free web pages to market their products. Class size will be limited. If you would be interested in any of these classes, call Nelson Brownlee at 910-671-3276 or Becky at 910-862-4591.

Bladen County Ag School Field Days

Bladen County Cooperative Extension, Bladen Soil and Water Conservation Service, Bladen County Farm Bureau, Cape Fear Farm Credit, Bladen County Livestock Association and the Bladen County Board of Education are planning Ag’em Up Day – An Agricultural Field Day Adventure for 3rd Grade. The field day will be on September 20 and 21, 2006 (raindates are the 27 and 28). There will be eight stations that focus include Nutrition of Food, Swine, Beef and Poultry, Blueberries and Beekeeping, Field Crops, Farm Technology, and Forestry and the Environment. There will be fun, hands-on activities to show the kids how important agriculture is to them and the county. If you are interested in helping with a station, call Becky.

Clinton Feeder Calf Sale

The Clinton Feeder Calf Sale will be held on September 13 at 10:00 a.m. at the Sampson County Livestock Facility. Cattle should be brought to the facility for grading, penning, etc. on September 12 between 7:00 a.m. and 4:00 p.m. For more information or to request a consignment form, please call George Upton or Paul Gonzalez at Sampson County Cooperative Extension at 910-592-7161.

Disclaimer: The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University nor discrimination against similar products or services not mentioned.

Tiffanee Conrad-Acuña
Extension Area Agent
Agriculture- Livestock

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Producer Profiles - Barbara and Lock Dial of Dial Produce Farm

By: Tiffanee Conrad-Acuña, Area Livestock Agent with North Carolina Cooperative Extension

Barbara and Lock Dial of the Shannon area in Robeson County previously only grew traditional crops of corn, soybeans, and wheat. Then they ventured into the alternative enterprise of growing vegetables such as tomatoes, okra, cucumbers, squash, cantaloupe, cabbage, peas, butter beans, watermelons, and Irish potatoes. They mostly sell their vegetables from their home, but occasionally sell them roadside in Red Springs and at the Farmers Market in Pinehurst. To complement their produce business, they recently have plunged into the pastured pork business. They raise 6 sows on pasture and sell the pigs right off the farm. They are both Pork Quality and Trucker Quality Assurance Certified. With this certification, they are set up to sell their pigs to Smithfield, but so far, they haven’t had the need to take them there. They have been fortunate enough to have all the pigs sold on the farm. This saves them a good deal of money on transportation costs. They have a sign in Spanish at the end of the road that also brings Hispanics onto the farm. People stopping in for a hog usually pick up some vegetables while they are there. They have 10 cattle mostly of Holstein mixed breeds. Any new stock they bring in are Angus due to market demands. They take the cattle to Country Slaughter in Rockingham and get their beef packaged there. They then bring the packages back to sell from home. This husband and wife team share the farm work responsibilities. The hogs get a formulated diet using crops grown on the farm such as corn and wheat. The feed mill adds in the minerals needed. They also take advantage of local factory by-products such as sweet potatoes, bread, and milk.
Animal Waste Management
Compiled by Becky Spearman, Livestock Agent with North Carolina Extension

PLAN OF ACTION (POA) FOR LAGOON SLUDGE REDUCTION
The NRCS Conservation Practice Standard for Waste Treatment Lagoons (Code 359-1) in North Carolina requires proper operation and maintenance of lagoons. The standard states: "After five years the waste treatment lagoon shall be checked for sludge accumulation and annually thereafter. If sludge has encroached into the treatment volume, the sludge will be removed and applied at agronomic rates, based on analysis of the sludge. Treatment volume must have a minimum of 4 feet of depth free of sludge at all times." If the sludge accumulation is greater than the sludge volume for which the lagoon was designed, a plan of action must be submitted to the Division of Water Quality Central Office within ninety (90) days of the survey. The plan should clearly state what the producer is going to do to manage the sludge. This can include lagoon additives, dredging, or agitating. For more information or to request a form, call the Extension Office.

Calibration and Sludge Survey Equipment
The Extension Office has equipment available that producers can check out to perform their sludge survey and equipment calibrations. We have handouts that explain how to perform the calibrations and sludge surveys. I am also available to help answer questions and help with the math involved in both processes. If you are interested in checking out any of the equipment, please call the Extension Office to reserve the equipment.

Farms with NPDES Permits - Producers are required to calibrate their irrigation equipment and perform a sludge survey every year. All NPDES farms are required to complete these by December 31st of the current year, unless an extension was given.

