

Hello Everyone,

Included is the Weekly Pile of Information for the week of October 8th, 2017 Extension's Equine related educational information & announcements for Rockingham & Guilford Counties. To have something included in the Weekly Pile, please follow these simple guidelines.

- Information included needs to be educational in nature &/or directly related to Rockingham or Guilford Counties.

- provided information is a resource to the citizens of Rockingham & Guilford Counties.

- provided information does not require extra time or effort to be listed.

- Listings for Swap Shop will not list pricing details.

- Please E-mail information to me by Wednesday each Week.

- Please keep ads or events as short as possible – with NO FORMATTING, NO unnecessary Capitalization's and NO ATTACHED DOCUMENTS.

(If sent in that way, it may not be included)

- Please include contact information - Phone, Email and alike.

- PLEASE PUT WEEKLY PILE IN SUBJECT LINE when you send into me.

- The Weekly Pile is not for listings for Commercial type properties or products.

If I forgot to include anything in this email it was probably an oversight on my part, but please let me know!

If you have a question or ideas that you would like covered in the Weekly Pile, please let me know and I will try to include. As Always, I would like to hear your comments about the Weekly Pile or the Extension Horse Program in Rockingham or Guilford Counties!

I NEED YOUR FEEDBACK & IDEAS!

Included in The Pile this Week:

1. FIRE ANTS

2. Wellness Exams

3. Renting Agricultural Land

in Rockingham & Guilford Counties

4. You Asked

5. Fecal Egg Counts

6. Weaning & Management of Weanling Horses

7. FALL PASTURE MANAGEMENT TIPS

8. Downed Trees & Livestock

9. Circular Logic

10. 2017 North Carolina State Fair

11. Upper Piedmont Research Station Field Day 10/28

12. HorseFriends Schooling Hunter Show & Tack Sale - 10/28

13. The Ag Tax Issues Short Course Nov 3

14. Amazing Grazing Workshop Workshop 11/11

15. Farm Service Agency Reminder

16. NCSU Equine Grazing & Pasture Management School 12/2/17

17. HAY DIRECTORY

18. Swap Shop

19. Take A Load Off

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1. FIRE ANTS

Mike Waldvogel, NCSU Extension Entomology

After this rain, as things dry out and we maintain moderate temperatures in many areas of the state, we are likely to see the late season fire ant mounds showing up. (If you haven't already, for those in the southern parts of the Piedmont) At this point for homeowners, baits or mound drenches are more likely to be the route to go. If using the fipronil-based granular insecticides (not the granular bait) and you already made an application in the spring or summer, then they need to check the label because products like Over N' Out may restrict use to one 2-lb/acre application per year.

Baits like Amdro will work but extremely slowly at this point. The indoxacarb bait such as Spectracide's "Once N Done" will give faster knockdown of the mound compared to Amdro. Mound drenches will knock down the mound pretty quickly as well.

Fire ants can be present without mounds. The dry conditions all summer have suppressed mound-building and we could see an explosion this fall.

Now, if we could train fire ants to carry off bed bugs, we'd be set ...

FIRE ANT MANAGEMENT IN PASTURES

<http://www.ces.ncsu.edu/depts/ent/notes/forage/rifanote04/rifanote04.htm>

FIRE ANT MANAGEMENT IN HORSE OPERATIONS

<http://www.ces.ncsu.edu/depts/ent/notes/forage/rifahorsenote05/rifahorsenote05.htm>

Management of Imported Fire Ants in Livestock Production Systems

<http://articles.extension.org/pages/9755/management-of-imported-fire-ants-in-livestock-production-systems>

Managing Fire Ants In Your Yard (includes a short movie)

<http://www.ces.ncsu.edu/depts/ent/notes/O&T/lawn/note145/note145.html>

To read more about the Fire Ant Regulations go to:
<http://www.ncagr.com/plantindustry/plant/entomology/IFA.htm>

Fire Ant Control (Management) (& other links)

<http://articles.extension.org/pages/61993/fire-ant-control-management>
<http://articles.extension.org/pages/9758/fire-ants:-publications-and-fact-sheets>

FIRE ANT VIDEO

http://www.ncsu.edu/project/ent_video/fireant/fireant_control_test.mov

Keys to Successful Fire Ant Baiting

- * Buy fresh bait and only what you will use up within a short time.
- * Do not store bait near other pesticides, fuels or products from which it will absorb odors.
- * Do not apply it to wet grass or when rain is expected within 24 hours.
- * Do not apply directly on top of a mound. Ants do not forage there.
- * Do not disturb the mound. Ants that are rebuilding or defending a nest are not busy foraging.
- * Do not apply bait when the temperatures are too hot or too cold. Perform the "potato chip test" before baiting. That is, in mid-morning before baiting, drop one or two potato chips near a mound. If ants are consuming the potato chips within 20 minutes, it is a good time to apply bait.

NOTE: Club soda will not control them, even if
you could drowned the mound (or come close).

However, if you drink alcohol, you may find it useful for pain & numbing when you step on a mound and get stung repeatedly to take the club soda and dilute it: 1 part club soda to 4 parts Scotch Whiskey (single malt only). Then, down about 4 of those and you will notice that the pain significantly subsides (or at least your memory of it does!). Then, the following morning (not when you drink the Scotch) take two Tylenol for the whopping headache you'll have (along with a bunch of welts on your leg and you can't remember how they came about).

WARNING: No Driving after consumption of any alcoholic beverage.

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2. Wellness Exams

Jamie D. Warner - Extension Agent, Livestock, Montgomery County

Wellness exams are essential to keeping your horse healthy and can catch small problems before they become major health concerns. Horse experts recommend that you have your horse examined annually by a trusted veterinarian and more often than once a year for older horses.

During these wellness exams, it is always important to review the animal's health history, making sure that you point out anything and everything that has changed since the last exam. A good physical assessment should also take place and should include body temperature, respiration rate, heart rate, body condition score, a good look inside their mouth, listening to their GI tract, heart and lungs. A fecal sample should be collected at this time to be evaluated for internal parasites. Fecal egg counts indicate the parasite load inside the animal and help your veterinarian determine the best wormer rotation for your

animal. On the flip side, if the parasite load is low, the fecal sample indicates that you are already controlling parasites on your property. Either way, this is information that owners need to know.

