HEY EVERYBODY

Included is the Weekly Pile of Information for the week of May 8th, 2016, 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. Weed Control
2. How Proper Pasture & Grazing Management Can Reduce Hay Needs
3. Equine Pasture Grazing Problems
4. You Asked
5. Using Electric Fence to Improve Pastures
6. Moles, Voles and Pasture Holes
7. PARELLI CLINIC MAY 20-23
8. Shooting Star Horse Farm Events
10. HAY
11. Swap Shop
1. Weed Control

What sprays are considered horse safe when spraying for weeds?

The first thing to note is that you will need to be sure that you have the weeds you want to treat identified and choose the correct herbicide for that particular weed. Following the label directions for the herbicide is also very important.

Below are a couple of publications and websites about grazing and herbicides:

http://extension.psu.edu/agronomy-guide/pm/tables/table-2-6-9
http://njaes.rutgers.edu/pubs/publication.asp?pid=FS446


Dr. Paul D. Siciliano & Alaina P. Cross - amparson@ncsu.edu North Carolina State University

Pasture is a valuable nutritional resource for horses. Full realization of pasture's nutritional value can only be achieved when horse owners and managers understand the types and quantities of nutrients supplied by pasture, and apply sound grazing management principles. In this two-part article series, nutritional aspects of horse pasture (Part I) and grazing management strategies (Part II) will be discussed. By appreciating the nutritional value of horse pasture and managing grazing horses properly, horse owners can optimize horse health and decrease feeding costs.

Well managed pasture can supply nearly all required nutrients for some feeding classes of horses (e.g., mature idle horses, broodmares in the first 5 months of gestation). In this article we will review the average energy, protein, mineral, and vitamin content of well-maintained pasture and compare it to the needs of the horse. We will also take a look at how much hay can be replaced with well-maintained pasture, potentially giving you the ability to save a substantial amount of money on feed costs. Pasture is an excellent source of nutrients that provide calories. Calories derived from pasture plant nutrients are measured in units termed “mega-calories of digestible energy,” or simply as “DE”. The DE content of pasture ranges from 0.8 to 1.2 Mcal/lb DM (Dairy One, 2013), and includes most of the range of DE requirements for horses, which is between 0.8 to 1.4 Mcals/lb DM (NRC, 2007). The lower values of this range correspond to mature idle horses with maintenance only requirements, while the upper values correspond to a five-month-old weanling. Pasture can also be an excellent source of crude protein. Crude protein values for grass pasture can range from 7.5 to 22.7% (Dairy One, 2013) compared to requirements ranging from 6.3% (mature idle horse) to 13.9% (5-month old weanling). These findings demonstrate clearly that grass pasture can provide some or all of a horse’s energy and crude protein requirements, depending upon the horse’s physiological status and forage quality. So, for many horses, well maintained pasture can meet most of their energy and protein needs without needing hay or grain supplementation.
Pasture is a variable source of minerals. In some cases, pasture can contain adequate amounts of minerals relative to requirements; whereas in others pastures it tends to be deficient. The concentrations of calcium and phosphorous reported for 9,432 pasture samples ranged from 0.27% to 0.82 % and 0% to 0.78%, respectively (Dairy One, 2013). The range of calcium and phosphorous requirements for horses is 0.2% (mature idle) to 0.8% (5-month old weanling), and 0.14% to 0.45%, respectively (NRC, 2007)

Therefore pasture is not viewed as a consistent source of calcium and phosphorous in many cases, especially for nursing mares and growing horses. Pasture also generally lacks the ability to provide sodium, chloride, copper and zinc. Selenium may or may not be deficient depending upon the region or geographical location. Some areas of the Southeastern US are extremely deficient in selenium. Pasture can be an excellent source of some required fat soluble vitamins. An unpublished study conducted at North Carolina State University that evaluated seasonal changes in vitamin E and betacarotene (provitamin A) over a 12-month period reported average pasture vitamin E concentrations of 195 + 59 IU/kg DM, which is well above the requirement range for horses. The lowest concentrations were reported during the months of December through February while the greatest concentrations occurred from May through August. These results suggest that pasture is an excellent source of vitamin E, even during seasons of the year when concentrations are lowest. Betacarotene is metabolized by the horse to retinol providing vitamin A equivalents. The average beta-carotene concentration reported in this study was 34 + 25 mg/kg DM, which equates to 13,600 IU/kg DM of vitamin A. Horses require between 3,000 to 4,800 IU/kg DM (NRC, 2007).

