

## Southside Team Wins State Youth Cattle Working Contest

By: Lindy Tucker and Laura Seigle

While agricultural Extension faculty across Virginia spend a significant portion of their time helping adult learners improve their farm management programs, agents have long held the understanding that teaching youth can set the stage for a lifetime of engagement in research-based farm practices.

Virginia Cooperative Extension's Youth Cattle Working contest encourages high school-aged 4-H and FFA students to treat and handle cattle in accordance with the standards of Beef Quality Assurance, an industry-wide program encompassing best management practices which promote carcass quality, animal health and welfare, and handler safety. Youth who practice for the contest learn to give injections and medications correctly, keep detailed records, and restrain animals properly—skills which can enhance future careers on the farm or in the agricultural industry.

On Monday, April 4, thirteen teams consisting of three students each gathered from across the state beside the cattle working facilities at the Southern Piedmont Agricultural Research and Extension Center in Blackstone to begin the Southern Piedmont Regional Youth Cattle Working Contest, one of five regional competitions taking place in Virginia. Students competing represented Bedford, Botetourt, Buckingham, Charlotte, Cumberland, Dinwiddie, Hanover, and Powhatan Counties. Each team faced the same tasks, beginning with calmly catching and restraining three calves in the headgate and then applying a fly tag, implant, pour-on dewormer, and nasal and injectable vaccinations. As any cattleman knows, working cattle is often an unpredictable experience and each competition echoes the variety of products, methods, and animal behavior seen across the state from farm to farm. The Southern Piedmont location had a surprise of its own as teams arrived to find Holstein heifers from a local dairy as their clients for the day. These well-mannered calves made for a quiet and fairly smooth handling experience but challenged youth in other ways such as finding space for fly tags amidst farm tags, RFID tags, and ear notches. Judges watched carefully, evaluating the students for technique, efficiency, safety, and correct recordkeeping. This year's judges included Jennifer Morris, local cattle producer, Mike Henry, manager of the Amelia Area Cattlemen LLC, and Kayleigh Mize, Brunswick County 4-H agent.

Taking first place in the regional competition was James River FFA - Team A (Botetourt County) composed of Eli

Stevens, Morgan Curry, and Davis Fenster and coached by Zach Wakeman and Katherine Carter in their second year of competition at Southern Piedmont, and their fourth year of competition for most of them. Claiming second place in their fourth year of competition, Randolph Henry High School - Team A (Charlotte County) comprised of Cassie Long, Hannah Adams, and Conner White and coached by Jim Pugh. Already no strangers to the state competition as both teams advanced to state last year as well, these two traveled to the Rockingham County Fairgrounds on Saturday, April 15th where they faced nine additional top finishing teams from regional competitions across the state. After a rocky run last year with equipment issues, Randolph Henry's main goal was to have a smooth run – which they managed well, barely missing a perfect score on time as they worked their three animals in 8:03 minutes. Competing early, they could not stay for the results as their second goal for the year was to not miss prom for the second year in a row. James River competed 5th, and had a smooth run as well, finishing in a mere 5:59 minutes, but noting that the competition was strong. When the dust settled, both teams had exemplified calm handling, proper safety, and excellent technique, earning Randolph Henry a 3rd place state finish (and a chance to make it to prom), and James River a 1st place finish and the first ever perfect score! The growth in these youth over the last few years in their cattle working skills and personal character has been amazing to witness, and these results show just that. In a situation in which even the most experienced cattlemen can lose their cool, these youth are challenged with patience, persistence, and confidence in their abilities. As they have learned from their mistakes over the years, each student has come out stronger and more prepared for the next year. It is a competition full of life lessons and irreplaceable



skills – and this year, a well-deserved bit of sweet success!

*Lindy Tucker is the Associate Extension Agent, Agriculture and Natural Resources agent for Lunenburg County and Laura Seigle is the Associate Extension Agent, Agriculture and Natural Resources agent for Amelia County.*

To JOIN the *Virginia Forage and Grassland Council* a membership form can be found on the web at

<http://www.vaforges.org>

Contact Margaret Kenny at  
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## Grazing School from Front Page

the differences in portable fence posts and electric wire for maximizing the flexibility of their grazing system. Other sessions included body condition scoring of beef cattle and folks also learned about visually evaluating hay samples and the importance of analyzing samples to determine the actual nutritional quality of these feed sources.