Blood work and vaccinations may also be conducted during wellness exams. According to the American Veterinary Medical Association, horses should receive annual core vaccinations. These core vaccinations are Eastern/Western Equine Encephalitis, Tetanus, Rabies and West Nile Virus. Depending on your location, there may be other vaccinations that your vet will recommend to you. Certain blood tests will give the doctor an inside look at what is going on internally and could detect irregularities so that they may be addressed quickly and efficiently.

Winter is right around the corner so Fall is the perfect time to have your vet check your horse's gait for changes or signs of lameness that can progress quickly during harsh winter weather. Lameness exams should definitely be conducted on horses with arthritis to evaluate whether or not they will require additional treatment or care throughout the winter.

Wellness exams are a time for owners to discuss nutrition, diet changes and exercise routines along with anything else that you might have questions about. Before the exam, make a list of all the questions that you have for your veterinarian so that you can be sure you won't forget to ask them while they are there. Don't wait! Go ahead and schedule your Equine Wellness Exam as soon as possible because healthy horses are happy horses and happy horses make happy owners.

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3. Renting Agricultural Land in Rockingham & Guilford Counties

In Rockingham & Guilford Counties rental rates have a range from \$0-\$50/Acre/Year for traditional Agricultural crops (may possibly be higher depending on situation)

- Typical grain rental rates are about \$25/Acre/Year and vary depending on productivity of land.

- Pasture rates can range from \$0-\$50/acre/Year with most falling in the **\$10-\$30/Acre/Year** range

This spread is due to many factors such as:

- why is land being leased (to generate income, to keep the land from growing up or to keep in agricultural use)

- land use

- how much land is available

- Term of Lease - how long can the land be leased

- How productive is the land for crops

- What the current status of the land (ie. fertility, condition of pasture, how much improvement is needed for the intended use)

- Available barns/buildings/working facilities or equipment on property for use

- Is a water source or system in place for irrigation purposes or watering livestock?

- Is land fenced for livestock use?

- Species of Livestock

Agricultural Land Values

National Agricultural Statistics Service

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1446>

AGRICULTURAL LEASES

Leases - NC Department of Agriculture

<http://www.ncagr.gov/aglaw/leases.htm>

North Carolina Farm Land Prices

<https://tobacco.ces.ncsu.edu/wp-content/uploads/2013/06/Farm-Land-Prices.pdf?pwd=no>

Factors Affecting Farm Rental Rates and Agreements

<https://craven.ces.ncsu.edu/factors-affecting-farm-rental-rates-and-agreements/>

Southern Region News Release Land Values and Cash Rents

[https://www.nass.usda.gov/Statistics_by_State/Regional_Office/Southern/includes/Publications/Economic_and_Demographic_Releases/Land_Value/Land_Values\(Aug\)2015.pdf](https://www.nass.usda.gov/Statistics_by_State/Regional_Office/Southern/includes/Publications/Economic_and_Demographic_Releases/Land_Value/Land_Values(Aug)2015.pdf)

Farmland rental rates and land economics

<https://www.extension.umn.edu/agriculture/business/land-economics/>

2016 AGRICULTURAL LAND Land Values and Cash Rents

https://www.nass.usda.gov/Publications/Highlights/2016_LandValues_CashRents/2016LandValuesCashRents_Highlights.pdf

NC Quick Stats USDA -

<https://quickstats.nass.usda.gov/results/E0F5EB36-3313-3D7B-9E7F-E56A3365CF2B#9A9F55D7-E267-38C6-ACB9-DF106291B5A7>

2015 GUIDE TO PRICING FARMLAND FOR RENT: WHAT SHOULD I CHARGE?

<https://peoplescompany.com/blog/2014/2015-farmland-rental-rates-what-should-i-charge>

Agricultural Land Values National Agricultural Statistics Service

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1446>

Pasture Lease NCFMEC-03A - Ag Lease 101 -<http://aglease101.org/DocLib/docs/NCFMEC-03A.pdf>

Farmland rental rates and land economics

<http://www.extension.umn.edu/agriculture/business/land-economics/>

Sample Pasture Lease Agreement (Not a legal document)

http://greenlandsbluewater.net/Perennial_Forage/Ohio_sample_pasture_lease.pdf

Leases, Marketing, Financial Management

<http://www.tein.net/~msufergus/Ag/Forms/forms.htm>

HORSE LEASE AGREEMENT

<https://buffalo.uwex.edu/files/2010/06/Horse-Lease-Agreement.pdf>

Pasture Rental Agreements For Your Farm

<https://aglease101.org/DocLib/docs/NCFMEC-03.pdf>

Grazing Lease Checklist

<http://nationalaglawcenter.org/wp-content/uploads/2014/03/Grazing-Lease-Checklist-Dowell.pdf>

Options for Clearing Land: Pasture Establishment for Horses

<http://pubs.ext.vt.edu/465/465-341/465-341.html>

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4. You Asked: I have to keep & feed a group of horses together and have a hard time with the dominant horse at the feed trough. Can you provide any suggestions to help with this??

I will take a stab at giving suggestions assuming I correctly understand your question.

In a herd situation, horses establish a dominance hierarchy, or a pecking order. In group feeding, one must keep this hierarchy in mind. Aggressive or dominant horses eat more than their share by chasing away others from the feed tubs, and timid horses do not get enough. For this reason, adequate feeder space should be available.

Young horses show little aggressive dominant behavior towards other horses during feeding. Mature horses, however, will show aggressive dominant behavior towards their pasture mates during feeding.

The goal of group feeding is to allow all of the horses to consume enough feed to meet their requirements. In order to minimize injury when feeding a group, the most dominant horse should be fed first and the least dominant horse fed last.

When feeding grain, feed tubs should be placed at least 50 feet apart and away from any fences. Placing the feeders in a circle appears to work best because it mimics the horses' natural group grazing behavior.

If using feed troughs, it is not appropriate to use just one trough, as the most dominant horse may control too much area in the trough. Instead, many smaller troughs should be used. It is a good idea to place one more trough or feed bucket than there are horses in a pasture to allow each horse a better chance of consuming the feed.

An alternative way to feed a group is to use feed bags, but this method is more labor intensive.

When feeding hay, racks that accommodate two to four horses each should be placed at least 50 feet apart. If feeding on the ground, hay should be scattered in different locations.

(Craig Wood University of Kentucky)

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5. Fecal Egg Counts

Tiffanee Conrad, Extension Agent, Agriculture – Livestock, Richmond County

Fecal egg counts can be performed on any species, but they are especially important for horses. Parasite resistance to dewormers is a problem in horses.

