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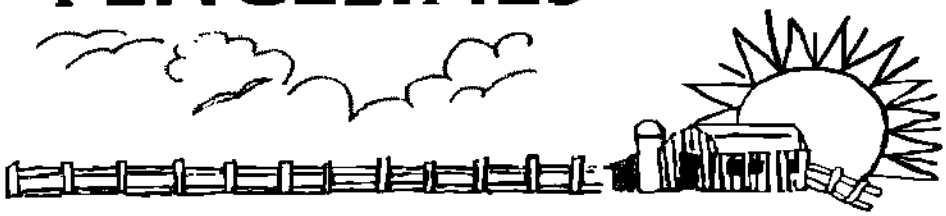
FENCELINES



Livestock Newsletter of the Southeast Extension District

Spring 2013

Inside this Issue:

It's spring and there's babies on the ground…

Written by: Adam G. Ross, Cattle Consultant - HRC Services
Submitted by: Margaret A. Bell, Livestock Agent – Craven and Jones Counties

As we look around the area we are seeing an abundance of calves lounging in the grass, being born, and playing in the lush, green grass. The cattle industry depends on these calves year by year to keep producing the world's highest quality beef. To manage this production effectively, we have some practices at our disposal to improve efficiency.

Over the past 60 years there have been tremendous advances in strategies and technology in the reproduction field. Artificial insemination was developed in the 1950's and today it is such an articulate science that we now have sexed semen available that allows us to breed specifically for heifers or bulls. Ultrasonography has advanced far enough that now we have the ability to have a unit not much bigger than a small radio on our belt and a pair of goggles that allows us to see the picture right in front of our eyes.

Developing an artificial insemination protocol is fairly easy and straightforward. With the advances in the animal pharmaceutical world, we have medicines that are very useful in synchronizing the cattle and having them all come into heat within a close period of time. This allows us to manage our reproduction to fit a season when prices will be at their peak.

Ultrasound allows us to pregnancy check the cattle and make sure they are working into the program. Ultrasounds also allow us to look at the animal's anatomy and make decisions on how we need to manage them – if they're cycling correctly, if they're cystic, or even if they have an early embryonic death. The ultrasound tool has greatly increased our diagnostic capabilities in the past years and continues to assist us in reproductive and health management for our herds.

While these advances are utilized to some extent, they do have a cost associated. Some of the practices we can implement, however, are free. Managing our breeding season for a specific period of time will allow us to have a defined calving season. To do this, we only need to look at manipulating the period for which we put the bull in the pasture. A basic number to remember is 75 days. This allows for the cattle to go through their heat cycle at least 3 times within the period and be bred. After this period, if the cattle aren't pregnant, it's time for them to go. We cannot keep the production level high if we aren't putting calves on the ground. We also cannot realize profits at a decent level if we aren't managing our reproductive strategies to the fullest extent.

Developing a reproduction strategy for your farm may be different than your neighbor's farm. Each operation is different and has different management goals in mind. To adequately develop a program, we need to take an in-depth look at your farm and then implement certain practices at different times to make it work.

Pre-Emergence Applications for Spring Weeds
By: Eve H. Honeycutt, Livestock Agent- Lenoir and Greene Counties

Think back to your pastures last year. Did you have lots of pigweed and dogfennel in the summer? How about grass weeds like crabgrass and goosegrass? If you had them last year, they will be back this year. Spraying the right chemical for the right weeds is very important. If you are unsure of your weed situation, call your Extension office and we can help you identify the weeds and the proper chemical to use. This months forage article will highlight methods to control warm season weeds.

Spring Weeds

The old standby for warm season weed control is 2,4-D. This product is safe on most pastures and will take care of several broadleaf weeds including dogfennel, horsenettle, and even pigweed in its earliest stages. There is 3 day withdrawal for meat animals and a 30 day hay restriction. For an added boost use a tank mix of dicamba (Banvel) according to the label directions, and you will see greater control of broadleaf weeds. Lactating animals should not graze this for 37 days, but other livestock have no grazing restrictions. Meat animals should be removed 30 days before slaughter.

