By: J. B. Daniel

More than 90 forage and livestock producers traveled to Rich Valley in Saltville, VA to attend the VFGC Fall Forage Field Day on September 20, 2010. The Clark family hosted the event at their home farm in Rich Valley where participants walked through a dense paddock of orchardgrass mixed with other common annuals and perennials averaging nearly 12 inches deep despite the relatively hot and dry growing conditions since the end of July. Participants watched as the electric fence was raised and the large herd of about 180 cattle walked into the rested paddock where we were standing for another day's allotment of forage. It was evident that the high density stocking technique for short durations left a lot of forage covering the ground, but the 90 day rest period since the previous grazing in June had resulted in another 4500+ lbs of forage dry matter ready for grazing at the end of this dry summer.

While Mr. Clark explained how they manage the cow/calf herd, the yearling stockers, and the finishing beeves in the pasture system, he emphasized to the crowd how important it was for them to try innovative grazing techniques but to remain flexible when managing stocking densities and paddock sizes based on growing conditions and the different needs of each herd throughout the year.

Other speakers on the program discussed meeting livestock nutritional requirements on forage, important considerations for designing water and fence systems, the importance of grazing management to the function and overall productivity of pasture soils, options for summer forages to meet livestock needs during the summer months and technical and financial assistance available through the local NRCS and SWCD offices.



Will Clark finished the after dinner program by explaining how the market for their grass finished product has developed over the last several years which resulted in an interactive question, answer, and discussion session with many of the participants who were also interested in direct marketing their own grass finished livestock products. This VFGC event successfully brought forage and livestock producers together with members of the local agriculture industry and government agencies to share ideas, experiences and innovative techniques to enhance sustainable forage production, grazing management and marketing of livestock products from farms throughout the region.

J. B. Daniel is a Grassland Agronomist with the USDA/ NRCS and serves on the VFGC Board.

Southern Piedmont Forage Tour Draws Big Crowd

By: Chris Teutsch

This summer's Southern Piedmont Forage Tour held at Mary Sue Terry's B.H. Copper farm in Patrick County drew over 100 participants. The tour stops included pasture ecology, watering systems, reproduction and genetics, novel endophyte tall fescue, stockpiling for winter grazing, hay storage and feeding, rainfall simulation, and annual forage species in grazing systems.

A catered meal, served at Virginia Tech's Reynolds Homestead, rounded out the evening. Dr. Alan Grant, Dean of the College of Agriculture and Life Sciences at Virginia Tech was the keynote speaker during dinner. Dr. Grant told participants that the three missions of the land grant university, teaching, research, and extension, are involving to meet the needs of today's producers.



Danny Boyer and Tammy Goodyear talk to participants about cost share programs for developing watering and fencing systems for rotational stocking.



Dr. Alan Grant, Dean of Virginia Tech's College of Agriculture and Life Science visits with J.B. Daniel, State Forage and Grassland Agronomist for NRCS.

Where have all the Butterflies Gone? And the Bees, and the Birds...

By: Dana Ernst

I was staring at my co-worker thinking: you're joking; you can't possibly be looking; and I hope all this doesn't show on my face! She had just made the comment that her grade school son was desperate because he was supposed to bring a Monarch Butterfly, chrysalis, or milkweed plant to school. He couldn't find any. How can you not find a butterfly in summer? And milkweed is everywhere...Well maybe not in a subdivision, so I told her I knew where some milkweeds grew and that I would get her some. Then I started looking for butterflies. After two weeks I had seen 3 Swallowtails and 2 tiny orange fliers that I think were Moths not Monarchs. I remember chasing butterflies by the hundreds as a child and the farm I grew up on had huge patches of Milkweed. The only Milkweeds that I found were the six plants along my riding ring fence, which I protect. What happened to all of the butterflies?



The caterpillar of the monarch butterfly (Danaus plexippus) is a specialist on members of the milkweed family (Asclepiaceae). Without milkweeds in the landscape, there will be no monarchs.

Two weeks later, I found the answer at a training session on invasive plants. The presenter quoted some startling statistics from research done by Dr. Douglas Tallamy, who is a professor at the University of Delaware and Chair of the Department of Entomology and Wildlife Ecology. Dr. Tallamy has published a book entitled Bringing Nature Home: How Native Plants Sustain Wildlife in Our Gardens which discusses several reasons for the disappearance of native wildlife. I promptly checked it out of the library and it has proven a fascinating and frightening read. It is written for suburban dwellers in simple straight forward language with references to the scientific research to back up the information.