Most people use fecal egg counts to figure out if their dewormer is still working on their farm. They will perform a count, deworm the animals that need it, and then two weeks later, do another count. If the worm egg load has not decreased

by 90%, then the dewormer you are using is starting to lose its effectiveness. You have severe resistance issues when your egg counts show less than a 60% reduction. There are three classes of dewormers and in this case, you would have to switch. You cannot just switch to another brand name of dewormer because it could be in the same class, you must look at the active ingredient when switching dewormer classes.

When counting, you are checking for strongyles in horses, because they are the parasite that causes most of the problems. However, there have been a few cases when other parasites are the real culprit such as liver flukes or coccidia. They require different treatments, so it's important to first figure out what you are dealing with. You may have some animals on your farm that have problems, but when you check the fecal eggs in the microscope, they may not have a heavy worm load. This is important to find out as you are trouble shooting, because you can eliminate parasite pressure as being a possibility. The animals may have a disease that you will need to treat.

When checking fecal egg counts, you may discover a few animals in your herd that always have high worm loads. This is why keeping good records is really important. At that point, you may decide to cull those high worm load animals off your farm. Parasite resistance is moderately heritable, so it's a good idea to sell those animals instead of breeding them since they can pass on the problem to their foals.

Several farmers have gotten serious about fecal egg counting after getting trained and have bought their own microscope and supplies to do their own counts on the farm. If an animal is doing poorly, that is often the first step they take towards troubleshooting the problem. Some farmers chose to only run samples every once in awhile and in that case will bring their samples to the Extension office to run them. Some farmers will bring their samples to a local Veterinarian to analyze. Which ever way you decide to go, fecal egg counts can be very beneficial to your farming management plan.

You can work with your Veterinarian on threshold limits, so that you know when deworming is needed. Just a few worm eggs in every sample is normal. Parasites like warm, wet weather, so you may need to do fecal egg counts more frequently during this time, but you can check them all year. Some supplies that you will need are a microscope that is able to magnetize 100 times, a measuring vial or scale, a McMaster slide (preferably with green lines for more visibility, cups, fecasol, a strainer, popsicle sticks, a timer, gloves, and an eye dropper.

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6. Weaning & Management of Weanling Horses

David W. Freeman Oklahoma Cooperative Extension Equine Specialist

Young, weaned horses below the age of one year are called weanlings. During this time of life, the foals have been separated from their dams, are rapidly growing, and are receiving training and management practices that have life-long effects. This fact sheet provides recommendations on preparing the foal to be weaned, weaning methods, and care and management of the weanling horse. More information on growing horses can be found in OSU Fact Sheet F-3985, "Foaling Management and Care of the Nursing Foal" and OSU Fact Sheet F-3977, "Managing Young Horses For Sound Growth."

Preweaning

Care Foals will spend the first four to five months by their dam's side receiving their nutrition from the mare's milk. The foal's nutritional requirement is met solely from the mare's milk the first several months of age. As the foal becomes larger, their nutrient needs exceed the nutrients available from the mare's milk. Foals will begin eating small amounts of grain within weeks after birth. If given access to grain, most will consume substantial amounts by two to three months of age. Most foals will readily eat from the dam's trough; however, to insure access, many farms use creep feeders. Creep feeding, supplying a separate feed source to nursing foals, is especially important on farms that wean later than 4 months of age. By this age, the foal's nutritional needs exceed what is available from their dam's milk. In addition to the benefit of the added nutrition of creep feeding while still nursing their dams, foals accustomed to eating grain will likely continue to eat through the weaning process, and be less stressed during weaning.

Creep Feeder Design

Creep feeders should be designed to allow for easy, safe entry and exit of foals while restricting access of mares to the creep feed. As such, the height of the opening should allow for a minimum of six to eight inches clearance above the foal's withers. A means of adjusting the height of

the opening is an important design consideration because of the large increases in height as foals grow to weaning age.

The height of the opening must restrict the entrance of mares to the feed source, so a maximal height of several inches above the wither height of foals is important. Mares may spend large amounts of time trying to enter creep feeders, so sturdiness of construction is important. The design should also consider widths of entry and exit points. Wider openings increase the chance that mares will enter the feeder. Also, the feeder should be large enough to separate the entrance from the creep feed, so mares are not able to reach feed by protruding their head and neck through openings or over and under feeder walls. When several mares and foals are housed together, feeders must be large enough to accommodate several foals at one time, as foals characteristically will eat together. A 10' X 10' area should be sufficient for one or two foals; however, it might be too small for areas housing a larger number of mares and foals. Foals must be able to turn around easily while inside the feeder. Feeders that are too confining may increase foal stress and injury. Also, multiple entry and exit points will reduce the chance that foals will become panicky because they did not have quick access to an exit.

Feeders must be cleaned routinely, and feed supply replenished or replaced. Feeders constructed with a roof will reduce spoilage resulting from the feed getting wet. Although enclosed sides would also aid in reducing environmental contamination, solid sides on creep feeders are not recommended. Restricting visual contact to mares while the foals are inside the feeder may restrict feeder usage and increase foal injury. For most stock horse breeds, slatted sides with spaces of two to four inches should allow for visual contact of mares and foals, restrict the ability of the mare to place her head inside the feeder walls, and guard against a foal placing its foot between the boards. The bottom one or two feet of the wall should be solid to further protect a foal from placing its foot through the wall.

Another wall design that has been used successfully is a single bar or board at an appropriate level to the foal's height. A single rail has advantage of simplicity, however may lack sufficient sturdiness to keep mares from the enclosed creep feed. When using this design, small amounts of feed should be offered to the foals at times they congregate around the feeder, such as when their dams are eating in the same area. Rationing grain in feeders, so there are not any large amounts left over, is more important because of the increased chance a mare may enter a feeder constructed with one rail or board.

To encourage use, the location of the feeder should be near the mare's feeding area, a water source, or other areas visited frequently by mares and foals. This is especially important in large pastures.

At first, foals may have to be shown how to enter a feeder. One method for teaching foals is to place two or three inside for a few minutes and show them the feed. Usually, once foals identify the feed source with the creep feeder, they readily enter and exit without problems. Also, this practice will make "teachers" for the other foals.

Creep Rations

Foals generally eat small amounts very frequently. Intake of creep feed varies greatly between foals, and from one day to the next with the same foal. Foals may consume one to five pounds of creep feed per day. Providing smaller allotments during a day, such as when mares are fed, is more desirable than supplying large single feedings. Even though the capacity and appetite of foals of this age guards against overfeeding, large amounts left in creep feeders increase the chance of spoilage and desire of mares to gain access. Feed should be checked at least once daily and any wet or moldy feed should be replaced.