*David Fiske explains things to remember when designing your grazing system.*

The course wrapped up with a one-on-one session of participants with instructors outlining their farm goals and summarizing farm information to develop a plan of action for their personal farm operation. The participants enjoyed meeting each other, interacting with the instructors and learning the core concepts of forage and grazing management in this interactive and personal setting. Congratulations to this class of grazing school graduates and we look forward to seeing you all again at regional summer field days and at the American Forage and Grassland Council Annual Meeting in Roanoke, VA this coming January 23-24, 2017. Mark your calendar and watch for more information on the agenda and registration details this summer.

The VFGC is fortunate to have such a dedicated group of Board members consisting of producers, agency, industry and educational advisors who work together to teach these grazing schools. This VFGC grazing school was a partnership event with VA Tech, Virginia Cooperative Extension, USDA-NRCS and the Chesapeake Bay Foundation and was partially funding by a Conservation Innovation Grant.



*Matt Booher explains the different materials and functions of various portable fence post options.*

*J. B. Daniel is the State Grassland Agronomist for Virginia USDA/NRCS and serves as a educational advisor to the VFGC.*

## Grass Facts

**Species:** Eastern Gamagrass (*Tripsacum dactyloides*)

**Description:** Native perennial bunch grass that has short rhizomes and grows to a height of 3 to 8 ft. Mature plants can have crowns can reach 3 ft in diameter. It is well adapted to wet natured soils and is often found along rivers and in flood plains.

**Positives:** It is extremely palatable and livestock performance is excellent.

**Negatives:** It is hard to establish. Gamagrass possesses a high level of seed dormancy.

**Uses:** Can be used for hay, silage, or grazing.

**Approximate Yield:** 3 to 7 ton per acre.

**Establishment:** Plant prechilled or chemically treated seed at a rate of 10 lb PLS/A in the spring when soil temperature reached 60 to 65 F.

**Hay and Silage Management:** Harvest 2 to 3 times per year at the early head. Do not cut closer than 8 inches.

**Grazing Management:** start grazing when it reaches 18 to 24 inches and stop at 8 to 10 inches.





By: John Fike

For a new generation of producers, returning to the farm often comes with desires both to connect to past heritage – and to do something different. In Buck Holsinger’s case, the motivation for getting initiated into agroforestry evolved from a desire to improve stream and pasture management into a way to benefit future generations.

Holsinger runs a 70-acre farm in the Shenandoah Valley that has been in the family seven generations. He currently direct markets beef, with plans to expand to other pasture-raised livestock. Since the 1980s the farm had been one large open field in endophyte-infected fescue pasture. The fields were continuously stocked and cattle had free access to the whole of it. Over time, a long stretch of water on one side of the property had become degraded by continuous cattle use. Seeking to improve the situation, Holsinger sought and received assistance through the NRCS’s Conservation Reserve Program Enhancement Program (CREP) program to fence out the cattle and plant trees along the stream and begin rotational grazing on the remaining acreage.

Problem solved...? Although implementing the CREP project began the process of stream rehabilitation, it left his animals without shade or shelter. Not one to watch his cattle stand and pant in summer or carry a layer of snow after winter storms, Holsinger began searching for answers. Around this time, he came across J. Russell Smith’s book: Tree Crops: A Permanent Agriculture. The book describes how trees might be used in agricultural systems for improving production and conserving soil. Holsinger’s reaction: “I can do this.”