The part that I found fascinating was Dr. Tallamy's explanation of the way insects evolved in conjunction with the plants. He classifies most insects as 'specialists' that can eat only the plants that they have evolved with over eons. There are some 'generalists' that can eat a variety of plants, but even they can be limited in the number of different species they can eat. This is because while the primary metabolites of photosynthesis are the same in all plants, the secondary metabolites are not; therefore the leaf chemistry is different in each plant species. It is this leaf chemistry that gives the plant its flavor. The secondary metabolites are compounds like lignins in grasses, tannins in trees and a substance called cardenolides in Milkweeds and the Digitalis family. Milkweeds are poisonous because the cardenolides cause heart attacks, except in the Monarch caterpillar. It has developed a way to neutralize the chemical so that it can eat milkweed leaves. However, **Page 7** this specialization means that the caterpillar can eat nothing else; therefore, no milkweeds, no Monarchs. By the way, the cardenolides make the caterpillar deadly to birds.

He also states that herbivorous insects are very high in protein which makes them efficient at transferring the sun's energy up the food chain and that about 96% of birds use insects to feed their young. This includes game birds like Grouse, Pheasants, Turkey, and Quail as well as song birds. He then adds a section on habitat loss and its impact on native species. Based on the premise that a larger land area will support more different species and larger populations of each than a smaller area, Tallamy discusses the concept of equilibrium of all species for a given habitat. Equilibrium is a little like carrying capacity or stocking rates with multiple species. A habitat can only support so many species based on its size and plant make up. Change in either one will change the relationships of all species. In grazing terms, if your pasture is stocked at maximum rate and you decide to pull 3 acres out for a new equipment shed, then you have to remove a cow or the pasture will be overstocked. The final concept that he discussed was redundancy. This is where several species do the same job. If you lose one, the function will continue. A grazing analogy would be keeping several bulls with the cows. If you have 6 bulls out and one gets injured, the cows still get bred. However, if you only have one bull and he goes down you have a catastrophe.

The frightening part started with a listing of all of the ways that the native habitat has been destroyed in North America since the Pilgrims. The native habitat for Virginia and the eastern seaboard is a deciduous forest with scattered meadows of grasses and forbs. Seventy percent of that forest cover is now gone. Nationwide estimates are that nearly 100 million acres have been converted to urban and suburban uses out of the 2.3 billion acres in the US. Of that 100 million, 27.8 million acres are paved and almost 40 million acres are in lawns. Add to that land in agricultural production because most of our crops are introduced and areas that have been affected by invasive alien plants, pests or diseases, and the amount of land disturbed since the Europeans came here is staggering. Some ecologists estimate that between 95 and 97 percent of the habitat in the lower 48 States has been altered from its native state.

No PLACE TO HIDE

See Page 11 Butterflies

Page 8 Tips for Efficiently Utilizing Stockpiled Tall Fescue

By: Chris Teutsch

Once we have stockpiled grass on the ground, how we choose to utilize it can dramatically impact how may grazing days we get per acre. Research in Missouri showed that giving cows access to only enough forage for 3-days versus 14-days resulted in a 40% increase in grazing days per acre. In a dry year, this could mean the difference buying hay when prices are high or making it through with what you already have. The following tips will help to get the most of your stockpile.

Graze pastures that contain warm-season grasses first. Although we often like to think of pastures as monocultures, they are often complex mixtures of cool- and warm-season grasses, legumes and weedy forbs. If pastures contain warm-season grasses, use these first since their quality will decline rapidly in late fall and early winter.

Graze pastures containing clover next. We are always happy to see clover in pastures. However, in a stockpiling scenario it does not hold up to freezing and thawing as well as tall fescue. So graze mixed pastures before pure stands of tall fescue.

Save pastures with tall fescue for later grazing. Tall fescue is by the best grass for stockpiling in terms of maintaining its nutritive value as you head into winter. So graze pure stands last.

Strip graze tall fescue. As mentioned above, limiting access to stockpiled forage can significantly increase grazing days per acre. Strip grazing usually starts at the water source and then uses a single strand of electrified polywire to allocate only enough forage for the predetermined time period. It could 1, 2, 3, or more days. The shorter the time period the better utilization you will get. Since pastures are not actively growing during the winter months, no back fencing is needed.