Metsulfuron Methyl (Pastora) is an excellent herbicide for suppressing crabgrass and goosegrass in bermudagrass pastures and hayfields. It also does a good job at controlling signalgrass, johnsongrass, sandbur, bahiagrass, curly dock, horseweed, pigweed, and many more. You may see a slight yellowing of the bermudagrass after application, but it will bounce back nicely. Be careful not to over apply this product. There are no hay or grazing restrictions

Nutsedges and Johnsongrass are particularly problematic in wet areas such as low lying areas and sprayfields. Sulfosulfuron (Outrider) is a product that works well on these species. It can be applied to established bermudagrass pastures with no grazing restrictions and a 14 day hay restriction.

These are just a few of the many products available for weed control. For a weed control method specific to your situation, call the Extension office to discuss your needs. If you have a particularly stubborn weed, make sure you can identify it properly (Extension can help) and we will help you find the right herbicide. Late March and early April is the best time to spray for warm season weeds. Don't wait until its too late!

Preventing Enterotoxemia and Tetanus in Goats

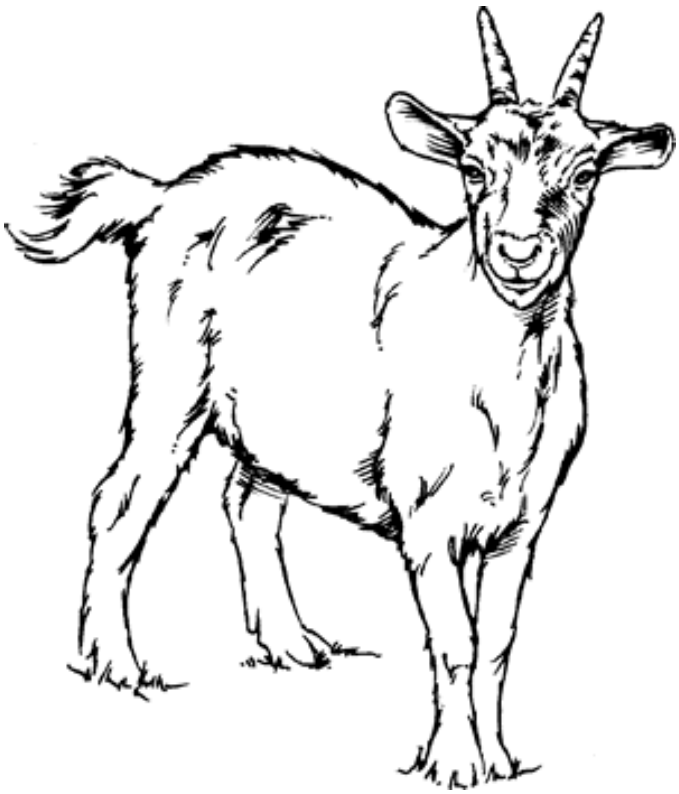
By: Eileen A. Coite, Livestock Agent - Wayne County

Information compiled from Vaccinating Goats Against Enterotoxemia and Tetanus: Is it Necessary? (ANS 09-614MG) by Drs. Jean-Marie Luginbuhl and Kevin L. Anderson, 2010.

Have your goats been vaccinated for enterotoxemia, otherwise known as overeating disease? How about tetanus? If you are in the goat business but aren't familiar with these diseases, or if you haven't had a chance to vaccinate for them you might want to consider. Enterotoxemia and tetanus are similar diseases because they both are caused by clostridial bacteria that can be found in the environment or in animals. Because of these similarities, the vaccines for both are often combined in one dose and make it easier to administer and lower the cost from having to give two vaccinations.