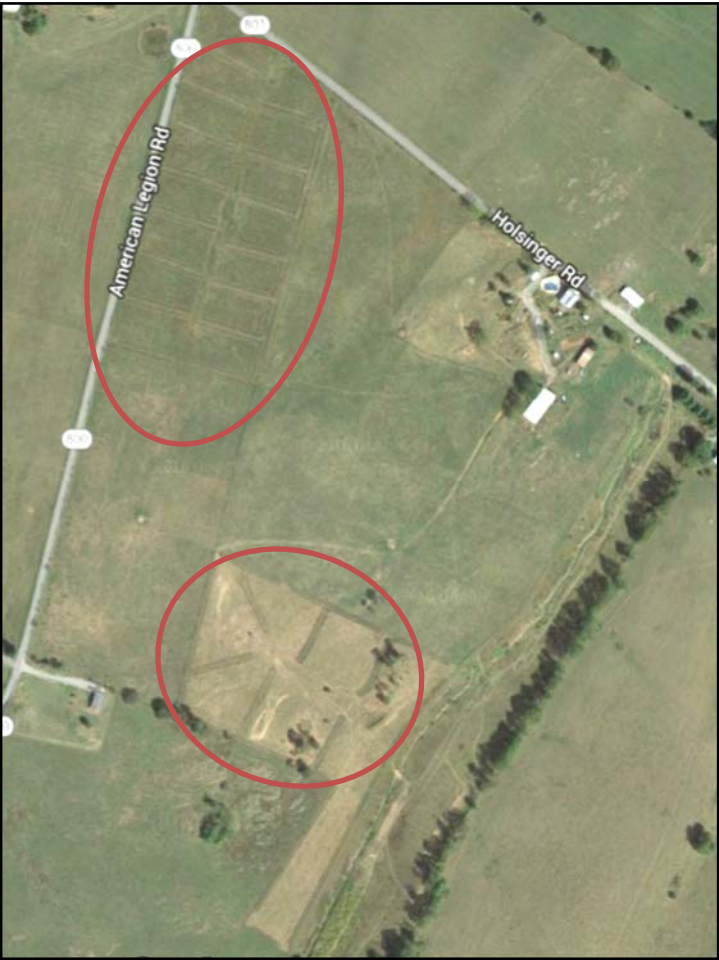
Holsinger consulted with specialists at Virginia Tech and NRCS, thinking about tree species, planting configurations and field layout and he secured EQIP cost share to help with the planting. After several trips to the field, Holsinger sat down one night with some paper and his children’s crayons and drew up the initial designs (Figure). Hybrid pitch-loblolly pine trees would be used as windbreaks on the western edge of his property and as “trainer” trees. These would be planted on each side of his hardwoods (black locusts, black walnuts, thornless honeylocusts, and yellow poplars) to train them for more rapid, upright growth. An avid hunter, Holsinger also planted Dunstan chestnuts and persimmon trees for hard and soft mast.

Holsinger’s farm is not certified organic, but he strives to minimize the use of chemical inputs. Thus, when considering vegetation control for the planting he decided to use scalping rather than killing the sod with herbicide. Scalping worked well to prepare the site and a commercial outfit then came in and did the planting in spring 2014. Unfortunately, the exposed soil presented opportunities for weed encroachment, and the laid-over sod made the ground uneven and difficult to mow. Keeping the weeds down would have been manageable even with his day job as a computer engineer, but Holsinger is also a part-time pilot for the National Guard and an extended deployment kept him off the farm last summer, allowing thistles to flourish. Despite this challenge, black locusts have thrived on the site and once Holsinger tackled the weeds the pines responded. Holsinger has seen that black locusts growing wild on the farm are a preferred

food of cattle in summer, and he is now thinking of ways to include this tree as a fodder crop.

is connected to solutions known further back in our past.

Installing the silvopasture also has had unanticipated benefits for management. Because Holsinger uses semi-permanent fencing with polywire to protect the trees, it’s very easy to set gaps from these lines. This has facilitated his rotational grazing management by creating mini-paddocks which has reduced his time in the field. Even his young children can handle the animal movements now. He also sees anecdotal evidence of a better microclimate for his forages. Holsinger feels confident about what he has learned with his first 19 acre planting and he is putting in an additional 20 acres this year. He’ll use what he’s learned to tweak the layout and management of the new silvopastures, including using herbicide for site prep. He sees little downside risk, thinking it’s much cheaper to plant trees that can appreciate in value and improve the aesthetics of the operation than to build a barn that will do the opposite.