Creep feeds must contain a balanced amount of energy, protein, minerals, and vitamins. Many commercially developed rations designed for weanlings will contain appropriate nutrient densities to be used also as a creep feed. A typical creep feed will supply approximately 1.4 Megacalories of digestible energy per pound (Mcal DE/lb) of feed. Creep feeds should contain 14 to 15% crude protein, approximately 0.8% calcium, and 0.5% phosphorus to insure a correct balance with this energy concentration. Commercially developed mixes will also contain additional minerals and vitamins.

The feed should be highly palatable and coarsely processed to enhance digestion; e.g. pelleted, extruded, rolled or crimped oats, and cracked or steam flaked corn. Pelleted and extruded creep feeds have the advantage of reducing the amount of sorting of individual ingredients.

Management and Health Programs Following separation, the foal usually enters into increased contact with human handlers who require certain standards of behavior. The foal, therefore, should be taught to accept basic handling and discipline before weaning. Haltering, brushing, and leading the foal while still on the side of the mare will be helpful for later training.

Because weaning can be very stressful, the foal should be in good health before being separated from its dam. Several vaccinations are recommended to begin between three to six months of age. For specific needs to be met, vaccination and deworming schedules need the supervision of a veterinarian that is familiar with your farm practices and location.

Weaning Systems

Time of Weaning

The choice of age for weaning foals depends on factors such as the health status of the mare and foal, temperament and vices of the mare, the environment into which the foal will be weaned, maturity of the foal at a given age, and the level of management on a given farm. If necessary, foals can be weaned as early as a few days post birth; however, the usual age for weaning is between four and six months. Newborn foals rely on the mare for nutrition, protection, and security. As such, foals weaned at extremely young ages require intense nutritional and behavioral management, and may not develop some of the natural behaviors associated with horses. By four months of age, however, the foal should be eating feed, and is less dependent on its dam for protection and emotional support. Weaning before this age may increase weaning stress, especially if environmental conditions are harsh, the foal is not eating grain, or the foal is heavily dependent on the mare.

On the other hand, little nutritional or social support may be gained by waiting until six months of age to wean. In fact, later weaning may promote some unwanted behavior in foals. Many breeders prefer to separate a mare with adverse disposition or vices from her foal as soon as advisable. Some behavior patterns can be learned from the mare and with early separation, the mare's behavior will have less influence on the foal's behavior.

Weaning System

The management level of the breeding farm, the condition and temperament of the mare and foal, facilities, and the number of foals to be weaned during a given period of time affect decisions on how foals are weaned. Regardless of method, foals weaned together and those consuming feed prior to weaning will have less weaning stress.

Weaning systems range from an abrupt separation in which the foal and mare are separated immediately from all contact (sight, sound, smell) to progressive separation in which the foal and mare are allowed a period of time with visual, auditory (sound), and olfactory (smell) contact before complete removal. Complete, abrupt separation usually involves moving the mare to another turnout area, or moving the foal into a confinement separated completely from any type of mare contact.

Foals weaned by complete, abrupt separation may have more weaning stress than foals weaned with progressive separation. Instead of immediately removing the mare from all contact, a mare and foal are separated by being placed in enclosures with a common side. Once separated, the foal and mare are not allowed contact that facilitates nursing; however, fences or stall partitions allow for visual contact. The presence of the mare in an adjoining enclosure allows the foal to retain the security and comfort of its dam during the first several days after separation even though nursing is restricted. After being housed in an adjoining area for several days to a week, the mare and foal should be moved completely away from one another. As with abrupt weaning, weaning foals in pairs and preconditioning the foal to solid feed before weaning will reduce weaning stress.

One of the best ways of lessening weaning stress is to maintain familiar surroundings. This can be accomplished by leaving the foal in the same area it occupied previously and by weaning with other foals of like size and age. If another foal is not available, a highly excitable foal may benefit by contact with a companion such as a goat or a yearling with an accepting disposition.

Regardless of system, foals should be watched closely when weaned, especially the first 12 to 24 hours. Also, facility construction and design must emphasize safety. Any protrusions, such as feed troughs, can readily result in injury of nervous foals. Any opening larger than a foal's hoof has the potential for trapping the leg of a foal.

Mare Care During Weaning

Most mares calm down more quickly than their foal, especially those who have foaled in past years. The time required for her to resume normal behavior may vary from a few hours to several days. If the mare still has significant milk production, the manager should decrease grain intake and increase exercise. A small amount may periodically be milked out by hand if the udder ANSI-3978-3 becomes very tight, but this practice is discouraged unless absolutely necessary. If the udder is still tight four days after weaning and the mare's temperature rises significantly, or other indications warrant it, the milk should be checked for the presence of mastitis (infection) and appropriate therapy instituted. Veterinarian assistance is recommended.

Post-weaning

Care Management and Health Care

Hoof care should include periodic trimmings and inspection for cracks, bruises, and abscesses. The frequency of trimming will be influenced by the conformation of the foal, the normal wear of hooves, exercise, and housing. One advantage to pasturing weanlings is that continual access to exercise may benefit normal hoof growth and wear. Stalled weanlings probably will need more intensive and frequent hoof care.

Handling practices will vary with the use of weanlings. Those weanlings that are shown in halter classes or fitted for sales will receive daily handling and training. Brushing and other normal cleaning routines not only help the general health status of the weanling, they also serve to gentle and train the weanling to accept handlers. Those weanlings housed in pastures that do not receive the daily care of stalled weanlings

should be periodically handled, brushed, and led. These handling sessions will allow handlers to better control these weanlings when they receive handling for ground training and breaking to saddle in subsequent years.

Commonly recommended vaccinations include tetanus, sleeping sickness, rhinopneumonitis, influenza, rabies, West Nile, and strangles. Deworming products are specific to types of worm infestation, and frequency of administration is influenced by product efficacy, reinfestation rates, and environmental conditions. Vaccination and deworming schedules will be influenced by your locale and management practices, so consultation with attending veterinarians is recommended.

Feeds and Feeding

Generally, 50 to 60 percent of mature weight and 80 to 90 percent of wither height is reached by 12 months of age. The exact body condition and rate of gain needed to promote sound growth of muscle and bone is debatable and perhaps somewhat flexible. Individual differences in genetic makeup create so much variation that general recommendations are limited in scope and accuracy.