Enterotoxemia, or overeating disease as it commonly is called can affect goats of all ages, and can often be fatal. It usually is a bigger concern for young goat kids and often those that grow the fastest or those that over-consume feed after becoming excessively hungry, hence the term "overeating disease". What happens is that normal bacteria found in the intestines of goats (and also found in the soil) reproduce rapidly and release high amounts of toxins in the gut. How can we prevent overeating disease? If you add grain to a goat's diet, or change their diet in any way, make all changes gradual. This might mean taking a couple of weeks to introduce the new diet to allow the goat's system to acclimate to the diet. Vaccinating for *Clostridium perfringens* types C and D will also protect against enterotoxemia.

Tetanus is caused by the bacterium *Clostridium tetani*. It is a neurological disease caused by this toxin, which is found in manure and also in the soil. It is very similar to the tetanus we are vaccinated for every ten years or if an injury occurs. Tetanus bacteria can enter the body of goats through wounds due to castration, disbudding, ear tagging, etc. The disease symptoms might not show up for several days after the wound takes place, but if affected, neurological problems will arise, such as muscle spasms, stiffness, and the common "lockjaw" symptom when they have difficulty opening their mouth. If not treated an animal will eventually go down permanently and die.



Make sure your goat herd is protected against these deadly bacterial diseases. Vaccines such as the 3-way "C-D-T" vaccine are available to prevent from both. Check the label for administration instructions and withdrawal times. These vaccines can be given through subcutaneous or intramuscular injection. Withdrawal times (the amount of time from treatment to marketing the animal) is usually 21 days for vaccines. Again, follow the label for vaccine handling, administering, and withdrawal instructions. For more information on vaccinating or preventing diseases in your goats or other livestock, your Cooperative Extension office can help, or contact your veterinarian.

Minimizing Heat Stress in Pigs During the Summer

By: Abby Dilley, Livestock Agent - Pender and Onslow Counties

Adapted from an original article by Dr. Mark Whitley, Assistant Extension Professor, University of Minnesota Extension

Although more common in tropical and subtropical regions, heat stress in pigs can and does occur in the upper Midwest at certain times during the summer. Extreme warm conditions can result in death losses if attention is not given to providing supplemental cooling to animals, but more commonly losses are realized in reduced growth performance in nursery, growing, and finishing pigs, along with decreased reproduction in the breeding herd. Heat stress can affect pigs of all ages, but becomes more pronounced and occurs at lower temperatures in heavier pigs, due to lower optimum temperatures for these animals.

Animal Age, Weight	Optimum Temperature (Fahrenheit)	Desirable Temperature Limits (Fahrenheit)
Lactating sow	60	50-70
Litter, newborn	95	90-100
Litter, 3 weeks old	80	75-85
Prenursery, 12-30 lbs	80	75-85
Nursery, 30-50 lbs	75	70-80
Nursery, 50-75 lbs	65	60-70
Growing-finishing	60	50-70
Gestating sows	60	50-70
Boars	60	50-70

Pork Industry Handbook, Extension Bulletin E-2574

There are two major methods pigs will use to minimize the effects of heat stress: increased heat dissipation and reduced production of body heat. Pigs will attempt to increase heat dissipation by increasing contact of their body with a cooler surface (floor) by sprawling out. Increased respiration, or panting, increases air flow and evaporation of water from the lungs, releasing additional heat. Pigs do not sweat like humans, and therefore cannot sweat or utilize evaporative cooling off their skin to cool off. Pigs also reduce the amount of body heat generated by reducing feed intake. Digestion of components in the feed releases heat, which must then be dissipated, so reduced feed consumption reduces the amount of heat generated from digestion.

Minimizing Heat Stress - There are a number of methods and areas producers can evaluate and utilize to minimize heat stress in their pigs.

Water Supply – Ensuring adequate quantities of quality water are available is extremely important to ensure pigs to not become dehydrated. Cool drinking water provides the most heat relief. A large amount of the water consumed during hot weather is utilized to dissipate heat via evaporative heat loss from respiration. Waterers need to be adjusted and functioning properly, with enough waterers available to allow adequate access.