Farms with General Permits - Producers are required to calibrate their irrigation equipment within two years of receiving their new permit (by October 1, 2006) and at least once every two years thereafter. They must also perform a sludge survey within two years of receiving their new permit (by October 1, 2006) and every year thereafter.

Check your continuing education hours!
Animal waste operators must have six hours of continuing education credit every three years to maintain their license plus pay the yearly fee of $10 by December 31st of each year. Many operator’s three year period ends 12/31/2006. You can call the Extension Office to check your hours or go to DWQ’s website at http://h2o.enr.state.nc.us/tacu/RenewalInformationCEPayments.htm Go to animal waste and click on the beginning letter of your last name to scroll down and find your name, hours, and period date.

10 Hour Animal Waste Operators Certification Training Class
November 1 and 2 - Mount Olive College starting at 9 am. Call 919-731-1525 to register.

2006 Exam Dates - September 14 and December 14 - applications to take the exam must be postmarked at least 30 days prior to date of exam.

CONTINUING EDUCATION CLASSES
November 9 - Bladen County starting at 10 am (6 hrs.) call 862-4591 to register.
December 7 - Robeson County starting at 10 am (6 hrs.) call 910-671-3276 to register.
A cow-calf operation’s goal is to make a profit. The amount of profit you make depends largely on the market price you get for your calves. Profitable cattle marketing means producing the most profitable calf, selling through the most profitable market outlet, and pricing at the most profitable time. Unfortunately, most cow-calf producers simply sell their calves at the most convenient market outlet at whatever the price is at the time. The first step in marketing is to recognize all your alternatives and evaluate each for potential cost and returns, selecting the most profitable rather than the most convenient alternative. Planning to make a profit is the best way to make a profit. This article will discuss the different options available to producers.

There are more marketing options if the entire production program has followed management practices that include selecting to produce desirable feeder cattle, a restricted calving season to increase uniformity in calves, good forage management, and a herd health program. Producers who make efforts to incorporate these practices have several options available to market feeder cattle.

The first and most common is the weekly livestock auction. There are approximately 25 sale facilities in North Carolina. Weekly auctions operate on a commission basis which generally ranges from two to four percent of the sale value of individual animals. The number of cattle sold through weekly auctions vary considerably between location, which influences the number of prospective buyers and ultimately the prices paid for cattle at a particular market.

A second sale type is the North Carolina Graded Feeder Cattle Sales. This is a cooperative effort by the N.C. Department of Agriculture, the N.C. Cattlemen’s Association, N.C. Cooperative Extension, and participating livestock markets. The graded sales group similar cattle into uniform lots based on sex, weight, grade, and breed, allowing buyers to minimize assembly and transportation costs, thus increasing their relative value. These sales have operated in North Carolina since 1952, providing small cow/calf producers an auction alternative with a strong educational component. These sales bring premiums over similar cattle sold through weekly auctions.

A third sale option, which has recently increased in popularity is direct farm sales. This option is desirable to many buyers because cattle are sold in 48,000 pound lots, the most efficient size lot for transportation. Cattle are from a single large farm, several smaller farms, or a backgrounding operation. The calves are similar in type and size. Health risks for potential buyers are usually minimized due to co-mingling, sorting, and vaccination of these cattle prior to sale. These cattle are usually heavier than individually sold feeders, accustomed to eating grains from a feed bunk, and adapt quickly to a feedlot environment with little stress or weight loss. There are several types of direct farm sales available to producers. Tele-auction sales are held via conference telephone calls where sellers and buyers hold a private auction. Buyers base their decisions on a written description of each lot, developed by a reputable agent who has seen and evaluated the cattle. Video and satellite auctions incorporate video footage of each lot sold, along with a written description developed by a qualified representative. Although premiums are not assured, these sales have the advantage of large audiences of potential buyers where other sale types may be influenced by a limited buyer audience.

Another option is retaining ownership of your calves, rather than selling at weaning. It can be profitable, especially if the cattle perform well and provide a desirable end product. Retained ownership allows increased control of the marketing process. Cow-calf producers have an opportunity to expand their beef cattle enterprise and capitalize on the performance potential of the calves they produce.

Feeder cattle prices are heavily influenced by weight, lot size, sex, breed, grade, and condition. In general, per hundred-weight prices paid for lighter feeders are higher than per hundredweight prices for heavier feeders. Prospective buyers of feeder cattle estimate future costs of gain on each set of cattle. The lower the expected cost of gain relative to the expected future sales price per hundredweight, the higher price buyers are willing to pay. Alternately, as cost of gain rises due to rising feed prices, these price premiums for lighter feeder cattle decrease.