To many producers that have not stripped grazed, the idea of moving a temporary fence two of three times a week can seem overwhelming. However, once you are set up it really goes pretty fast and the pay backs are huge—a free day of feed every time you move the fence. Is it less work than feeding hay? Probably not less, but just different and the pay back is much better.



Strip grazing stockpiled tall fescue drastically improves utilization on this Pulaski County farm.

Chris Teutsch conducts forage research at Virginia Tech's Southern Piedmont AREC located near Blackstone, VA and resides on a small farm in Dinwiddie County with his wife and four children.



Upcoming Events

Alfalfa Haylage/Baleage Conference

December 7, 2010 - Wytheville, VA December 8, 2010 - Rocky Mount, VA December 9.2010 - Weyers Cave, VA miscott1@vt.edu or www.vaforages.org

2011 VFGC Winter Forage Conferences

January 18, 2010—Wytheville, VA January 19, 2010—Madison Heights, VA January 20, 2010—Weyers Cave, VA makenny@vt.edu or www.vaforages.org

10th Heart of America Grazing Conference

January 25-26, 2011 Holiday Inn - Hurstborne Lane Louisville, KY http://www.kfgc.org/events.html

Virginia Beef Industry and State Dairymen's Convention

Hotel Roanoke and Conference Center Roanoke, Virginia February 10-11, 2011 http://www.vacattlemen.org

2011 Appalachian Grazing Conference

March 4-5th, 2011 Waterfront Place Hotel Morgantown West Virginia http://www.grazeappalachia.org/

5th Annual Equine Winter Conference

March 12, 2011 Jolliff Middle School, Chesapeake, VA cporr@vt.edu or 540-687-3521 ext 27. or www.vaforages.org

AFGC Annual Meeting June 15-15, 2011 French Lick Resort French Lick, IN http://www.afgc.org/events.html



Participants were divided up into small groups and ask to come up with a grazing system during an exercise at the Eric Crowgey's farm.



Eric Crowgey's calf barn doubles as pumpkin processing facility in the fall. Eric explained to participants that diversification in agriculture enterprises on their family arm is very important to overall health of the farm. His primary enterprises includes pumpkins, sheep, and dairy



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Page 4 Does Poultry Litter Fertilizer Create Weed Problems in Pasture?

By: Ben Tracy, Rory Maguire, John Fike, Steven McGrath

Poultry litter is a mixture of chicken manure, bedding material, and bird feathers cleaned from poultry production houses. It is a good source of nitrogen and phosphorus and often applied to row crops. Copious amounts of poultry litter are generated in Virginia, and infertile pastureland would benefit greatly from litter applications. Some forage producers may be reluctant to use litter as it may carry weed seeds that germinate after application. No one has actually confirmed of these claims though. A recent research project at Virginia Tech addressed this issue to help quell conflicting reports about weed problems associated with poultry litter application.

The main objective of this study was to evaluate whether poultry litter application increased weed problems in permanent pasture. Among other variables, forage and weed species were monitored in plots that received poultry litter, inorganic fertilizer, and no fertilizer. These field experiments were established at sites in Rockbridge and Shenandoah Counties, Virginia. To gauge the commonness of weed seed presence in poultry litter, we also collected litter samples from farms around Virginia and screened them weed seeds.

Over two years, poultry litter applications increased the amount of tall fescue and bluegrass in plots from 21% to 51% and 15% to 35%, respectively. These results were not surprising as other studies have also shown that increased fertility (mainly nitrogen) benefits competitive grasses like fescue and bluegrass. More weed species in the litter applied plots might have suggested that litter amendments increased weed abundance. We found no such evidence. Our survey of poultry litter collected from 10 farms within Virginia also failed to detect any live weed seeds. Although the survey was not intensive, the results suggest that viable weed seed may not be common in most poultry litter applied to farms.



Some forage producers in Virginia may still believe that poultry litter application contributes to weed problems in pasture. Results from this study found no evidence to support these claims. Poultry litter, like nitrogen fertilizer, favored forage grasses like tall fescue but had no effect on weed abundance. Most pastureland in Virginia is considered infertile and would benefit from poultry litter fertilizer. Weed problems that might arise from poultry litter applications are probably rare and should not influence decisions about using this fertilizer on pasture.

Ben Tracy is a grassland ecosystem management specialist in the Crop Soil and Environment Sciences at Virginia Tech and serves on the VFGC Board as an Educational Advisor. Rory Maguire, John Fike, Steven McGrath are with Department of Crop and Soil Environmental Sciences Virginia Tech.