Although the beta-carotene concentration provides vitamin A equivalents well above the requirement; there is no likelihood of vitamin A toxicity due to the way that the horse converts beta-carotene to vitamin A. The value of pasture can clearly be demonstrated when put into the context of hay replaced as a function of hours of daily pasture access. The data shows some general pasture/hay equivalencies for horses having a variety of differing body weights and hours of pasture access. Keep in mind that these values are average estimates with some degree of variation. Nonetheless, by comparing values, we can appreciate the value of pasture in terms of hay replacement. When considering current hay prices near $250/ton ($0.125/lb) the table shows that horses having pasture access from 2 to 16 hours per day can save owners approximately $0.50 to $3.00 per day per horse! That is a possible savings of $15.00-$90.00 per month per horse, which is significant when multiplied across several horses. In summary, pasture can provide some or all of a horse’s energy, protein, vitamin A and E requirements. Pasture’s ability to provide minerals is variable. Nonetheless, it is clear to see from the above examples that pasture is an excellent source of many important nutrients for horses.

3. Equine Pasture Grazing Problems

Pasturing horses is the most economical and easiest way to feed.

The most difficult thing about pasturing horses is their grazing behavior. Horses have two grazing habits that can make pasture management difficult. They are highly selective grazers, choosing some grasses or areas to graze heavily while avoiding others. They are close grazers, leaving very little of the grass above the soil surface.

Most horses if given the opportunity, will spend 14-18 hours a day eating forages, much like free-running horses (Ralston 1986). There are health and metabolic problems such as colic, gastric ulcers and behavior concerns when horses are fed large amounts of nutrient dense feeds
like grain only once or twice a day and have limited access to forages. So it is important to supply equine with a safe constant forage supply.

Because horses have evolved to eat plant material, we must keep in mind that not all plants are safe for them to eat. Poisonous plants and weeds can cause metabolic disturbances or death in horses. Horses differ from other livestock in that anything that impairs the horse's tolerance for exercise and performance diminishes the horse's value. This paper will cover some disorders created by certain pasture and forage plants.

### Fescue toxicosis

Fescue toxicosis in the horse has been recognized for decades. However, the mechanism of action and successful management practices are only now being reported. Fescue toxicosis in the horse is due to several alkaloids in the endophytic fungus found in fescue. These alkaloids can cause problems to a pregnant mare and her fetus. Common signs of fescue endophyte toxicity include prolonged gestation, lack of udder development, absence of milk production, abortion, thickened placentas, retained placentas, stillbirths, and foal mortality. One of the most common effects in pregnant mares is reduction of prolactin hormone, which triggers udder development in late pregnancy. Prolactin is released from the pituitary gland and is influenced by other hormones, including dopamine, which inhibits prolactin release. Dopamine is a chemical normally produced in the body, affecting function of glands, muscles, organs, and nerves, and it acts as a neurotransmitter in the central nervous system. It is essential to normal nerve activity in the brain and some peripheral tissues. Its cellular receptor activity is affected by the endophytic fungus toxins.

Fescue toxicosis may be controlled by management or treatment. A rotational grazing technique allows use of fescue for growing horses. Even though endophyte-infected tall fescue hay may be less digestible in the horse than uninfected hay (Redmond et al., 1991), young growing horses being exercised can efficiently use the endophyte-infected fescue on a short-term basis (Pendergraft et al., 1993). Similar techniques can be used in mares. A forage legume, such as birdsfoot treefoil or red clover, seeded with tall fescue will substantially reduce the adverse effects of this poison. The primary method of transmitting the fungus is through infected seed. Fungus-free and fungus-resistant seed is now available and should be used. However, pastures seeded with fungus-free seed may eventually become-infected.

If mares are removed from fescue in late gestation, most signs of toxicosis can be reduced or eliminated. Withdrawal from infected fescue before parturition results in a rise in serum prolactin levels, allowing milk production (Redmond et al., 1991). Mares moved to endophyte-free pasture at 305 to 310 days of gestation delivered live foals and lactated normally.