Type of Pig	Water/ Head/ Day, gallons	Pigs/ Nipple	Minimum Nipples Flow Rate, gal/min
Sow Litter	8	----	1.0
Starting pig (10-45 lbs)	1	10	0.3
Growing pig (45-120 lbs)	3	12-15	0.5
Finishing Pig (120- 250 lbs)	5	12-15	0.67
Gestation sow	6	12-15	1.0

Adapted from Pork Industry Handbook, PIH-87

Wet Skin Cooling – Pigs, under natural conditions outdoors, wallow in mud to cool themselves. The mud itself does not provide significant cooling directly, but instead evaporative cooling occurs as the mud dries, while it also provides a protective barrier against the sun. In confinement systems, water sprinkler systems and drip coolers can also provide effective supplemental evaporative cooling. In group pens, sprinkling water in 1 to 2 minute intervals every 20 – 30 minutes allows moisture to evaporate off the

pig's skin before wetting and starting the cooling process over again, and is more effective than leaving waterers on continuously. Larger water droplets are the most effective, as fogging increases the humidity of the surrounding air and therefore indirectly reduces the evaporative rate for heat loss on the pig. For sows individually housed in gestation or farrowing stalls, dripping water on the necks and shoulders combined with air movement also provides direct evaporative cooling. Water drips should be set such that water is nearly or completely evaporated before reaching the flooring.

Nutrition – Pigs will reduce voluntary feed consumption at temperatures above their ideal range in order to reduce the amount of heat being generated due to digestion. Therefore, diets should be reformulated in the summer to be more nutrient dense, ensuring nutrient needs (amount/day) are still being met. Including higher levels of fat, such as beef tallow, choice white grease, or vegetable oil, will increase caloric density while also reducing the amount of heat generated during digestion. Fat is typically added at levels of 2 – 6% of the diet. Fibrous ingredients, such as soybean hulls, wheat midds, alfalfa, etc… should not be fed during hot weather, since caloric density is much lower and will also contribute towards higher heat liberation during digestion.

Adequate Ventilation – Rapid air movement over pigs increases the rate of evaporative and convective heat loss, and is particularly important in confinement buildings. Providing and operating supplemental fans over pens to increase air velocity to at least 3 mph is very effective in warm conditions. Additionally, air exchange in mechanically ventilated buildings should be increased in hot weather to increase the removal of humid air from barns.

Type of Pig	Cold Weather Rate, cfm/hd	Mild Weather Rate, cfm/hd	Hot Weather
Sow and Litter	20	80	500
Prenursery Pig, 12-30lbs	2	10	25
Nursery pig, 30-75lbs	3	15	35
Growing pig, 75-150 lbs	7	24	75
Finishing pig 150-220 lbs	10	35	120
Gestating Sow	12	40	150
Boar	14	50	300

Midwest Plan Service, MWPS-8

Floor Space – Under conditions of heat stress, it is encouraged to increase the minimum floor space allowed per pig when possible. Increased floor space improves the ability of each pig to dissipate heat, and is particularly important in larger pigs that are more vulnerable to increased temperatures.

Type of Pig	Weight, lbs	Area, ft^2
Prenuresery	12-30	2-2.5
Nursery	30-75	3-4
Growing	75-150	6
Finishing	150-220	8

Midwest Plan Service, MWPS-8

Adequate Insulation – Properly designed and maintained buildings should contain ample levels of insulation to not only prevent excessive heat loss during the winter, but also help minimize solar heat build-up during the summer. Buildings that were originally designed an built with adequate levels of insulation can have reduced effectiveness later on. Age and rodent infestation can greatly reduce the insulating value, or R-value, of the insulating material, and therefore needs to be evaluated at least annually.