Dairy Grazing Alive and Well in Mid-Atlantic By: Chris Teutsch

The Mid-Atlantic Dairy Grazing Conference and Organic Dairy Field Day was held in Wytheville, VA on October 11-13, 2010. More than 100 participants attended the two-day conference that was made up of both formal presentations and field tours. On the afternoon of the October 11, participants traveled to the farm of Eric Crowgey and family for an afternoon tour and a hands on exercise in which participants were divided up into small groups and task with designing a grazing system for this newly established grazing dairy. Each group presented their system later that evening at an opening reception.

The following day started off with formal presentations addressing the topics of adapting New Zealand knowledge, dairy grazing in Missouri and Oregon, and the Millionaire Model. After lunch participants toured the Richardson's organic grazing dairy. At this farm participants rotated through stops that included a soil pit, herd health, and pasture management. The tour finished with a rainfall simulation conducted by J.B. Daniel from Virginia's NRCS.

The last day of the conference included concurrent sessions that covered topics including legumes in pastures, low cost milking parlors, soil biology, supplemental feeding, animal health, and irrigation. The conference concluded with keynote speaker Joe Horner from Dairy Farmers of America talking about the future of dairy grazing in America.

If you missed this conference and would like to see videos of these talks, please visit <u>www.vaforages.org</u> and click on the link for the Mid-Atlantic Dairy Grazing Conference.



Participants learned about the impact that grazing management can have on soil structure at a soil pit dug at the Richardson's organic grazing dairy.

Winter Horse Care Tips

Shea Porr, PhD

As we gear up for the arrival of Old Man Winter, we are reminded of the challenges that winter horse care brings – particularly if you were around for "Snowmageddon". Cold, snow, ice, rain, wind or any combination thereof, complicates barn chores and limits our riding time. For these reasons, we typically do not spend as much time in barns or with our horses during the winter months. By keeping a few simple things in mind we can insure horses are receiving adequate care this time of year.

Access to Water. Cold weather brings the risk of frozen water buckets and troughs in stalls and pastures. Free and continuous access to water is important to maintain healthy horses, and extremely cold water will decrease a horse's water consumption. Ideally, water should be maintained at about 40°F. It doesn't have to be excessively warm, but it needs to be liquid – heated waterers are commonly used to assure the water source is not too cold or frozen over. When a horse's water consumption decreases, feed intake also decreases, leaving less energy available to maintain body temperature and condition. Reduced water and feed intake also leave your horse at risk for a number of intestinal health issues, including dehydration and impaction colic.

Adequate Shelter and Protection. While horses will need some protection from the elements, it is not necessary to keep them in a closed barn throughout the winter. Providing a wind break or a shed is often enough. Also, horses have two natural defenses against the cold – a long winter coat and a layer of fat beneath the skin. The long coat traps a layer of air near the horse's skin, helping to keep them warm. Keep in mind that the insulating ability of a horse's hair coat is lost when a horse is wet or covered in mud (or in a blanket, for that matter!), so it is important to provide a dry shelter for them in cold, wet weather and to groom them regularly. While a layer of body fat provides excellent insulation, it's not healthy to let a horse become obese.

Proper Nutrition. Provided forage quality remains consistent, most horses' nutritional needs do not significantly change during the winter months. Older horses or horses with compromised health may have a more difficult time maintaining body condition in extreme cold weather, so adding a source of extra calories (perhaps alfalfa hay, or a high-fiber grain mix) to the diet may be appropriate. However, extreme cold weather is generally not an issue in this region. A horse should be fed according to their type, age, and use – let body condition be your guide. Inactivity and overfeeding are probably a bigger concern this time of year, as they can lead to obesity and associated health problems in the spring.

Regular Hoof Care. The same amount of attention should be paid to your horse's hooves, whether you are riding regularly or not. This is often one aspect of horse care that is overlooked in



the winter. Horses' hooves are still growing in the winter **Page 9** months and they are walking on frozen, uneven ground, so timely and appropriate farrier work is important. Remember to pick hooves regularly to remove dirt and debris.



Regular Observation and Grooming. This doesn't mean petting their neck when you feed them and then running back to the warm house. It means taking the time to remove their blanket and groom them thoroughly. Weight loss and skin conditions can develop rapidly and can compromise your horse's health before you even realized there was a problem. Remove the horse's blanket and check them carefully 2-3 times a week to keep them groomed and feeling good.