Each beef operation is unique and has different goals and abilities. Take time to plan your marketing strategy to get the most out of your calves. Selling calves is what makes you money, so make sure you are taking advantage of the opportunities available to you. For more information on how to market your calves, call the Extension Office.
Now is the time to plan your fall and winter grazing. Grazing costs less than feeding hay to animals, so consider your farm fields and what you can do to increase your grazing time. Many producers in our area plant winter annuals to add to their grazing. Winter annuals include annual or Italian ryegrass and small grains such as rye, wheat, oats, barley or triticale. Winter annuals can provide high quality forage under good management.

Producers can use combinations of small grains and ryegrass to spread some of the risks and extend production through varying maturity. Small grain grown in combination with ryegrass gives earlier fall grazing and increases the total grazing days on a field. In small grain-ryegrass combinations, the small grain contributes most during the fall and through midwinter. Ryegrass dominates from late winter through late spring. To gain the advantage from the small grain and the persistence of the ryegrass, plant on fallowed, prepared seedbeds between $\frac{1}{4}$ and $\frac{1}{3}$ of the total acreage in a combination, and plant the remainder in only ryegrass. Small grain/ryegrass pastures can be grazed heavily in November and early December, allowing ryegrass planted alone to develop good growth before grazing begins.

Grazing may be started between late October to mid-November depending on planting date and fall weather conditions. Begin grazing when grass reaches 6 to 8 inches high. Graze small grain or small grain-ryegrass mixtures first. Grazing too early reduces forage production and causes shortages later in the winter. Extended periods of extremely cold, wet weather or dry periods can cause a shortage of forage. Grazing the crop shorter than 2 to 3 inches in cold weather badly damages the stand and slows regrowth. When using a high stocking rate, cross fences allow the pastures to grow 6 to 8 inches tall. The large group of animals need to be moved to allow regrowth. When animals are given access to large areas of succulent grazing, they usually graze the shortest tender growth which allows some areas to grow too tall and become less palatable. Rotational grazing through use of adequate cross fences helps eliminate this problem and gives maximum use of the forage produced.

Seeding rates and planting depths are different for each type of grass or small grain. Check with the Extension Office for recommendations. Stands will be ready to graze 3 to 6 weeks sooner when seed is planted into a prepared seedbed compared to no till planting into sod depending on moisture and existing competition. Seed only the amount of pasture your cattle can heavily graze during the spring because you may have problems keeping the ryegrass grazed. If overseeding on bermudagrass, pay close attention to how much growth accumulates on the bermuda in April and May; ryegrass can severely shade bermuda, resulting in weakened or eliminated stands of bermuda. Summer pastures that are not overseeded grow in April and May to produce early summer grazing or a hay cutting while the ryegrass areas are being grazed. If overseeded ryegrass is to be cut for hay, cut by early May or summer grass pasture will be severely penalized.

Winter annuals are a great way to increase your grazing time; however, there are a few precautions to consider. Take time to plan your grazing by following these recommendations. Give us a call for more information.
Predator Control  By: Tiffanee Conrad-Acuña

Do you think you can shoot all the coyotes in the woods that are killing your young goats or calves? Even though this might make you feel better, there are some control methods that will make it easier for you. Predation on livestock in North Carolina is most likely to occur from coyotes and domestic dogs. However, losses from vultures, foxes, bears, cougars, eagles, feral pigs and bobcats are possible but not likely.

Evidence of predation is normally present when larger livestock are killed, but oftentimes small animals may disappear without a trace. The presence of predators and predator signs in the area; in addition to hair, feathers, and other remains in predator droppings, are not sufficient evidence to confirm predation. Predators often scavenge animals dead of other causes and livestock can disappear in other ways. Within reason, producers should make every effort to prevent livestock and poultry losses from predation through good husbandry and the use of deterrent strategies such as electric fence, guard animals, and housing.

It is much more practical and less time consuming to protect your animals from predators with fencing than it is to set up a stake out at night waiting for them to come so that you can ambush them. Different combinations of barbed wire and electrical wires can help keep coyotes away from livestock. However, there is probably no such thing as a completely coyote-proof fence, at least not an economically feasible one. The traditional sheep and goat fence of netwire with two strands of barbed wire on top, if kept in good repair, will prevent most dogs from entering pastures, but coyotes will dig under, pass through a hole in the fence, climb, or even jump over some fences. Good fencing can also be used with snaring and trapping techniques. For maximum effectiveness, a netwire fence should be at least 5 feet high and have mesh no larger that 6 inches wide, a buried wire apron to deter digging under, and electrified wire on top to prevent climbing over. The use of 7 to 12 charged and ground wires, alternately spaced 4 to 6 inches apart, has been effective in the past.