Fluphanazine has been considered, however Equidone, domperidone has been very promising. Daily oral doses of 1.1 mg/kg body weight of domperidone prevented symptoms of fescue toxicosis in late gestation mares on endophyte-infested fescue forage (Cross et al., 1999).

### Alsike clover

Alsike clover (Trifolium hybridum) creates a photosensitivity response secondary to damage in the liver caused by alkaloids in the plants. Legume hays have also been implicated in setting up these conditions for skin problems. (Nation, 1989). Chronic or nervous clinical signs and
liver disease, including biliary fibrosis and epithelial proliferation, may occur (Nation, 1991). Photosensitivity - Certain plants contain photosensitive pigments that are absorbed into the blood when a horse eats the plant. In the presence of ultraviolet light from the sun, these then react in areas of non-pigmented skin, and the horse's skin sunburns. Generally, a horse has to consume these plants for a few months before the liver effects are severe enough to allow accumulation of a by-product of plant chlorophyll breakdown in the blood. This compound is called phylloerythrin, and its accumulation in areas of non-pigmented skin causes photosensitivity.

Sweet clover

Sweet clover poisoning occurs as a result of molds that grow in poorly managed sweet clover silage or hay that is put up too wet. These molds produce the chemical dicoumarol which blocks normal blood clotting in animals that consume large quantities. Dicoumarol is commonly used in several commercial rodent poisons. If formed, the poison persists in hay or moldy silage and is readily eaten by animals. The signs of sweet clover poisoning include those of abnormal bleeding. The first signs are spontaneous nosebleeds and black tar-like manure. Swelling of joints, lameness and difficult breathing can occur later if heavy doses are consumed. Treatment consists of removal of the feed source and administration of vitamin K to restore normal blood clotting. Prevention includes avoiding moldy sweet clover silages and moldy hay that consists primarily of sweet clover.

Red clover

Slobbers - excessive salivation were observed in horses eating red clover or other legumes infested with *Rhizoctonia leguminicola* that produces slaframine (Socket et al., 1982). It thrives best in cool conditions with high moisture. Slaframine may be visible on a plant as bronze-colored or black spots or rings, and there is a quantitative lab test for its presence. This toxin is usually stable, it can be found in baled hay. Slaframine can break down over time. In one report, after ten months of storage, the toxin dropped from 100 mg/kg to 7 mg/kg (Hagler and Behlow, 1981). Some of the signs of slaframine are excessive salivation, increased tear production, increased urination, bloating with associated colic, diarrhea, feed refusal, or abortion. Its effects go away almost immediately after taking away the contaminated feed.

Nitrate poisoning

Nitrogen poisoning can occur in cattle and horses grazing pastures or eating hays that have accumulated high levels of nitrates during growth. Nitrate levels tend to be higher in the lower one-third of the plant or stalks and accumulate more at night and on cloudy days. Some species of plants that are known to accumulate nitrates include Johnsongrass, sorghum, sweetclover, bromegrass, orchardgrass, lambsquarter, oat hay, rape, barley, wheat and corn. Hay may continue to be dangerous as the accumulated nitrates decrease slowly over time (Stanton, 1995).

Low levels of nitrates can cause abortion without any other symptoms. Severely affected animals develop muscle tremors, lose coordination and become weak. Moving these animals will initiate difficult breathing commonly followed by collapse and death. Nitrate poisoning is often confused with prussic acid poisoning but is distinguished by a marked difference in blood color of affected animals. Animals poisoned by nitrates will have chocolate brown blood while those poisoned by prussic acid will have bright red blood. Treatment by a veterinarian can be effective if
initiated early. Prevention includes mixing affected forages with normal forages to dilute the nitrate levels. Raising the cutter bar 10-12 inches to avoid cutting the lower one-third of the plant and not cutting drought-stressed forages for several days after a rain also helps reduce problems. If high nitrate levels are suspected, samples of the forage should be submitted to a competent laboratory for analysis before the forage is fed.

Horses can tolerate a higher amount of nitrate levels in feed than cattle.