Spending time with your horse even when you cannot ride is an important activity, and it doesn't take long to make sure their needs are met during cold winter months. By keeping these tips in mind, you, too, will be prepared for the next "Snowmaggedon"!

Shea is the Superintendent of the Virginia Tech's MAREC Center and is currently serving on the VFGC Board.



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IMPROVED VARIETIES IN IMPROVED MIXES



Page 10 MaxQ feeding a national trend of Kentucky 31 replacement on livestock farms

MADISON, GEORGIA – August 25, 2010 – Marking an innovation milestone that has forever changed grazing and livestock farming for the better, Pennington Seed today announced special tenth year anniversary discounts on its breakthrough toxin-free tall fescue MaxQ. Introduced a decade ago in the fall planting season, MaxQ provides the persistence, durability and performance of Kentucky 31 without the harmful effects on farm animals and profits.

For a limited time, farmers can put the proven pasture forage to work in their fields at a price approximately 20% less than previous years. "Every acre planted with MaxQ is an acre of non-toxic, persistent and high-yielding forage grass that will last for years to come," explained John Carpenter, Pennington's national forage and wildlife sales and product manager. "We expect farmers across the country will seize the opportunity to reap the superior animal health and performance benefits of this premium pasture grass."

"MaxQ has become the principal feed source for healthy livestock and efficient, profitable operations on a growing number of farms across the country," said Ronnie Stapp, executive vice president of Pennington Seed, which began working with scientists at the University of Georgia and New Zealand's AgResearch in the mid-1990s to develop MaxQ and solve the Kentucky 31 toxicity issues that negatively affect the health of livestock and farms. "Hundreds of farmers who have planted MaxQ fescue fields over the past decade are reaping the benefits of a healthier herd and a greener bottom line. Grazers and conventional hay farmers alike have come to trust MaxQ," Stapp added.

MaxQ success stories are as varied as the farmers who have planted the increasingly popular fescue that features friendly endophyte or fungus, which boosts productivity and helps lower everything from input costs to labor and equipment expenses. The MaxQ endophyte, discovered by New Zealand scientists, is a naturally occurring fungus that does not produce animal toxins like the Kentucky-31 endophyte. The MaxQ endophyte also helps the tall fescue plant battle drought, disease, and insects.

"Eight years later, this grass is just as green, tolerant and persistent as the first day my cattle grazed it," explained Whitey Hunt, a Georgia cattleman who turned a 40-acre kudzu field into his best performing pasture with MaxQ and now plans to replace 200 acres of his Kentucky 31 pasturelands with the healthy variety. "Sure there are upfront costs associated with fescue and crop replacement, but my cattle weight gains and



pregnancy rates are up and so are my profits," noted Hunt.

"I'm more of a grass farmer than a grazier," said Dan Potthast, a dairyman in Southern Illinois who cuts and stores his MaxQ fescue hay conventionally and relies on it as a mainstay in a twice-a-day feed mixture for his dairy herd. "My MaxQ fescue fields take the weather out of the mix for the most part and allow me to harvest even when the grass is wet," noted Potthast, recalling the storms and rains that used to washout his corn and alfalfa fields before he replaced them with MaxQ fescue. "My inputs, equipment, labor, fuel and vet costs, not to mention my blood pressure, are all down dramatically since I made the switch to this animal-friendly fescue," Potthast explained.

"The price of farmland around here is high, so it's absolutely critical that we make the most of the fields on our 40-acre farm," said Terry Becherer, a sheep farmer in Trenton, Illinois who has more than 200 sheep grazing his persistent MaxQ grasslands and at least 100 dry sheep and 60 lambs feeding on MaxQ hay in his barns. "We're getting nearly three times the grazing days with MaxQ compared to our fields of orchard grass. That's like tripling the size of my farm," explained Becherer. "MaxQ fescue has been the best thing for our farm operation and for our sheep."

"A healthy herd is a more profitable herd," said Dr. Che Trejo, an Egypt, Mississippi veterinarian whose passion for keeping animals healthy is having a positive impact on his cattle business. "We run about a thousand head of stocker grazing steers on about a thousand acres of new and old fescue," Dr. Trejo explained, noting there are big and visible differences in the overall health, performance and grazing patterns between the herd grazing his Kentucky 31 fields and those eating MaxQ. "The Kentucky 31 cattle aren't gaining much weight and are slow moving, while the MaxQ herd is out grazing even in the heat of the day and looking healthy from head to hoof," said Trejo, who plans to replace his 450 acres of Kentucky 31 in stages with MaxQ.