Generally, weanlings should be fed individually at rates to maintain a moderate body condition. Weanlings expected to mature at 1100 to 1200 pounds should gain between 1.25 to 2.0 pounds a day. Most weanlings will consume between 1.5 and 2.0 pounds of grain per 100 pounds of body weight per day; and 0.5 to 1.0 pound of forage per 100 pounds of body weight per day to meet their needs for growth in moderate condition.

Extremes in body condition should be avoided. Rations should be reduced when large amounts of body fat are deposited, and increased if the ribs or other bony structures become apparent. Also, weanlings fed to grow at consistent rates will have less structural problems as compared to those restricted in growth for several months and then fed to gain rapidly.

There are numerous grain mixes available that have been formulated to contain the proper balance of protein, minerals, and vitamins to energy for weanling horse needs. This balance insures adequate amounts of these nutrients at different energy intakes and rate of growths. Most weanling rations will have between 1.2 and 1.3 Megacalories of digestible energy per pound. To insure adequate protein and minerals, these rations (hay and grain combined) should contain a minimum of 13% crude protein, 0.6% calcium, and 0.35% phosphorous. The concentration of nutrients in the grain mix will depend on the type and level of hay or pasture forage. To ensure adequate nutrient intake with different forages, grain mixes formulated for weanlings typically will contain 14% crude protein, 0.8% calcium, and 0.5 % phosphorus.

The most common problems with nutrition of growing horses are from over or under feeding, making sharp increases in rates of gain by sudden changes in amounts of feed, or by feeding unbalanced rations. Unbalanced rations commonly occur when grains are added on farm to commercially formulated mixes, or feeding grains without vitamin or mineral supplementation.

Housing and Exercise

Many weanling horses are turned out in pastures with other similarly aged horses. There are several advantages to managing weanlings together in a pasture as compared to housing in stalls. Weanlings will interact with one another, and the behavior the weanling exhibits later in life may be more characteristic of expected behaviors in all horses as compared to weanlings housed separately. The need for forced exercise is lessened, and research suggests that weanlings managed extensively in pastures will have less frequency of bone growth problems. This is probably due to a combination of factors related to free access to exercise and nutrients in the pasture forage. Continuous, free access to exercise may benefit bone strength and hoof formation. Also, horses may be managed for slower growth rates in pastures.

Those showing or marketing young horses require horses to be managed and housed individually. Stalled horses generally receive more individual care, regulated feed intake, and can be kept in better hair condition. Exercise is important, as stalling without forced exercise can inhibit development of bone strength in weanlings. Single exercise bouts should be short in duration, and apply enough stress to stimulate sound muscle and bone growth without over-exertion.

Successful forced exercise programs for stalled weanlings have incorporated a number of practices: timed turnouts with other growing horses, ponying, longeing, and use of mechanical devices such as horse walkers and treadmills. One practical management method has been to follow short-duration, controlled exercise bouts with longer-duration, free-access turnouts. Exercise programs must be individualized and adjusted with the development of each horse. Exercise level and intensity should begin conservatively, and increased as positive responses are achieved. Evidence of mild soreness or joint swelling must be recognized before becoming severe, and the subsequent level of exercise reduced until the horse responds more favorably.

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7. FALL PASTURE MANAGEMENT TIPS

Fall is the time to stockpile fescue for late fall & early winter grazing for beef cattle, horses, sheep, & goats. Stockpile Fescue to graze later. If you have not grazed or mowed grass down to remove previous fescue growth that has accumulated over summer

consider doing so to get rid of rank growth.. This allows for fresh growth to be stockpiled which is much more nutritious and palatable for the livestock. Its late but fertilize if have not done so. Remove livestock from section to be stockpiled so that the growth can accumulate throughout the the remainder fall growing season. Graze other grasses in the pasture, particularly summer type grasses such as bermuda, crab grass, and dallis grass. The growth of these summer grasses slows considerably as the nights and days cool off from the summer high temperatures. When all the other pasture grasses are grazed out, usually in mid-late November, move the livestock to the accumulated (stockpiled) fescue. For best results, grazing on stockpiled fescue should be controlled using temporary fencing. A recommended practice is to "strip graze" the fescue. To strip graze, the animals are given sections of grass each day. This effectively gives approximately 1/3 more grazing because ALL of the forage is eaten because none of it is trampled or deficated on. Stockpiled fescue has been tested to be as high as 16% protein in the early winter grazing season. As the fescue goes into the winter season, the quality deteriorates somewhat but tests have shown it to be 13% protein even in late December. As the fall season progresses, it is often asked in October if it is too late to fertilize for stockpiling fescue. Fescue will grow quite well through October and will grow some during November and December depending on how cold it gets. If fertilizing is delayed until October, cut the nitrogen rate back to 50 lbs/acre. This translates into 150 pounds per acre of 33-0-0 (ammonium nitrate). After Mid-October, it is too late to fertilize for the stockpiling process.

What if your pastures are worn out & consist mostly of bermuda grass, crab grass, & dallis grass?

First of all, the above mentioned grasses are excellent summer grasses! Livestock eat them quite readily & actually prefer these grasses over fescue during the summer. However, as the growth of these grasses slow during the fall & fescue starts growing again, livestock switch their grazing preferences back to fescue. If this describes your pasture, the following are some management tips: Soil test to be sure phosphorous, lime and other nutrients are not limiting the growth of your grass. Follow soil test recommendations. Since fall is a major planting time for pastures, getting soil test results back on time is often difficult. The window of opportunity for fall planting is only opened for a short period of time and consequently one may not have the time to wait on soil test results. In the absence of a soil test, apply 1-2 tons of lime per acre & 400-500 pounds of 10-20-20 per acre. Soil tests should still be taken & corrections made when the results are obtained. To avoid this problem in the future, soil tests should be taken in early August. In Mid-September, plant a rye/ryegrass combination. Rye is a winter annual & provides late fall, late winter, & late spring grazing. Being an annual, it dies out in Mid-June. Incidentally, this is when the bermuda, crabgrass, and dallis grass comes back in.