Prussic acid poisoning

Prussic acid poisoning is caused by a poison called cyanide that can be produced in several types of plants under certain growing conditions. All species of farm animals may be affected with this acute poisoning. The plants most commonly involved in prussic acid poisoning are Johnsongrass, sundangrass, common sorghum, in addition to black cherry and choke cherry. Johnsongrass is the most toxic of the sorghums and commonly causes poisoning when subjected to frost or drought conditions. Very young, rapidly growing plants are more likely to produce the poison. Feeding or grazing of these forages should be delayed until they are more mature. Feeding forages following heavy nitrogen fertilization, plant injury by trampling or stunting of plant growth due to adverse weather should be avoided. If large amounts of forages containing prussic acid are eaten, death can occur within a few minutes. Excess salivation, difficult breathing, muscle tremors and rapid heart rate all signal the onset of prussic acid poisoning. Shortly after these symptoms are seen the animal may go down and death will likely occur due to respiratory paralysis. Animals that live one to two hours after the onset of these signs will usually recover.

Prussic acid is quite volatile and there is little danger from feeding well-cured hay. The following prevention measures will best control the problem: Do not graze pastures that are less than 18-24 inches tall or green chop plants over 18 inches tall for three days after a killing frost. Feed grain before allowing animals to graze fields that may be high in prussic acid.

Colic from Alfalfa

Colic from grazing in Alfalfa pastures is commonly involved in causing cattle to bloat. Cattle in early stages of bloat will show signs of abdominal pain, which include restlessness and kicking at the belly. Legumes tend to produce gas in the Equine digestive system. Horse do not bloat but do colic just another name for a sever stomachache.

Metabolic Disorders related to feeding forages:

Because horses are living longer we are having reports of metabolic and hormonal dysfunction (Peripheral Cushing’s disease) in horses. Clinical signs of metabolic syndrome include obesity-associated laminitis and abnormal fat deposition. In addition, insulin resistance appears to be one of the criteria defining metabolic syndrome. When a horse has a history of chronic laminitis, the first concern would be addressing the metabolic issues contributing to the problem, usually obesity and/or pituitary dysfunction, both of which are treatable.

Insulin resistance

Horses that are truly insulin resistant/glucose intolerant there is no one “type” of hay guaranteed not to trigger a bout of laminitis. It depends more on the harvest conditions, not the species of grass, whether a batch of hay contains sufficient non-structural carbohydrates (NSC:
starches, water soluble sugars and fructans) to cause problems. Most horses tolerate more than 20% NSC without adverse effects, and most grass hays, especially those from the Eastern states, contain only 7-18% NSC, with an average of 12%. Even legume hays, on average, contain less than 15% NSC. Oat hay, on the other hand, averages 22% NSC. (Equi-Analytical Laboratories' web site.)

Grasses accumulate NSC throughout the day, with the highest concentrations achieved late in the day if the sun shines. If temperatures are above freezing and adequate water is present, NSC are converted to cellulose and other structural carbohydrates overnight, resulting in very low sugar concentrations by daybreak. If this process is disrupted by drought or freezing temperatures overnight, NSC concentrations can increase significantly.

The grasses continue to "respire" after cutting until the hay is baled and "cured." The longer the hay is dried in the field, the lower the NSC will be. Sugars and fructans are water soluble, so if the hay is rained on or soaked in water, the overall NSC will also be reduced. "Warm season" grasses, such as coastal Bermuda and crabgrass, tend to accumulate lesser amounts of sugars than the "cool season" grasses like fescue, orchard grass, and timothy under adverse conditions.

If a horse is sensitive to NSC content, the "safest" hays are coastal Bermuda or timothy cut early in the day, after a warm night and recent rainfall. Hay dried in the field for at least a day or two--even rained on a bit--is considered safer. Western hay producers tend to cut their hay later in the day to prevent excessive drying, and they bale more quickly than is possible in the humid East, all of which tends to preserve a higher NSC content.

Laminitis

Laminitis is inflammation within the sensitive laminae of the feet. It can occur for many reasons, but as a nutritional problem it is commonly linked to grain-rich diets, ingestion of too much rich pasture, and obesity. Grain overload or a diet rich in high-carbohydrate feed (grain or lush pasture) initiates a series of metabolic and endocrine (hormone) disturbances in the body. A diet abundant in carbohydrates upsets normal intestinal bacteria, allowing more endotoxins from harmful bacteria to be absorbed into the bloodstream than can be neutralized by the liver.