"Toxic fescue is bad for business, period," said John Andrae, an extension forage specialist at Clemson University who monitors the effects of Kentucky 31 on producers and sees a growing national trend toward the replacement of toxic fields. "Grazing dairies are losing as much as 25-percent of their milk production and cattle producers are giving up 30-percent of their calf crops to toxic fescue," added Andrae, who recommends over seeding Kentucky 31 with persistent clovers to reduce the toxins until the fescue can be replaced.

"Understandably, some farmers are reluctant to replace what appears to be perfectly good stands of tall fescue, but it's the toxins they can't see in their fields that are holding their cattle and their businesses back," Andrae explained.

Article submitted by Pennington Seed Co. of Madison, Ga.



5th Annual Equine Winter Conference Coming Soon!

By: Shea Porr,

Saturday, March 12, 2011, will feature the Virginia Forage and Grassland Council's 5th annual Equine Winter Conference. This year's program brings in speakers from Virginia and Maryland to discuss topics on horse care and pasture management.

Relative to horse health care and management:

Dr. Harold McKenzie from the Marion duPont Scott Equine Medical Center will discuss the latest discoveries concerning parasite management, including the developing resistance to ivermectin. He will also deliver a presentation on Equine Metabolic Syndrome, clarifying some of the misunderstandings about this complex issue.

Mike Spitzer, journeyman farrier with Virginia Farrier Services, Inc., will review hoof care and management with references to common lameness issues involving the equine foot.

Relative to pasture management and forage for the horse:

Dr. Shea Porr, from the Virginia Tech MARE Center, will present information on managing the health of the horse while on pasture, including controlling weight and managing horses who have foundered.

Watson Lawrence, Virginia Cooperative Extension agent will lead a discussion on how to prevent weed growth in horse pastures.



Dr. Les Vough, from the University of Maryland, will discuss hay selection for horses and will provide a hands-on demonstration with several varieties and qualities of hay.

Dr. Blair Meldrum, with the Virginia-Maryland Regional College of Veterinary Medicine, will review toxic plants common in Virginia, including discussions on how to recognize and prevent poisonings.

The conference will be held at the Jolliff Middle School located at 1021 Jolliff Road in Chesapeake, Virginia. Early registration (postmarked by February 26, 2011) will be \$25.00; registration at the door will be \$35.00. Registration will begin at 8:30 am, with the program running until 4:00 pm. Lunch and program materials are included with the registration fee. For more information, contact Dr. Shea Porr at cporr@vt.edu or 540-687-3521 ext 27.

Shea Porr is the Superintendent of the MARE Center and is also on the VFGC Board.

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President's Message



Greetings,

This message is going to be very short as I have been out of the loop for over a month recovering from a complication that developed from a simple operation. I am just now wading thru loads of e-mails to see what has happened and I am truly amazed of the dedication of all board members and all supporting staff that have carried on in my absence. It is humbling to see this work in action to bring you the members the summer and fall programs and all the hours that been put in for the 2011 winter forage conferences featuring Temple Grandin, Fred Provenza, and John Anderson. Please read up on this program and sign up early as a lot of excitement has been generated and people are signing up early. In closing I want to thank Margaret Kenny, David Fiske and Jerry Swisher for coming

back and helping. I hope to be back at work in a couple of weeks.

Best Regards, E. N. Garnett. President, VFGC

Chris's Corner

It has been a hot and dry summer and I was certainly thankful to get 6.5 inches of rainfall from the tropical storm that came up the east coast in October. What was truly amazing is that we had almost no runoff from that rainfall event. My old well at the farm did not even cloud up. That tells me how dry it really was. This season has allowed me to make some good observations on the impact that grazing management can really have during a drought. People always like to

blame drought for killing their pasture, but in my observations, well managed pastures are rarely killed by drought. What normally happens is that pastures are mismanaged (poor fertility, overgrazing, no rest, poorly adapted forage species, etc.) and then a drought comes along and adds just enough stress to these already weakened pastures and they die. We then blame drought, but in reality drought was the straw that broke the camel's back, not the primary cause. My point is that we need to be managing pastures for drought all the time, not just before, during and after a drought. We do that by building strong and resilient sods with a healthy root systems that can reach deeper into the soil to find water during a drought. This means we need to soil test and apply fertilizer and lime when needed, rotationally stock our pastures giving rest between grazing events, and choose forage species that we know are adapted to our areas.