Moving livestock close to people can also deter most coyotes. Keeping livestock in a properly fenced area for a short time may be feasible. For example, livestock getting ready to kid or calve can be kept in fences close to the producers home or shut up in the barn at night. In recent years, there has been a surge of interest in the use of guard animals to protect livestock from predators. Several species have been used, including dogs, donkeys, ostriches, emus, llamas, and mules. The use of different breeds of guard dogs, including Komondor, Great Pyrenees, Anatolian Shepherds, and Akbash has increased greatly. Researchers and producers agree that guard dogs can effectively prevent livestock losses to coyotes especially.

In general, livestock killed by predators will exhibit subcutaneous bruising and puncture wounds. With larger calves and sheep there may be evidence of a struggle, such as trampled and bloody vegetation. Coyotes typically bite adult sheep and goats on the throat just behind the jaw and below the ear. Death commonly results from suffocation and shock; blood loss is usually a secondary cause of death. Careful removal of the skin from around the neck will reveal the tooth puncture marks. On small prey, such as young lambs and kids, coyotes may kill by biting the head, neck, or back, causing massive tissue and bone damage. Some coyotes kill by attacking the flanks or hindquarters, causing shock and loss of blood. This is quite common with calves but less common with sheep and goats. Young coyotes are more likely to kill in a manner similar to dogs, and some coyotes may kill in an abnormal fashion throughout their adult life. Coyotes normally begin feeding in the flank or just behind the ribs. Feeding on the hindquarters is also common, and small animals may be entirely consumed. Animal losses are easiest to confirm and evaluate if examination is conducted soon after losses occur. Scavenging birds and mammals also can eliminate evidence, sometimes within a few hours.

It is important to remember that not all deaths are caused by predation. Common causes of livestock losses other than predators include starvation, internal parasites, bacterial and viral diseases, pregnancy disease and other metabolic diseases, bloat, suffocation, poisonous plants and moldy feeds, chemicals, lead-based paints, discarded batteries, lightning, snake bite, and let’s not forget the all too common theft.
Goats - Getting Ready for the Breeding Season

Written by Tiffanee Conrad-Acuña from publications by North Carolina Extension

Are your goats ready for the breeding season? Ready or not its coming up soon. Goats are seasonal breeders and in our area, the breeding season usually extends from September to February. Does and bucks need to be together for approximately 45 days. This is the time necessary for the does to complete two estrus cycles. One buck for every 20-30 does is the recommended ratio for optimal breeding results. As the breeding season approaches, producers should be concerned with the body condition of their breeding does. Goats should not be allowed to become too thin or too fat. Reproductive failure, 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 not usually a problem. The ideal body condition score (BCS) just before the breeding season is between a 5 and a 6 to maximize the number of kids born. When body condition starts to decrease, it is a sign that supplemental feed is needed or that animals should be moved to a higher quality pasture. Waiting until goats become thin to start improving their feed quality may lead to large production losses. Producers 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.

Body condition score is used to determine whether flushing will be of benefit to breeding does. Flushing means increasing the energy level of feed given to breeding does, starting about one month before the introduction of the bucks. This increases body weight, ovulation rate, and litter size. 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. The added energy will provide adequate implantation of the fetuses in the uterus. Does in extremely good body condition (BCS = 6-7) will usually not respond to flushing. Does that are in poor condition (BCS = 4 or lower) as a result of summer pastures of poor quality, high worm loads, or 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 about 4 weeks before introducing the bucks. This cost-effective flushing method is often underused in the Southeast where forage is abundant. Another method is feeding 1/2 lb/day of a high energy supplement. Corn is the grain of choice for flushing. Whole cottonseed is another low-cost, high-energy supplement. As the goal is to increase the intake and body weight, breeding does should be grouped according to their BCS and fed accordingly to first improve their body condition to 6 and then to maintain it.

The buck pasture should be far enough from the breeding doe herd so that scent emitted by glands located behind the base of the buck's horns will not induce estrous in does. As a result of this, the "buck effect," does will come into heat approximately 7 to 10 days after the introduction of the buck. It is a good strategy to isolate the bucks and then to use them to naturally synchronize breeding does at the start of the breeding season. Before running the buck with a group of breeding does, it is a good idea to let it breed some cull does to flush its system because the sperm that has accumulated during the off-season is of low quality.

Animals that have a rough hair coat and poor general appearance and who stay thin and do not gain weight may have a high worm load. Such animals will not breed well. Therefore, it is a good practice to deworm the does and bucks before flushing and before the introduction of the bucks. Trimming the hooves of breeding animals is another practice that will increase reproductive success. Limping does may not let bucks breed them and bucks with hoof problems may not breed at all. Start trimming their feet several weeks before the breeding season so that they are in their best condition.