In Conclusion, When feeding horse forages there are a few things to keep in mind. There are molds and fungi that can produce toxins in forages that can make your horse sick or cause death. Learn to recognize clinical signs, and understand climatic conditions that may cause plants to be affected. Buy feeds and hays from reputable dealers and lab test suspicious feed.

References:


4. You Asked: Here is the response from our Extension Attorney. Questions are from those who emailed asking.

Question: What are the liability responsibilities for the Livestock & Horse owner in North Carolina?

Response: We are a "fence-in" state. That means that, unlike some western states, an owner of livestock and horses (as well as poultry) have a duty to others to ensure that those livestock, poultry, and horses remain on their own land. This does not mean that an owner of livestock guarantees that the livestock will not escape. It does mean that the livestock owner has taken reasonable steps to prevent escape. If there is a history of animals getting out it makes it much more likely that negligence will be found and the owner found liable for the plaintiff's losses, either personal injury or loss of property.

Question: So after reading about the drones, If we can NOT shoot it down.........and it spooks the herd and the herd breaks out and damages others property or gosh forbid, causes a vehicle wreck and lives are injured/lost.......who is at fault.?? Especialy if we do NOT know who owns the drone.
Response: A livestock owner is generally not liable for the acts of third parties unless those acts were foreseeable. In your hypothetical, liability on the part of the landowner is very unlikely. Nonetheless, some injured plaintiffs will sue anyway. This is why adequate insurance coverage is so important. Your insurance policy generally provides that the insurance company will pay your costs of defense.

Question: Well, this will be challenged at the first time a drone will put in danger a person or an animal or both. I believe that if a drone is taunting my horse and he/she spooks, throwing a rider off etc, I believe I have the right to defend myself/my property/my guests and my business. I own the airspace above my farm (up to 500 feet?)

Response: Where the drone is putting the horse and/or the rider at risk of serious bodily harm or death, one would certainly be within their rights to should it down or otherwise (electronically, for example) disable it. A person that shoots down a drone may, nonetheless, face legal action so documentation of the incidents and witnesses are essential. One should also check one's insurance policy to determine whether your insurance company will pay the costs of defense under such circumstances.

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5. Using Electric Fence to Improve Pastures

Krista Lea & Dr. R. J. (Bob) Coleman – University of Kentucky

Acceptance of electric fence for use with horses varies greatly with horse owners across breeds, disciplines and geographic locations. But regardless of where you are located or what you do with your horses, electric fence can be a valuable tool to improving your pasture management.

Benefits to Pastures Horses are known as spot-grazers. They will return again and again to the same areas to graze and will leave other areas of pasture untouched. Grasses are more succulent in a short, leafy stage compared to more mature, taller grasses nearby. Horse may also prefer one area of a pasture because it is closer to the gate, water, shade or horses in a neighboring pasture. Areas of heavy grazing will over time begin to deteriorate; large patches of weeds or bare soil will soon be found where health grasses were once plentiful. Weeds can greatly reduce the productivity and the quality of the pasture; bare soil is likely to wash out during wet periods and may take with it nutrients or pesticides that will end up in surface and ground water. Often, spot grazing can be controlled by strategic placement of temporary electric.
Installation of electric fence in large pastures allows the manager to subdivide the pasture in a low cost, temporary way. Subdividing allows for rotational grazing. While rotational grazing is often very complicated, it can be as simple as rotating horses from one side of the fence and back to the other. Horses should be allowed to graze one section of the pasture until the average pasture height is about 3-4 inches and then be rotated to another section. The recently grazed pastures should be clipped to a height 3 inches, evening out patched of under grazed areas with more heavily grazed areas. Horses should be returned to this section with they have grazed down other areas to 3 inches or regrowth has reached 6-7 inches. Timing of this rotation is dependent on grass species present, size of pasture, number of horses and weather conditions, but will often be around 21 days on cool season pastures in the spring and 28-35 days during the summer months.