Shade – Pigs that are reared outdoors must have areas shaded either naturally via trees or have structures built to provide relief from the sun. Shade provides relief by blocking a significant proportion of the radiant heat load from the sun. If constructing artificial sources of shade, excellent roof materials include uninsulated aluminum or bright galvanized steel. The reflective surface helps deflect radiant rays from the sun.

Equine Herpes Virus - Outbreak

Submitted by: Margaret A. Bell, Livestock Agent - Craven and Jones Counties
Horse Blog: nchorse.blogspot.com

Do you know what Equine Herpes Virus is? How could it affect your mares? Read on to find out more. *From Dr. Michael Yoder, NCSU Animal Science, REINS Coordinator:* Attached, please find a news release documenting the EHV-1 Wild Type, outbreak in Florida. The Wild Type EHV-1 may cause abortion in mares, but may also result in neurological issues that are very serious. To date, North Carolina has not been exposed to the disease in 2013. If you wish to follow the information coming from the Florida State Veterinarian, you may find that information on the following website.
http://www.freshfromflorida.com/ai/
EHV-1 Outbreak and Quarantine Information
March 3, 2013 (Revised information is *italicized)*

A horse participating in the Horse Shows in the Sun (HITS) horse show in Ocala was referred to the University of Florida, College of Veterinary Medicine after showing clinical neurological signs on February 20th. The horse subsequently tested positive for the Equine Herpes Virus (EHV-1), wild-type strain. Currently, the horse is in stable condition and continues to be treated at the University of Florida.

Five additional horses that are linked to the HITS Show in Ocala have tested positive for EHV-1 wild type. One is located at Redfield Farm in Ocala and four are located at Miles Away Farm in Loxahatchee, Florida. One of the positive horses located at Miles Away Farm, has developed neurological signs and is being treated at the University of Florida, College of Veterinary Medicine. While the additional positive horses were detected after leaving the Showgrounds, they resided in Tent 3 and Tent 6 in proximity to Tent 7 which housed the index case. With evidence of more widespread exposure, the HITS Showgrounds have been placed under quarantine. An additional horse, with no clinical signs of disease that is linked to the HITS showground's, has tested positive for EHV-1 and is located at Calder Farms, in Ocala. That horse continues to remain clinically healthy with no signs of EHV-1 infection.

A horse not believed to be linked with any of the HITS-associated quarantined premises has also been positive for EHV-1. This horse is located at Tequestrian Farm in Wellington, Florida.

The Division of Animal Industry is continuing their disease investigation and developing protocols for surveillance and quarantine release measures. An Incident Command Team comprised of state and federal personnel has been mobilized to implement appropriate control measures. Quarantined Farms/Premises**

- HITS Showgrounds, Ocala – Entire facility
- Up Country Farm/Synergy Farm, Ocala
- Montera Farm, Ocala
- Flutterby Farm, Ocala
- Foxwood Farms, Pinellas Park
- Black Forest Farm, St. Augustine
- POD-F Farm (Littlewood Farm), Wellington
- Brookmore Farm, Oviedo
- Kings Ridge Farm, Reddick
- Tequestrian Farm, Wellington
- Redfield Farm, Ocala
- Miles Away Farm, Loxahatchee
- Calder Farms

**The quarantines listed above do not necessarily encompass the entire premises.

Premises Released from Quarantine

- FEI tent at Wellington Showground's – February 28, 2013

Known State Movement Restriction for Horses

- California requirements include a negative test for Equine Infectious Anemia, obtained within the six (6) months before date of entry, and a Certificate of Veterinary Inspection (CVI) with a body temperature recorded for each horse in the shipment. Accredited veterinarians preparing CVIs are responsible for fulfillment of the temperature recording requirement.

We are advising horse owners and trainers to contact the venue of destination for any additional requirements prior to travel.

Recommendations for horses that have shown at HITS since February 5, 2013 include close monitoring of animals, reporting of fevers greater than 101.5 and strict bio-security measures for at least 21 days after departure from HITS.