In the process of learning, Holsinger has become an advocate of rotational grazing and silvopastures. He has been a willing speaker to ag students at Virginia Tech and his site will be used for field days and agent trainings. The silvopastures also provide entry to conversation with customers, neighbors, other farmers. The customers get it, he says, and are happy to see a more integrated, “two-story” agriculture that offers improved animal welfare and habitat

## Upcoming Events

### VCA Annual Meeting & Convention

July 8, 2016  
McCormick Farm  
Raphine, VA  
[www.vacattlemen.org](http://www.vacattlemen.org)

### Annual Forage/Livestock Field Day

July 28, 2016  
Southern Piedmont AREC  
Blackstone, VA

### Annual Tobacco Field Day

August 2, 2016  
Southern Piedmont AREC  
Blackstone, VA 23824

### Virginia Ag Expo

August 04 2016  
Double B Farms in Dinwiddie County  
[www.viriniagrains.com/events/](http://www.viriniagrains.com/events/)

### AFGC 2017 Annual Conference

January 22-24, 2017  
Hotel Roanoke and Conference Center-  
Roanoke, VA  
[www.afgc.org](http://www.afgc.org)

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## A Current Update on Baleage Technology

By: Gonzalo Ferreira

Last March, Dr. Wayne Coblenz, a forage scientist from the USDA-Dairy Forage Research Center (Marshville, WI), updated us about baleage technology during our last Area Dairy Conference. Following are some of the main take-home messages from Dr. Coblenz:

- Well-made baled silage will often exhibit better forage quality characteristics than corresponding hays.
- Hay usually loses more leaves and requires more wilting time, which increases cell respiration and exposure risk to rain damage.
- Baleage has little or no spontaneous heating and less storage losses related to weathering (outdoor storage).
- The goal of baleage is to obtain a good anaerobic fermentation with a quick decrease of pH to ensure conservation of nutrients.
- The quality of the fermentation is related to the type of forage, as there are differences on sugar concentrations (corn and sorghum > small grain crops > legumes) and buffer capacities (legumes > small grain crops > corn and sorghum).
- Promote conditions that promote growth of desired bacteria (lactic acid producing bacteria, LAB) and reduce conditions the promote growth of undesired bacteria (*Chlostridium* sp.).
- The best fermentation occurs when the forage has high concentrations of moisture. However, ensiling too wet forages (>70% moisture) can lead to chlostridial fermentations, which are not desired. Target for a moisture concentration range between 45 and 55%.
- Too wet baleage will result in very heavy bales, which can be less safe to handle or can overload equipment (e.g., loaders).
- Increasing the bulk density also enhances the anaerobic fermentation. For this, reduce the ground speed and decrease the windrow “thickness”, which will increase the revolutions per bale.
- Consider the operative capacity of your baling equipment when mowing your pastures. Exceeding the baling capacity will increase wilting time (due to waiting), therefore increasing losses and limiting fermentation.
- The fermentation for chopped haylage is typically better than for non-chopped baleage (there is greater exposure of sugars in chopped haylage, which enhances the fermentation). Because of this, using inoculants is even more important for baleage as it already is for chopped haylage.
- An adequate wrapping is critical to obtain good quality haylage. Wrap as quickly as possible (within 2 hours since baling) and use at least 4 layers of 25-micron film. In southern states (higher temperatures) or for long-term storage increase wrapping to 6-layers.

Gonzalo Ferreira, PhD, PAS is a Dairy Management Extension Specialist in the Department of Dairy Science at Virginia Tech.



Gordon Groover presents Gabriel Pent with the Harlan E. White Memorial Scholarship.

Florida establishing a sound base for graduate work at VA Tech. He moved to Blacksburg to study hardwood walnut and honeylocust silvopasture systems. In research with black walnut silvopastures, he has found that although forage production has been lower, lamb weight gains have been similar to open pastures. In honeylocust-based systems, forage yield has been equal and animal gains have been greater in the silvopastures compared to the open pastures. With little apparent change in forage nutrition, the mitigating impact of the trees on lamb body temperatures seems to be compensating for lower forage productivity in the walnut system, while greater forage nutritive value and cooler temperatures appear to support improved performance in the honeylocust system. These systems have additional potential for improving nutrient cycling and providing timber, nuts, and pods. His plans for the future will surly involve research on grazing animals and southern grasslands.