Dividing pastures into front and back (instead of side by side) can give managers the option to encourage horses to graze different sections of a pasture that they may not otherwise want to graze. Always check these areas to be used for toxic weeds or other situations that cause horses to avoid these areas before installing temporary electric fence. Temporary electric fence can also be used to keep horses out of certain areas of a pasture. If managers want to apply herbicides to part of a pasture, this area can be fenced off and allow horses in the non-treated areas only. Fencing can also keep horses away from wet areas, noxious weeds or trees.

What Do You Need Keep in mind that temporary electric fence is first a psychological barrier, then a physical one. It is not recommended to use temporary electric fence as a perimeter fence for a pasture, but as an interior fence to further subdivide the pasture. It is best to purchase all hardware from the same manufacturer as individual parts of the fence will work better together. What type of fence material can be used ranges from poly-wire, poly-tape and braided rope. Horse owners need to select a fence type that they are comfortable with and is easy to use and maintain. The wider 1 ¼ inch tape is more visible, but tends to catch wind and water resulting in stretching of the fence. The ¾ inch tape works well, is visible and easy to use as are the braided rope products. If you experience a lot of wind in your area, consider the rope rather than the tape products. How many strands of tape or ropes will depend on the horses in the pasture and horse owners’ preference. One strand can be effective, but in some cases two strands are needed to keep horses where you want them.

Select posts that are designed to be used with the type of fence that you have selected. Post can be made of fiberglass, metal or plastic. Metal (such as t-posts) are not recommended with horses. Plastic posts are light weight and inexpensive, however they may not last more than 1 season unless they are UV stabilized (meaning the sun will not breakdown the plastic). UV stabilized posts are often more expensive, but are worth the investment. Fiberglass or some of the composite posts last longer and can be driven in, giving a very stable fence. Wear gloves when handling fiberglass posts.

The charger is the source of the electric current for the fence. Chargers can plug into a power source such as in the barn or can be battery or solar operated. Solar chargers may run low after days of cloudy skies or if the solar panel is not exposed to the sun.

Many chargers will have a combination of power options for backup when needed. The size and type of charger will largely depend on the length and type of fence you plan to install and the availability of power to the area.

In order for electric fence to work properly, it must be a completed circuit, which will require ground rods. Use galvanized ground rods to reduce rust and corrosion. Ground rods are connected to the charger via wire and are buried in the ground. The number and length of the ground rods needed will again depend on the length, type and strength of the fence, however a general rule of thumb is 3 six foot rods for dividing a medium size pasture. Ground rods do not have to be driven straight into the ground, but can be put in at an angle or even trenched and laid parallel to the soil surface. If trenching, make sure the rod will not be exposed by minor erosion as this will decrease the effectiveness of the fence.

Lightning protection is recommended for electric fence systems, especially more permanent ones. Lightning boxes provide a way for the system to discharge excess energy in the event of a lightning strike. Otherwise, this energy will move back to the charger and can result in charger damage or fire when housed in a structure.
Other items needed will include wire to connect the charger to the fence and to the ground rods. Be sure that the wire is the same as what is in the fence tape to prevent compatibility issues. Gate handles make it easy to install a simple gate to allow people, animals and equipment in and out of the area. Make sure that the gate is wide enough to allow animals to pass through without getting uncomfortably close to the fence as they may panic and rush through. Electric fence indicators are available that warn others that the fence is electrified and some will flash when the fence is on to indicate an active current. Fence testers may also be useful to test the current in the fence after it is set up.

Using Electric Fence Safely Proper installation and maintenance is essential for temporary electric fence to be effective and safe around horses. While 1 strand of tape is adequate for most adult horses, multiple strands may be needed for young, aggressive or naïve horses. It is important to electrify all strands, so consider your design and needs before you select a charger. Fences should be kept tight to reduce blowing in the wind and prevent entanglement. When horses are first introduced to electric fence, be sure to provide ample room. Once horses have a respect for the fence, the area can often be reduced or the stocking rate can be increased. Accidents often occur when fences are not “hot enough” or do not carry enough of a charge to completely deter horses from testing a fence. This is why using an appropriate charger for the length and type of fence is essential.