We are asking all those in the equine community to practice prudent bio-security on their farm and to report any suspected cases of EHV-1. For reporting, you may call 850-410-0900 Monday through Friday 8:00am-5:00pm and 1-800-342-5869 after hours and weekends.

The Florida Department of Agriculture and Consumer Services with continue to work with HITS management, trainers, and veterinarians to ensure proper safeguards are taken to prevent further spread of the disease.

Frequent informational updates will be provided, so please continue to visit this Website regularly at: http://www.freshfromflorida.com/ai/.

Additional Resources:

More information on the Equine Herpes Virus (EHV-1) can be found at the following websites:

- *American Association of Equine Practitioners, http://www.aaep.org/health_articles.php?category=Equine+Herpesvirus+%28EHV%29*
- *Gluck Equine Research Center, University of Kentucky, http://www.ca.uky.edu/gluck/BiblioEHV1.asp*
- *University of Florida, College of Veterinary Medicine, http://extension.vetmed.ufl.edu/files/2012/02/EHV-June-2011.pdf. Bio-security information, to help reduce the risk of spread contagious and infectious*

diseases can be found at the following Websites,

- *American Association of Equine Practitioners, http://www.aaep.org/pdfs/control_guidelines/Biosecurity_instructions%201.pdf*
- *United States* Department of Agriculture, Animal and Plant Health Inspection Service (USDA, APHIS), http://www.aphis.usda.gov/publications/animal_health/content/printable_version/HorseBioSecurity_final.pdf

Forage Management Tips

April

•Fertilize cool-season grasses if you have not already done so.
•Watch for symptoms of grass tetany.
•Winter annual pastures should be completely used before grazing pastures which may be harvested as hay.
•To maintain clover in grass pastures and to maintain quality, develop a rotational grazing system in which cattle can graze forage to a 2 inch height before moving to another pasture.
•Fertilize warm-season grasses as soon as dormancy breaks.

May

•Plant warm-season perennial grasses such as common or seeded bermudagrass.
•Plant summer annuals such as pearl millet by May 15.
•Fertilize warm-season grasses with nitrogen after each cutting or every four to six weeks on pastures.
•If irrigation is available, hybrid bermudagrass sprigs may be planted, but weed control will be essential.
•Spray pasture weeds while they are small (3 inches or smaller) for most effective control.

June

•Take soil samples from fields which will be overseeded or planted during the fall.
•Apply lime as far in advance of planting as possible.
•A late planting of summer annuals may be made to extend forage supply.
•To stimulate yield of warm-season grass such as bermuda, apply nitrogen after each cutting or every four to six weeks.
•Graze bermudagrass close (1 to 2 inch stubble) and harvest any growth that has not been grazed every four to six weeks.
•Control summer pasture weeds before they get too tall and mature.

Calendar of Events

RSVP FOR ALL EVENTS BELOW TO THE CRAVEN COUNTY COOPERATIVE EXTENSION OFFICE AT (252) 633.1477 UNLESS OTHERWISE NOTED

March 26, 2013: Craven & Jones Counties Livestock Association Meeting, Bethany Christian Church, 7:00 PM, POTLUCK SUPPER.

March 27, 2013: Wilson County Skill-A-Thon and Livestock Judging Competition, Wilson County Fairgrounds.

March 28, 2013: Jones County 4-H Livestock Club Meeting, Jones County Cooperative Extension Office. Contact Club Leader, Mary Murphy, for more information at (252) 933.2034.

April 1 – 2, 2013: Coastal Plains Jr. Livestock Show & Sale, Lenoir County Livestock Arena. Contact Eve H. Honeycutt for more information at the Lenoir County Cooperative Extension Office at (252) 527.2191. *Note: Entry forms were due February 14, 2013.*

April 3 – 4, 2013: Wayne County Livestock Show & Sale, Wayne County Fairgrounds. Contact Eileen Coite for more information at the Wayne County Cooperative Extension Office at (919) 731.1521.