VFGC is proud to support new scientists that will add to the collective knowledge and understanding of the ecology of grazing systems. They clearly are following in the footsteps of Dr. White.

Gordon Groover is an Ag Economist at Virginia Tech and severs as a Educational Advisor to the VFGC.



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and numerous conservation services. Holsinger notes that many who farmed a generation or two back remember having some trees in pastures – and not having large round bales to feed – and he enjoys seeing how this “new” way to manage trees and livestock is connected to solutions known further back in our past.

John Fike is the State Forage Extension Specialist at Virginia Tech and serves as an educational advisor with the VFGC.

### 2017 VFGC Board of Directors Nominations

By: Charlie Wootton

The Virginia Forage and Grassland Council Board of Directors consists of 18 members. There shall be twelve directors elected from the members holding individual membership: six (6) representing agri-business and six (6) representing producers. The Board shall also appoint a Technical Advisory Committee composed of six agricultural agency representatives. Directors serve for a three year term and cannot serve more than two consecutive terms.

The Nominating Committee is seeking nominations for two (2) producer positions and four (4) agribusiness positions, for terms beginning 2017. Nominations should be sent to VFGC c/o Charlie Wootton, 100B Dominion Drive, Farmville, VA 23901 or email to charles.wootton@va.nacdn.net. Please include name, contact information and a short biography. Deadline for nominations to be received is August 31, 2016.



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By: Bridgett McIntosh

Weeds in horse pastures are usually the result of poor pasture management and overgrazing. Pastures should be grazed when grasses are at least 6 inches tall, and rested when grasses are grazed down to 3 inches. If over 50% of the leaf area is removed by grazing, the plant's ability to capture and store energy is reduced and root mass is diminished, ultimately killing off the grass. Overgrazed and bare areas provide the opportunity for weeds to move in. Weeds reduce the nutritional value of pastures and some common pasture weeds, such as buttercup, are toxic to horses. Properly managed pastures will have fewer weeds and provide optimal nutrition for horses.

### Weed Prevention

- Maintain appropriate stocking rate of at least 2 acres per horse
- Do not graze pastures below 3 inches
- Do not graze newly planted pastures until grass is at least 6 inches tall
- Soil test every three years to maintain soil fertility and pH
- Apply lime and fertilizer according to soil tests
- Clip or mow pastures regularly to keep grasses productive
- Pastures with dense stands of grass will choke out weeds

### Weed Control with Herbicides

- Herbicides can be used on grass pastures to control broadleaf weeds
- Type of herbicide and timing of application depend on type of weeds
- Follow label instructions and recommendations
- Apply herbicides after at least three days of air temperatures above 60°F
- Do not apply herbicides on windy days
- Do not apply herbicides if there is a chance of rain within 24 hours

Herbicides are only effective after weeds have emerged, but before they flower (ie. once you see the yellow buttercup flower it's too late) Removal of horses from pasture is not required for most broadleaf weed herbicides, but always check labels If toxic weeds are present, horses should be removed from pastures 7 days following herbicide application (because toxic weeds can become more palatable following herbicide use)

For more information please contact Dr. Bridgett McIntosh at bmcintosh@vt.edu or 540.687.3521.

Bridgett McIntosh is the Equine Specialist at the Middleburg Agricultural Research and Extension Office.



Jim Tate, VFGC Board member and Conservationist with the Hanover Caroline Soil and Water Conservation District, met Tim and introduced him to VFGC in 2014. Based on Tim's livestock system goals and his interest in learning, he agreed to be a farm demonstration cooperator with the Forage Council. After a few farm visits and planning, Tim established a mix of alfalfa and novel endophyte fescue in part of the land transitioning from cropland to permanent pasture. At the field day, Dr. Chris Teutsch led participants through the fall planted paddock of alfalfa and fescue trying to make it through a dry spring. Dr. Teutsch explains to participants how alfalfa can be used in a grazing system for a high quality fresh forage to graze weaned calves who need a high power feed to keep them growing to finish.