I realize that everyone that has ever read my column already knows that I am big promoter of stockpiling tall fescue for winter grazing and just because it has been a dry fall I am not going to stop talking about it. There is no cheaper way to feed cows during the winter months. The question is how you handle dry years like the one just experienced. What I observed this fall is that even when rain is delayed until October, we were still able to grow a considerable amount of grass. My observations from around the Southern Piedmont indicate that our stockpile is yielding around 50 or 65% of what we would normally expect. I think the key to having success with stockpiling in dry years is having your pastures ready to grow when the rain finally comes. This means that we need to protect pastures that we want to stockpile from overgrazing during the summer months and have nitrogen on your pastures prior to rainfall. The other key to getting the most of stockpiled grass in dry years is efficiently utilizing it. You will find a short article in this issue of the Forager with tips for efficiently grazing your stockpiled grass.

The last thing that I wanted to mention is this year's winter conferences. We have had some great conferences in the past five or six years and after each one I always ask myself, how we are going to top that. I do believe that this year's conferences are going to do just that! Two world renowned experts in animal behavior on the same program for less than a dinner and movie would cost you. This is truly rare opportunity for producers in Virginia and surrounding states. So don't let it pass you by. Get you tickets early this one may be SOLD OUT! As 2010 wraps up, I wish everyone happy and safe holidays and hope to see in January at this winter's conferences.

Chris D. Teutsch Forage Research and Extension Virginia Tech's Southern Piedmont Agricultural Research and Extension Center

Frost Seeding Legumes

By: John Andrae

The widespread presence of thinned tall fescue pastures and recent development of more productive and persistent clovers have increased grazier's interest in establishing legumes in perennial cool season grass pastures. Many producers interseed perennial legumes into tall fescue pastures using a no-till drill in fall months. However, white and red clovers are commonly "frost seeded" during Spring in the Midwestern United States. Freeze/thaw cycles in these areas of the U.S. cause the soil surface to 'honeycomb'. Small ice crystals drive this slight shrinking and swelling at the soil surface and allow legume seeds to 'settle' to a perfect depth for germination and emergence. Frost seeding is also an excellent establishment option in the mid-Atlantic United States. Seed can be spread in late winter and early spring (typically late January through early March depending on location) using a small Herd seeder mounted on a tractor, ATV or even pickup truck. Some producers have also blended legume seed with dry sand and broadcast this mixture with large cone fertilizer spreaders. Frost seeding is most successful on closely grazed pastures. These pastures have minimal competition for light between the small legume seedlings and well established tall fescue or orchardgrass plants. In warmer areas where freezes and honeycombing are less common it may be useful to drag or heavily graze immediately following broadcasting to help incorporate seed into the soil. When frost seeding it is recommended to increase legume seeding rates by about 20-25% to offset decreased seed/soil contact.



All terrain vehicles can be fitted with spinner type seeders like the one above. A seeding recommendation that works well for the mid-Atlantic region is 4-6 lb of red clover + 1-2 lb of ladino or intermediate white clover broadcast onto a closely grazed sod in February.

John Andrae is the Forage Extension Specialist at Clemson University and resides with his wife and two children on a small farm in SC.

From Page 7 Butterflies

Tallamy then reveals that it is believed that there is a one to one ratio between habitat destruction and loss of species. For example, a 25% reduction in habitat means a 25% reduction in species. So if 95% of the native North American habitat has been compromised then that means that we can expect to lose 95% of the species that were here when the Pilgrims landed. I find that very, very frightening!

Bringing Nature Home is aimed at Suburban residents because Dr. Tallamy has a solution to prevent this huge loss of native wildlife. He is encouraging folks to use native instead of introduced plants for landscaping and to work diligently to reduce or control invasive plants like Japanese Honeysuckle, Mile-a-Minute, Ailanthus and Kudzu. Also, Tallamy claims that providing habitat for more native insects brings the entire population into balance, with predators to prey on the destructive pests.