* Always remember the potential problems with Nitrates, Prussic Acid and Acorns*



8. Downed Trees & Livestock

With the wet weather, that seems to be on us for a couple of days, we need to be diligent in checking livestock, repairing damaged infrastructure, and looking for possible hazards in pastures caused by any storm damage. If previous Hurricanes taught us anything we know that there could be toppled and uprooted trees across North Carolina. Cattle, horse, goat and sheep producers need to be aware of the potential dangers that exist. The wilted leaves of stone fruit trees (cherry, peach, plum and especially wild cherry) are toxic to livestock. These leaves are only dangerous in their wilted form. Wilting of the green leaves changes a glucoside in the leaves to hydrocyanic acid (prussic acid) and sugar. The sweet, wilted leaves are thus more attractive to animals than normal foliage.

Prussic acid interferes with the oxygen-carrying ability of the blood. Death is usually rapid and with little outward symptoms. Prussic acid contents vary widely, but in some cases just a few handfuls of leaves could be enough to kill a horse or cow. These leaves loose their poison when they become dry. Your best bet is to remove these trees entirely from your pasture systems, but if you have some, check for downed trees. Either remove the trees from the pasture (taking care to remove all of the leaves) or remove the livestock from the pasture until the leaves have dried.

Another threat is acorn poisoning. It seems that cattle like newly fallen acorns best. If you are grazing

livestock in pastures with Oak trees, take proper precautions. Clinical signs of poisoning are loss of appetite, listlessness, weakness, constipation early, followed by diarrhea that may be dark colored or bloody and animals will appear bowed in the back. Animals get weaker and eventually go down. Affected animals may show yellow color, bloody urine and dehydration.

Treatment of down animals is rarely successful, while early treatment of cases is helpful. Again, if you suspect poisoning, remove the livestock from the affected pastures. *In all cases of poisoning, contact your local veterinarian for proper diagnosis and treatment.*



9. Circular Logic



<http://www.horsechannel.com/english-horse-training/circular-logic.aspx>

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10. 2017 North Carolina State Fair

<http://www.ncstatefair.org/2017/index.htm>

Horse Shows

<http://www.ncstatefair.org/2017/Competitions/HorseShow.htm>

Livestock Competition

<http://www.ncstatefair.org/2017/Competitions/Entering/LivestockCompetitions.html>

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11. Upper Piedmont Research Station Field Day - 10/28

Come one, Come All to the annual **North Carolina Beef Cattle Field Day** that will be held at the **Upper Piedmont Research Station** on **Saturday, October 28, 2017**.

Registration will begin at 8:00 a.m. and Dr. Joe French will kick off the North Carolina Beef Cattle Field Day with a welcoming address and provide a brief history of the Angus herd and the research station. The station tours, starting at 9:30, will provide an overview of livestock and forage research being conducted within the NC Beef System.

There will be a 3 tour stops in the morning at various locations on the **Piedmont** Research Station. The tours will consist of the following stations.

Focus on Feed Efficiency Station: Using the historic Black Angus herd at UPRS, we have been collecting data to identify cow families that produce feed efficient progeny. These projects monitor growth and development in heifers in an effort to produce more pounds of beef with less feed. By selecting only those that are very efficient in converting feed to pounds, costs can be lowered. Dr. Joan Eisemann, Professor of Animal Science, will discuss how this **feed efficiency** research could lead to the discovery of a gene or genes responsible for efficient feed conversion in beef cattle. Understanding these genes could decrease the cost of beef production and revolutionize the beef cattle industry. Additionally, Kelli Retallick, Angus Genetics Inc. Genetic Service Director, will expand on this topic and convey how this information is a benefit all beef producers. The heifers evaluated on this feed efficiency study are fed **sorghum silage**, produced by forage-type sorghum with higher digestibility than corn silage. Sam Ingram, Animal Science PhD student, will share his research demonstrating the advantages sorghum silage has in NC over the traditional corn silage. Heifer development is a critical component of selection the next generation of brood cows in your herd. Dr. Harrison Dudley, Clinical Assistant Professor, Ruminant Health Management, conducts **heifer breeding soundness exams**, including reproductive tract scoring and pelvic area measurement to improve the reproductive efficiency of our replacement heifers. He will discuss how application of these techniques in your herd can add values to your replacement heifers.

Winter Feeding Area Station: Most all cattle operations have winter feeding areas. These sites are usually on well drained soils and easily accessible. However, using the same place over many years can lead to nutrient accumulation which can pose environmental risks and wastes a valuable nutrient source that could be used in other areas. After **winter feeding** is complete these sites can be seeded with annual forages to capture nutrients, alleviate soil compaction and provide high quality summer grazing. In addition, some producers have used management strategies to more efficiently use the nutrients that pass through their cattle's digestive system. Johnny Rogers, Coordinator of the Amazing Grazing Program, will discuss options for rotating feeding areas and/or unrolling hay to improve nutrient distribution. Furthermore, extending the grazing season with stockpiled Tall Fescue can reduce hay requirements and reduce the impact of winter feeding. **Stockpiling Tall Fescue** starts with close grazing or clipping in early September (August 15th in the Mountains) and nitrogen is added to increase the quantity of accumulated forage. But do you receive enough added forage growth to cover the nitrogen cost? In **healthy soils** the microbiology cycles plant available nitrogen which could allow for optimum forage production. Yield response to nitrogen fertilizer is small in soils with high soil biological activity, but large and cost-effective only in soils with low biological activity. Some commercially available soil health tests could be beneficial in determining the value of supplemental nitrogen in stockpiled fescue. Dr. Alan Franzluebbers, USDA Professor of Soil Science, will address how grazing principles will improve soil health and add value to pasture-based livestock systems.

Forage systems/Tall Fescue Station: Forages provide the feed base for all beef production systems in North Carolina. Mountain and Piedmont forage systems are typically based on tall fescue and other cool-season forages, while Coastal Plain forage systems are typically based on bermudagrass. Either system is imbalanced in terms of season of production, so without complimentary species a long hay feeding season is required. Recently there have been new opportunities and interest in the use of annual species to fill specific gaps in growth, and also to provide a higher level of nutrition than is

supplied by the base forages. Producers with bermudagrass-based systems have long used overseeding with rye or ryegrass to give them winter and spring production, but often this still leaves a significant autumn and winter feeding situation. In fescue-based systems very few producers have used annuals in the past due to the tenacity of the base forage, and the challenges to implement a successful annual system. Additionally, most of the tall fescue in North Carolina is infected with an endophytic fungus that produces toxins that negatively impact the health and well being of the cattle. Conversion of some or all toxic fescue is a common goal of many progressive producers in North Carolina, but many of the same factors that limit adoption of annuals also limits the conversion of toxic fescue to non-toxic varieties.