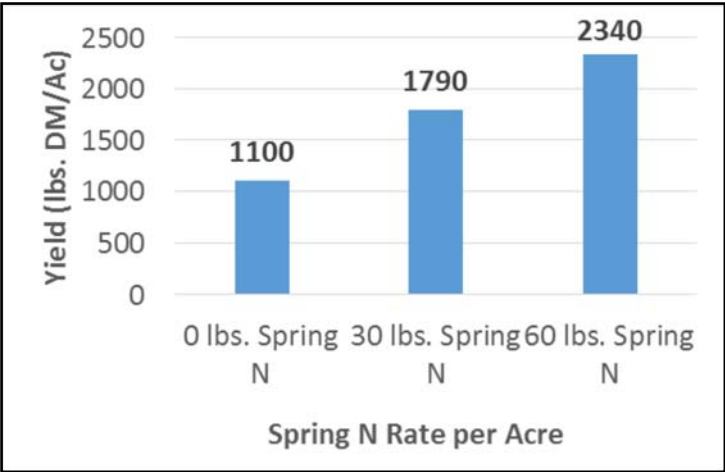
At the same time J.B. Daniel, led participants through a field of mixed winter annuals Tim had established in October for spring grazing. Winter annuals have the potential to provide high yield in the spring before perennials are ready for grazing. In order to pro-



Growing yearlings gain well on annual forages.

duce, they must have the nutrients they need for growth. A timely application of nitrogen in mid-March will help maximize its yield potential. Tim is well aware of the additional cost when planting annuals for grazing and he is concerned about getting return on this investment. In order to see what the spring N application really did for him, a strip N evaluation was applied for this demonstration and field day. The local fertilizer dealer left one strip with 0 lbs. N, then applied one strip with 30 lbs. N/ac. and another strip with 60 lbs. N/ac. mid-March. Even with a dry spring the results were very telling.

The chart on the right compares spring forage yield between the 0, 30 and 60 lbs. spring N applied. The 0-N treatment was thin and pale, lacking vigor only provided 63% canopy cover and yielded a mere 1,100 lbs. forage dry matter/acre (DM/ac). By applying only 30 lbs. N, the plants visually had improved color and vigor, canopy cover increased to 85% and yield increased by 62% to 1,790 lbs. DM/ac. The 60 lb./ac N application resulted in a thick, vigorous stand with 91% canopy cover with an average yield of 2,340 lbs. DM/ac. This is 112% greater



yield than the 0-N treatment. This is not replicated research data, the samples were taken and summarized for demonstration purposes only.

The featured speaker at this event was Dr. Matt Poore, an Extension Leader and Ruminant Nutrition Specialist for N.C. State University. Dr. Poore's talk focused on managing livestock on endophyte infected fescue highlighting methods to mitigate the effects or replace the forage all together. He has researched the effects of fescue toxicosis and put the results into practice using methods of mitigation and a rotation to annuals for future replacement with novel endophyte fescue on his personal farming operation in Virgilina, VA.



Matt Poore was the keynote speakers at the Soil Health Field Day at Swallow Hill Farm.

Finally Jim Tate, Hanover Caroline SWCD and Brian Wooden, from USDA-NRCS the local Conservationists explained how the grazing system plan was developed with Mr. Tobin. In the process Tim voluntarily installed over 9,000 linear feet of stream exclusion fencing to exclude his livestock from surface water. In exchange the State BMP program helped fund a pressurized water system including permanent troughs and quick couples to maximize strip-grazing opportunities at different times of the year.