Organic vegetable producers have been utilizing this idea in a practice called 'Farmscaping'. In Farmscaping, flowering plants are established in groups, rows or sections all over the farm to house beneficial insects. I think this concept is applicable to our farms as well. Perhaps, field borders and hedgerows along our pastures and fields should be established by choosing plants not only for the flowers but for the insects that it hosts. It could benefit Quail, which most landowners miss, as well as our fields. These borders and hedgerows could be designed to connect small wood lots and 'natural' areas together to allow wildlife protected passages to move around. This would in effect make one larger habitat area which would in theory be more stable.

This idea brings up some questions: Is being able to control insect damage without spraying worth the economic loss from a 30 to 40 foot strip of land along the field? Is hearing Quail whistle or watching a Bluebird worth "giving up" such a strip? Is the cost of NOT protecting native plants and insects a price our grand-children can afford to pay?

Dana Ernst is an employee of the USDA/NRCS and serves on the VFGC board.





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VFGC President, E. N. Garnett, thanking Jerry Swisher, former VFGC President for his dedication to the Virginia Forage and Grassland Council.

PUBLISHER'S NOTICE

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Temple Grandin and Fred Provenza to Speak at the 2011 Winter Forage Conferences

By: Gordon Groover

Essential Topics in Animal Agriculture: What Farmers Need to Know is the theme for the Virginia Forage and Grassland Council (VFGC) and Virginia Cooperative Extension winter forage conferences. This is an ideal opportunity for all livestock producers to gain an understanding of animal psychology and behavior leading to: reduced stress and injury to animals and people; higher quality animal products; a safer work environment; improved animal welfare; and lower total costs of production.

This year's keynote speaker is Dr. Temple Grandin, Professor of Animal Science at Colorado State University and internationally known expert on animal behavior. She is listed in the 2010 TIME 100, Time magazine's annual list of the 100 most influential people in the world. Dr. Grandin will provide research-based insights and



knowledge into animal behavior and how to improve transportation, handling, and working facilities to reduce stress and improve animal welfare.

Participants will also hear from Dr. Fred Provenza, Professor Emeritus in the Department of Wildland Resources at Utah State University and Dr. John Anderson, Livestock Economist

By: Chase Scott

As grain sources of protein rise, the value of high quality farm raised forages increase. Proper management at harvest can ensure that your farm maximizes its stored forages potential. Baleage and haylage will be the focus during the Virginia Forage and Grasslands Council's 2010 Alfalfa Conference. The conference will he held in Wytheville (12/7), Rocky Mount (12/8) and Weyers Cave (12/9). Speakers include, Dr. Dan Undersander from Wisconsin who will speak on alfalfa/ grass mixture fertility management and proper hay equipment adjustment to decrease hay and haylage drying time.

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Winter 2011

for the American Farm Bureau Federation. Dr. Provenza will help famers understand the practical science behind grazing behavior and how to train animals to enhance the environment. Dr. Anderson will provide insights into the global economics of animal agriculture and what that means for individual farm profitability.



The daylong conference will be repeated at three locations:

Tuesday, January 18, in Wytheville at the Wytheville Meeting Center.

Wednesday, January 19, in Madison Heights at the Madison Heights Community Center.

Thursday, January 20, in Weyers Cave at the Weyers Cave Community Center.

The conferences will run from 8:30 am to 3:00 pm.

Please visit the VFGC web site (http://vaforages.org) for additional details and registration information.

The U.S. Department of Agriculture Natural Resources Conservation Service is also a sponsor.

Gordon Groover is an Associate Professor of Agricultural & Applied Economics at Virginia Tech and serves as an educational advisor to the VCFGC.

Alfalfa Haylage/Baleage Conference

Dr. Undersander has worked extensively with major farm equipment manufactures to improve their hav equipment. Also speaking on the program will be Randy Cragoe, an independent forage consultant. He will be speaking about the proper use of inoculants on hav crops. Billy Good from Anderson bale wrappers will talk about proper bale wrapper operation and management. Virginia Tech will be represented by two speakers, Dr Scott Hagood and Dr. Gordon Groover. They will be speaking about hay crop weed management and bale wrapper economics respectively. The programs will begin at 8:30 at each of the locations there is a pre-registration fee of \$20 if received by December 1st, \$25 at the door. Both nutrient mgt and certified crop advisor credits will be offered. Registration forms can be found at the VFGC website vaforages.org. If you have any questions please contact Chase Scott at 276-223-6040.

Chase Scott is an Extension agent in Wytheville, Virginia and serves on the VFGC Board.

Reporting the progress of Virginia's forage industry