Topics to be explored at the Forage systems/Tall Fescue Station will include how to build a successful forage system, with a primary focus on the Piedmont region. **Selection of annuals** for use as complimentary forages, and the use of mixtures or single species will be discussed by Dr. Deidre Harmon, Extension Mountain Livestock Specialist. Non-toxic fescue is ideally suited to the Piedmont and Mountains of North Carolina but adoption rate has been slower than expected. Research at NCSU funded by the NC Cattle Industry Assessment Program is exploring the most commonly recommended system for **converting toxic fescue to non-toxic fescue** (Spray-Smother-Spray) as compared to a longer-term process using two years of annuals. At the Field Day, Dr. Matt Poore, Professor & Extension Ruminant Nutrition Specialist, will be discussing the progress of this research project, and we will discuss the process of selecting a variety of non-toxic infected fescue.

While conversion to non-toxic fescue has great potential it will be virtually impossible to eliminate toxic fescue from our farms, so finding animals that are naturally tolerant of fescue toxins must be part of our long-term strategy to enhance the efficiency of fescue-based systems. A number of projects funded by the NC Cattle Industry Assessment Program have focused on identifying animals that are tolerant to fescue toxins, and determining the biological basis behind the **fescue tolerance**. Dr. Dan Poole, Associate Professor of Animal Science will share results of that recent research and include the usefulness of commercial tests being offered for fescue tolerance.

Lunch starting at 12:30 pm, sponsored by NC State University and North Carolina Department of Agriculture & Consumer Services, will conclude with Dr. Carrie Pickworth, Assistant Professor of Animal Science, introducing you to the multiple pathways to NC State with her talk entitled "*Red Brick Road: connecting with NC State from 9 to 99*".

Following lunch, there will be an **Open Heifer Sale** starting at 1:30. There will be approximately 20 Open Heifers offered at the sale. They will consist of approximately 10 Open Registered Angus heifers from the Upper Piedmont Research Station and 10 Commercial Open heifers from Butner Beef Cattle Field Laboratory and the Center for Environmental Farming Systems. We will have a link to the sale catalog after the first of October on the North Carolina Cattlemen's Association website. The website address is www.nccattle.com. Lastly, producers will have opportunity to take the Beef Quality Assurance recertification test after the open heifer sale.

NOTE: This Field Day has been approved for 1 Hour of Pesticide Credit (D,N,O & X) and have for 2 Hours of Animal Waste Credits!

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12. HorseFriends Schooling Hunter Show & Tack Sale

Saturday, October 28th

HorseFriends, a therapeutic horseback riding program dedicated to helping individuals with special needs, will host a Schooling Hunter Show & Tack Sale at their riding facilities at Flintrock Farm in Reidsville on Saturday, October 28, 2017 from 9:00 a.m. to 5:00 p.m.

The show will include Walk/Trot, Walk/Trot/Canter, Young Entry, Short Stirrup, Schooling Hunter, Hopeful Hunter, Special Hunter, Green Horse, as well as a Costume Division. \$10 per class or \$75 for the day. High point awards will be presented. HorseFriends Schooling Hunter Class List

Not a rider, but looking for something fun to do with the family? Bring a chair and come out and watch the competition. Horses in costumes are always fun to see! Enjoy hamburgers and hot dogs, and learn more about HorseFriends therapeutic riding program. Plus, enter to win a beautiful fire pit, valued at \$1,000 from Fleet Plummer in Greensboro! Purchase your tickets in advance at the HorseFriends website, or in person the day of the show. No need to be present to win.

The Tack Sale includes a variety of items for riders and horses of all ages and sizes.

With 100 plus horses and hundreds of acres, Flintrock Farm is one of the largest horse farm facilities in North Carolina. It's located at 221 Flintrock Trail, off 158 – across from Greensboro National. At Flintrock Farm, HorseFriends is able to use a

lighted indoor arena for classes, as well as an indoor activities area. Donations to HorseFriends go directly to the needs of the horses and operation of the program.

About HorseFriends

HorseFriends is a Christian ministry whose mission is to help individuals with disabilities to experience joy and strength through horses, regardless of participants' individual beliefs. We provide FREE therapeutic horseback riding to those with special needs. We are registered with the IRS as a 501(c)3 non-profit corporation, and all gifts are tax-deductible. Visit our website for more information www.horsefriendsnc.org.

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**13. The Ag Tax Issues Short Course
Guilford County Nov 3**

The Ag Tax Issues short course is a day long class in which tax issues relative to production agriculture and agri-business are discussed. Attendees generally are professional tax preparers though farmers (or the farm's bookkeeper/accountant) are most welcome. A working knowledge of taxation is needed to understand discussion topics. Topics in the past have covered income and deduction reporting, Special issues such as Christmas trees income reporting and renewable energy taxation have also been discussed.

Attendees receive a text which is the basis of the course framework. The short course is not a straight "lecture" course as questions and topics of interest are brought to the session by attendees. A goal of the course is to provide a suggested 8 hours of continuing education for professional income tax preparers.

This will be either the 19th or 20th year this program has been available. Though the "farming community" is not the primary target audience, farmers are welcome to attend. This is a fee based program.

To register for this or other Tax Short Courses go to:

<https://www.ncsu.edu/mckimmon/cpe/brochures/pdf/taxSchools.pdf>

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**14. Amazing Grazing Workshop Workshop 11/11
Amazing Grazing**

Pasture Based Livestock Education Program

**Amazing Grazing Workshop
for New and Small Scale Farmers**

November 11, 2017

10:00 AM—3:00 PM

Butner Beef Cattle Field Lab

8800 Cassam Road

Bahama, NC 27503

Workshop Topics

- **Proper Operation of Agricultural Sprayers and Spreaders**
 - **Handling Pasture Chemicals Safely**
 - **Soil Sampling Techniques**
- **Principles of Pasture Improvement**

Cost: \$10 (Payable at the door Cash or Check made to NCFGC)

To register online: <http://go.ncsu.edu/amazing-grazing-workshop>

For more information:

april_shaeffer@ncsu.edu

jrroger3@ncsu.edu

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15. Farm Service Agency Reminder

November 15th is the deadline to report acreage planted to perennial covers (grass acreage) and apiculture (honey bees) to the USDA Farm Service Agency in Rockingham & Guilford Counties. Most Farm Service Agency programs require a complete acreage report for the entire farm, which often includes grass fields and pastures. Failure to report your grass and apiculture crops timely may result in a late filed crop report penalty. Visit the Rockingham/Guilford County Farm Service Agency before November 15 to complete your crop reports on grasses and apiculture. **Note: You may have signed a continuous certification for your grass acreages after certifying your 2017 crops. If you did, your grass acreages have rolled over into 2018 and you will not have to visit the office to complete your acreage report by the above deadline as long as no changes have been made. However, to avoid possible late filed crop report penalties, you should contact the office to verify if you need to complete an acreage report by November 15th.**