April 10 – 12, 2013: Farm Animal Days at North Carolina State University Beef Educational Unit, Raleigh. Visit the website for more information and to register: http://www.cals.ncsu.edu/farmanimaldays/.

April 10 – 12, 2013: Craven County Water Conservation Days. For more information contact Tom Glasgow at the Craven County Cooperative Extension Office.

April 18, 2013: Jones County Science Day, Jones County Civic Center. Contact Erin Morgan at the Jones County Cooperative Extension Office at (252) 448.9621 for more information or to volunteer.

April 27, 2013: District Activity Day, Mount Olive College. Jones County – contact Erin Morgan at the Jones County Cooperative Extension Office at (252) 448.9621. Craven County – contact Wendy Paschal at the Craven County Cooperative Extension Office at (252) 633.1477.

April 29 – 30, 2013: Initial Animal Waste Operators Class, Onslow County Cooperative Extension Office. Contact Nita Walton at (910) 455-5873.

April 30, 2013: Responsible YOUth, Jones County Civic Center. Contact Erin Morgan at the Jones County Cooperative Extension Office at (252) 448.9621 for more information or to volunteer.

May 2, 2013: Jones County Community Event, 6:00 PM – 8:00 PM, Jones County Civic Center. Contact Erin Morgan at the Jones County Cooperative Extension Office at (252) 448.9621 for more information.

May 15, 2013: CARTs (County Animal Response Team) Training. All volunteers or interested volunteers are welcome to attend. More details to come via email listserv. If you are not currently on my listserv, contact me and request to be added.

June 3, 2013: *FOR ADVISORY COUNCIL MEMBERS* – Advisory Council Meeting, Jones County Cooperative Extension Office, 7:00 PM. Contact the Jones County Cooperative Extension Office to RSVP at (252) 448.9621.

June 13, 2013: Animal Waste Operator Exam. Must pre-register for exam, pay associated fees and have taken the 10-hr initial class.

June 13, 2013: Livestock Judging Clinic, North Carolina State University Beef Educational Unit.

June 14, 2013: Skill-A-Thon Clinic, North Carolina State University Beef Educational Unit.

June 17, 2013: Youth Livestock Showmanship Clinic, Duplin County. Contact Abby Dilley or Justin Whitley for more information at (910) 296.2143.

June 22 – 25, 2013: 4-H Congress. Fore more information, contact Erin Morgan at the Jones County Cooperative Extension Office at (252) 448.9621.

Voluntary Agricultural District (VAD Program)

Craven County agricultural field crop and livestock producers generate $50-70 million dollars of farm sales each year. Enrollment of lands into farmland preservation programs identifies and preserve existing farmlands. Additionally, it adds additional protection for the producer and landowner against nuisance lawsuits, notifies potential new landowners of agricultural activities and provides a priority ranking or reduced cost share for some USDA programs. Please consider enrolling lands into either the Voluntary Agricultural Districts or Enhanced Voluntary Agricultural Districts if you are a landowner. The Craven Soil & Water Conservation District is accepting applications for enrollment into the Voluntary Agricultural and Enhanced Voluntary Agricultural Districts. Applications can be obtained from the Craven County Soil & Water Conservation office, our office or downloaded from our web page (http://craven.ces.ncsu.edu/). Cost of enrollment is $76. For more details, visit, http://craven.ces.ncsu.edu/content/VAD

We're on the web!

http://craven.ces.ncsu.edu/

http://jones.ces.ncsu.edu/

http://cravenjoneslivestock.blogspot.com/

http://nchorse.blogspot.com/

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Fencelines is a quarterly newsletter written by a team of Southeast District Agricultural Agents for livestock producers of Southeastern North Carolina. For more information on material and events presented in this newsletter, contact your local agent and Cooperative Extension office at:

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