While the shock from an electric fence is quick and harmless, it should be strong enough that there is no question in the horse’s mind. Fences should be checked regularly for sagging, damage or decreased charge. Weeds or grasses that grow up and touch the fence will decrease the charge in the fence, therefore mowing or weed eating will be required around fences that are standing for the season. As horses become accustomed to the fence and appear to give it a wide berth, remember to keep the fence on and working at all times. Summary The key to successful use of electric fence is proper installation and maintenance. When used properly, temporary electric fence is a safe and economical way for managers to encourage horses to utilize more of the pastures available. This will reduce the need for stored forages such as hay, increase the profitability of the farm and reduce the environmental impacts of the operation on the surrounding areas.

This article was first published in the Bluegrass Equine Digest, the University of Kentucky Ag Equine Programs’ free, monthly equine research newsletter, published in conjunction with The Horse.com and sponsored by Zoetis.

6. Moles, Voles and Pasture Holes

Jamie D. Warner - Extension Agent, Livestock

The calls are beginning to pour in to every Cooperative Extension Office in the state wanting to know how to eradicate moles and voles in their pastures and yards. Each year, as the days get longer and the weather gets warmer, these calls become almost a daily occurrence. It’s important to first identify which critter is responsible for the damage to your grass before deciding on the best control option for you.

DESCRIPTION

Moles are 4-6 inches in length. They have very short tails and pointed noses. Moles possess short front legs that are paddle-shaped which allows them to “swim” through soil. Their eyes and ears are not visible. Moles are not rodents, they are classified as an insectivore, meaning their diet consists of insects only. Eighty-Ninety percent of their diet is composed of earthworms, the remaining portion is from other insects such as ants and grubs. They do NOT eat plant material but do tend to damage root structures while moving around under the soil. In the Southeastern US, moles breed in February and March and give birth approximately 42 days later (April/May) to 2-5 “pups”. These pups are ready to leave the nest and become solitary individuals, finding their own area 30-45 days later.

Voles, on the other hand, are true rodents and are very closely related to the house mouse. Depending on species, voles are 3-5 inches in length with visible ears and eyes. Their legs are mouse-like and their tails are longer, resembling those of their rodent cousins. They eat a variety of green vegetation, roots and bulbs and even the bark on trees, causing damage and death to most of the plants they
Voles mate several times a year and after a gestation period of 3-4 weeks, give birth to 5-10 young. These young reach sexual maturity in as little as one month and begin having litters of their own. Because of this, populations of voles can seem to explode over night.

**SIGNS**

**Moles:**
- Tunnels in pastures or lawns that are pushed up, dome-shaped.
- Small mounds may be visible – usually 1 - 2 inches high
- No teeth marks or gnawing on plants

**Voles:**
- Small holes without a mound
- Plants that die unexpectedly without cause
- Trees/Shrubs that show teeth marks and gnawing from the ground, up

**CONTROL**

Moles and voles have the same natural predators including: snakes, foxes, coyotes, weasels, birds of prey, domestic cats and dogs. Creating beneficial habitats for these predatory animals can dramatically tip the scales against moles and voles. You can work with your local Wildlife Office on habitat creation. All mole species are protected by law in the state of North Carolina and **cannot** be hunted/trapped without a permit from the North Carolina Wildlife Resource Commission. Voles like lots of vegetation in which to build their burrows. By maintaining proper heights of grass species, mowing when you should and keeping your barns, fence-lines and out buildings free of brush piles and high organic matter voles will tend to move on. Most rodenticides are not available for homeowner use and are normally not recommended since other species of wildlife or domesticated animals may be harmed. Traps are labor intensive and not very effective against either species. For more information on control techniques, or situations unique to you and your operation, it is strongly advised that you contact your local Cooperative Extension Agent or Wildlife Officer.

7. **PARELLI CLINIC MAY 20-23**

PARELLI NATURAL HORSEMANSHIP CLINIC at EagleBear Farm. MAY 20-23. Don Jessop, from Corvallis Montana, top Instructor who taught at the Parelli Center with Pat and Linda Parelli, will be coming to North Carolina's EagleBear Farm. Don is an incredibly insightful and effective trainer and horse specialist. AUDITOR SPOTS STILL AVAILABLE! Don't miss this opportunity to see a master at work. CONTACT: Lauren (919) 452-3023, ncparelliclinics@bellsouth.net

8. **Shooting Star Horse Farm Events** -

www.shootingstarhorsefarm.com
Group lessons Wednesdays and Sundays @ 4pm

Boarding Spots Available

June 11th, 3pm - Carolina Stars & former Cavalia star Fairland Ferguson Trick Riding Performance!!