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16. NCSU Equine Grazing and Pasture Management School 12/2/17

Presented by NC Forage and Grasslands Council,

NC Horse Council, Amazing Grazing and NC State Extension

Saturday 2 December 2017

8:30 AM to 5 PM

NCSU Beef Educational Unit

3720 Lake Wheeler Rd Raleigh NC 27603

For more information contact: paul_siciliano@ncsu.edu

Topics

- Learn to improve horse health through sound grazing management
- Learn the latest principles and practices of pasture management/renovation
- **Live demonstrations and multiple opportunities for hands-on training One-half day of lecture + one-half day of hands-on-training**

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17. HAY DIRECTORY

A Hay Directory is maintained by the North Carolina Cooperative Extension Service for the Rockingham County & Guilford County area. This directory is intended as a service to both hay producers and buyers in the area. If you are in need of hay or would like to be added (or removed) from this list please call me at 1-800-666-3625 or 342-8235 and let me know your

name, address & phone #, type of hay, number of bales, (square or round bales) and weight per bale. MANAGE YOUR PASTURES & If you have hay to sell, hay is in short supply, especially quality hay, so please let me know & I will put you on the list!

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18. Swap Shop

Round-Up Yard Sale - November 4, 2017 @ Piedmont Saddle Club, Colfax, NC. Open to the public, breakfast & lunch available, see www.piedmontsaddleclub.org for details. Come shop for just what you've been wanting or bring your items to sell and be a vendor. No Live Animals! Call 336-403-2296 with your questions.

Shooting Star Horse Farm Events:

- Cooler Horsemanship Clinic Nov 10-12:

<https://coolerhorsemanship.net/chssf-clinic>

- <http://livelyheels.com/>

Lively Heels is a learning company offering equine-based experiential leadership and team building workshops in North Carolina, Colorado, and Maine. Workshops available at Shooting Star Horse Farm.

- Few Boarding Spots available

Trailer-in's welcome

Training available

<http://shootingstarhorsefarm.com/>

336.423.6981

Rockingham County Soil & Water has a no-till drill (grass specific) available to rent. The cost is \$10 per acre planted. Call 336-342-8230 for more information.

(One also available in Guilford County at
336-641-2440)

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19. Take A Load Off

Redneck Winner

A Redneck buys a ticket and wins the lottery. He goes to Austin to claim it and the man verifies his ticket number. The Redneck says, "I want my \$20 million."

The man replied, "No, sir. It doesn't work that way. We give you a million today and then you'll get the rest spread out for the next 19 years."

The Redneck said, "Oh, no. I want all my money right now! I won it and I want it."

Again, the man explains that he would only get a million that day and the rest during the next 19 years. The Redneck, furious with the man, screams out, "Look, I want my money! If you're not going to give me my \$20 million right now, then I want my dollar back!"

Teenage Driver

A teenage boy had just passed his driving test and inquired of his father as to when they could discuss his use of the car.

His father said he'd make a deal: 'You bring your grades up from a C to a B average, study your Bible a little, and get your hair cut. Then we'll talk about the car.'

The boy thought about that for a moment, decided he'd settle for the offer, and they agreed on it.

After about six weeks his father said, 'Son, you've brought your grades up and I've observed that you have been studying your Bible, but I'm disappointed you haven't had your hair cut.'

The boy said, 'You know, Dad, I've been thinking about that, and I've noticed in my studies of the Bible that Samson had long hair, John the Baptist had long hair, Moses had long hair...and there's even strong evidence that Jesus had long hair.'

His father replied, 'Did you also notice they all walked everywhere they went?'

College Graduate

A young man hired by a supermarket reported for his first day of work. The manager greeted him with a warm handshake and a smile, gave him a broom, and said, "Your first job will be to sweep out the store."

"But I'm a college graduate," the young man replied indignantly.

"Oh, I'm sorry. I didn't realize that," said the manager. "Here, give me the broom -- I'll show you how."

Farming

The school of agriculture's dean of admissions was interviewing a prospective student, "Why have you chosen this career?" he asked. "I dream of making a million dollars in farming, like my father," the student replied.

"Your father made a million dollars in farming?" echoed the dean, much impressed.

"No," replied the applicant. "But he always dreamed of it."

I *always* need more "Help" with Clean jokes!

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**I always want to know what you think of the Weekly Pile, good or bad,
Especially if it has had ANY IMPACT on you. Let me hear from you!**

PLEASE SEND TO ME YOUR IDEAS FOR ARTICLES IN FUTURE NEWSLETTERS!

I WANT TO HEAR FROM YOU!!!!

Have A GREAT SAFE Weekend!

North Carolina State University and North Carolina A&T State University

Is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, creed, national origin, religion, gender, age, or disability.

Moreover, North Carolina State University and North Carolina A&T State University is open to people of all races and actively seeks to promote racial integration by recruiting and enrolling a larger number of black students. North Carolina State University and North Carolina A&T State University regards discrimination on the basis of sexual orientation to be inconsistent with its goal of providing a welcoming environment in which all its students, faculty, and staff may learn and work up to

their full potential. The Universities values the benefits of cultural
diversity and pluralism in the academic community and welcomes all men
and women of good will without regard to sexual orientation.

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- This includes all printed and non-printed public communication resources, such as pamphlets, brochures, newsletters, letterhead, websites, news releases, advertisements, outreach letters and so forth.
- It may appear in the most convenient spot on your communication piece and can be as small as 6pt type.

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In Rockingham County - Will Strader, County Extension Director, at (336) 342-8230 or by email at william_strader@ncsu.edu or In Guilford County - Karen Neill, County Extension Director, at (336)641-2400 or by email at karen_neill@ncsu.edu

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Ben Chase

Rockingham and Guilford County Extension Agent
Agriculture & Livestock

North Carolina State University

North Carolina Cooperative Extension,

525 NC 65, Suite 200, Reidsville, NC 27320

(336) 342-8235 800-666-3625 Fax: 336-342-8242

Email : ben_chase@ncsu.edu

<http://rockingham.ces.ncsu.edu/index.php?page=animalagriculture>