It’s a good idea to group the goats several weeks before the breeding season so that the pecking order will be established. If you form the groups during the season, it will disrupt their reproductive performance because of fighting and stress. It is also recommended to vaccinate goats against overeating disease (enterotoxemia) and tetanus. Breeding does should be vaccinated before the start of the breeding season and again 4-6 weeks before kidding. This is because some immunity will be passed on to the newborn kids. Following these few simple tips will help you to prepare for a successful breeding season.

Youth Livestock Shows

Fall is approaching which means fair season. Our youth are gearing up for another round of livestock shows. Many youth in our area participate in the Sandhills Showmanship Circuit. They go to different county shows and compete in heifer, meat goat, or lamb showmanship. The youth have been working with their animals to train them the proper way to walk and stand for the shows. The showmanship contest is about how well the youth has worked with their animal.
HYPP in Horses  By: Tiffanee Conrad-Acuña

More than 20 years have passed since the yearling Quarter Horse stud colt Impressive was purchased for $20,000 at the Indiana State Fair. He won every halter show he participated in because of his heavy muscling. Little did the owners know that he was carrying a dangerous genetic defect that would change the quarter horse industry forever. Hyperkalemic Periodic Paralysis Disease (HYPP) is a muscular disease that affects both horses and people. It is caused by a hereditary genetic defect that disrupts a protein called a sodium ion channel. The genetic defect disrupts the channel's normal opening and closing which in turn changes the voltage current of muscle cells, causing uncontrolled muscle twitching or muscle weakness. High levels of potassium in the blood usually are present when the disruptions in the ion channel occur. The constant twitching causes the horse to gain muscle without exercise.

Horses with HYPP can experience attacks of paralysis which can lead to collapse and sudden death. The cause of death usually is cardiac arrest and respiratory failure. The disease is characterized by muscle tremors or shaking, trembling, and weakness. Occasionally, episodes are accompanied by respiratory noises resulting from paralysis of the muscles of the upper airway. Signs of HYPP vary among different horses. Homozygous horses are affected more severely than heterozygous horses. Under ideal management practices, the defective gene does not appear to have adverse effects, but stress or increased potassium in the serum can trigger signs of muscle dysfunction. Why some horses display severe signs of the disease and others exhibit no signs is unknown. Unfortunately, a horse carrying the defective gene but showing minimal signs has the same chance of passing the gene to future generations as does the affected horse with severe signs. The disease can be managed with proper diet and sometimes medication is needed.

The original genetic defect causing HYPP was a natural mutation that occurred as part of the evolutionary process. The majority of similar mutations usually do not survive. However, the genetic mutation causing HYPP produced an altered functional sodium ion channel. This gene mutation is not caused by inbreeding. The gene mutation causing HYPP accidentally became widespread when breeders tried to produce horses with heavy musculature.

Even though HYPP is associated with horses of heavy musculature, this does not mean that all horses with well-developed musculature have the disease. The mutant gene causing HYPP has been identified in the descendents of the horse Impressive only. Research has not yet been performed on other bloodlines to determine whether the same or similar genetic mutation existing in other bloodlines also may cause HYPP. Since Impressive descendants are so numerous, the genetic mutation in the bloodline is widespread.

FALL ARMYWORMS  By: Becky Spearman

The fall armyworm is a chronic pest in the Southeast. It feeds on a variety of crops, but prefers lush, green, well-fertilized bermudagrass. Damage begins in late July or early August. The worms damage grass by chewing plant tissue. They are most active in the morning, late in the afternoon or in early evening, but on taller, unmowed grass can feed throughout the day. Larvae (caterpillars) may be up to 1-1½ inches long and vary in color from light green to almost black with several stripes along the body. The "face" is marked with a light-colored inverted "Y" (see below).

The presence of 5 medium to large fall armyworms per square foot justifies initiation of control measures. The NC Agricultural Chemicals Manual suggests the following to control fall armyworms:

* Methomyl (Lannate 90SP)- restricted use pesticide (7 days between application and harvest) or
* 80S, XLR, or 4F formulations of carbyl (Sevin) (14 days between application and harvest) or
* Spinosad (Tracer) - (3 days between application and hay harvest)

Always read and follow label directions and mixing instructions.

If the hay is close to ready, cutting it may be the best option for salvaging the crop and avoiding an insecticide. Apply insecticides early or late in the day when larvae are most active. Damaged fields should be closely monitored for the rest of the season to determine future treatments. Two weeks after damage, start checking for signs of egg laying.