Prepare to be amazed by the talented Carolina Stars Trick Riders!! Stunts on Horseback!
The event will be in our beautiful indoor arena so purchase tickets early here-
http://www.shootingstarhorsefarm.com/events/
and plan to come rain or shine! Gates open at 2:30

Aug 6th-2nd annual Shooting Star PHA Horse Show. Sponsorship packages available.

Trick/Roman Riding performance at Shooting Star Horse Farm with former Cavalia star Fairland Ferguson (inspiration for Disney movie Brave character Merida)

https://www.youtube.com/watch?v=hDgNAOwhX5Y

and Carolina Stars Trick Riders Lori Chaney and Leslie Reed

Details to come (2nd weekend in June). $20/adult ticket $10/child ticket

Shooting Star Horse Farm
Stunt Riding Performance
5624 Davis Mill Rd.
Greensboro, NC 27406

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9. Pasture PorkShop

Wednesday May 25, 2016

9am – 5pm

Please Join Us

This all-level seminar, presented by NC Choices and NC Cooperative Extension, is geared toward NC pastured pork producers interested in taking their business one step further on-farm and off.

Registration Opens at 8:00am Forsyth Cooperative Extension Office, 1450 Fairchild Road
Winston-Salem, North Carolina 27105 (Directions can be found

FEATURED SPEAKERS Ryan Butler, Green Button Farm Dr. Mark Knauer, NCSU Animal Science Casey McKissick, Foothills Local Meats Lee Menius, Wild Turkey Farm Roddy Pick, Greenbrier Farm Silvana Pietrosemoli-Castagni, CEFS and NCSU Animal Science Dr. Eric van Heugten, NCSU Animal Science

*Due to limited space, the first 25 PAID registrants receive a spot in the pork demo class.

All other registrants will be put on a waitlist for the demo class. Registration fee is $35, payable by cash, check, or cc. Go here to register. For snail mail folks, see back of this page. Registration deadline is May 18, 2016.

Registration fee includes a Grab and Go breakfast with local buttermilk biscuits, local BBQ plate lunch, and snacks. Please make all checks payable to “NC State University” and leave the memo line blank. Please mail checks and snail mail registrations to: Center for Environmental Farming Systems Attn. Lisa Forehand Box 7609 - NCSU Raleigh, NC 27695

Register On-Line at HTTP://GO.NCSU.EDU/PORKSHOP

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10. HAY

PLEASE LET ME KNOW IF YOU HAVE HAY FOR SALE!
MANAGE YOUR PASTURES!

11. Swap Shop

Horse instructor needed for Camp this summer. Need to be 18 or older to live on site. If under 18 then they could commute here. Let me know, if you know of anyone who would be interested, let me know

Looking to purchase steer calves, let Ben know if you have some or know of someone who may be interested.

Are you looking to buy some really nice AI Bred Heifers? Or Are you looking to put some beef in the freezer? If so, let Ben know!

12. Take A Load Off

I need your clean Jokes, so please send them to me!

I always need more help with the jokes!

Critical Thinking

**Woman:** Do you drink beer?

**Man:** Yes

**Woman:** How many beers a day?

**Man:** Usually about 3

**Woman:** How much do you pay per beer?

**Man:** $5.00 which includes a tip

**Woman:** And how long have you been drinking?
Man: About 20 years, I suppose
Woman: So a beer costs $5.00 and you have 3 beers a day which puts your spending each month at $450.00. In one year, it would be approximately $5400.00 correct?
Man: Correct
Woman: If in 1 year you spend $5400.00, not accounting for inflation, the past 20 years puts your spending at $108,000.00 correct?
Man: Correct
Woman: Do you know that if you didn't drink so much beer, that money could have been put in a step-up interest savings account and after accounting for compound interest for the past 20 years, you could have now bought a Ferrari?
Man: Do you drink beer?
Woman: No.
Man: Where's your Ferrari?

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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!!!!!

Please remember our Troops who are serving our Country (and their families), those who have come home with wounds, and the families that paid the ultimate sacrifice.
Have A GREAT
SAFE WEEKEND!

Ben Chase
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North Carolina State University
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