## Reconsideration of an Old Idea

By Jim Tate

### Now for the good news from the conference.

There is a new bovine genetic test for tolerance to fescue toxicity. As I have previously stated elsewhere I am going to test all of the females in my small hard....the cost of testing is supposed to be in the area of \$30.00 per animal. I have contacted the two places from which I obtain semen to breed my cattle. One is a closed herd and they are testing now. The other is a commercial bull stud and they are not yet testing. They are waiting for reliability and repeatability numbers to confirm the strategy. One must remember that the entire cattle market is not in the fescue belt. So for a big part of the country this is not an issue. For me....I will most likely adopt a strategy of using the best quality bull I can find that tests well for fescue tolerance. There is some thought that the cow may have a greater role than the bull in progeny adaptation, but this is unproven as yet. So to hedge my bets I am going to begin to use bulls that test well for fescue tolerance. My logic is that there is little value in testing and improving my females if I then breed them to a bull that has less genetic tolerance. The calves would then be more affected by the fescue than the cows.

I have just learned today that I can send a straw of semen to the testing lab and they can test and tell me the status of the bulls I have in the semen tank. I am going to look at my inventory this afternoon.

Secondly there is now a test to determine how badly your fescue pastures are infected. Matt Booher and John Benner have been doing testing at 14 sites in the Valley of Virginia and have had startling results. The sampling being done by these extension agents is being tested at a commercial lab. I think they were operating under a grant to do the testing. I have no idea of the relative cost of the testing. But the process is a bit complicated. The data they have generated has been tremendous at revealing in terms of the magnitude, extent and timing of when fescue toxicosis is at its worst. Long story made short is that you can now determine if you have a problem and how bad it is. It will probably take some assistance from your extension agent.

And last but not least...I am modifying my position on pasture renovation to eliminate infected fescue.

One factor has been seed cost. Until lately there has only been Max Q Endophyte Friendly. The seed cost was north of \$5.00 per lb. Now there are six named cultivars of Endophyte Friendly fescue and competition should bring price down. Also given all the costs of renovation seed cost alone is less of a factor.

In the past I have discussed this with quite a few producers. Now I think that I may have given some of them bad advice. My biggest fear is that the pasture would end up repopulated by infected fescue over time. Since I am unable to

look at a fescue plant and tell if it is infected  
 fescue or novel endophyte fescue, I could not tell when and if reinfection took place.

The evidence I heard from the researchers at the conference is that reinfection would be more likely to occur thru management issues than from natural occurrence.

Infection requires the introduction of infected seed to the soil. There are four basic ways this will occur.

1. Planting infected seed. I can think of no valid reason to plant an unimproved fescue variety, be it K31 or other varieties, in any situation that might involve livestock.
2. Dirty equipment. For example bush hogging an infected field and then bush hogging a novel field without washing off the bush hog. You are reseeding with the infected plant seed. Or similarly carrying seed from field to field with a mower or baler.
3. Feeding infected hay on a clean field. This will not only introduce the infected seed but the livestock will work it into the soil and fertilize it for you. Alternatives would be to not feed hay on a novel endophyte field, or feed only uninfected hay, or feed something other than fescue hay or at the very least feed second cutting hay that should have limited seed heads.
4. Cows moving seed from field to field. The experts said that digestive processes would reduce the number of viable seed going thru the animal. But some seed would go thru. A simple management strategy would be to have somewhere uninfected for cows to go for three or four days before going to the novel endophyte field and the danger of then having livestock broadcasting infected seed would be greatly reduced. This is another case where having a few days of grazing on small grain or multi species cover crops could serve as a buffer to seed transmission.

I foresee an opportunity for progressive stockmen to take advantage of a couple of new innovations and reduce the vulnerability of infected fescue.

I have already mentioned the benefits of using multi species cover crops in a grazing operation. Our Graziers who used them actually were among the most vigorous supporters of our project. They all saw immediate benefits from grazing the cover crops.

The standard recommendation for renovating an infected field is to Spray – Smother – Spray and re-plant. That is to spray the infected fescue in late May or early June with herbicide to kill it. Then plant a smother crop such as millet or sudangrass or sorghum or MSCC...graze or hay this crop...then in the fall spray herbicide again and plant the novel endophyte. For those that wish to resist the use of herbicides, your best course is to stick with mitigation as Fescue and Bermuda grass once established are not going to be terminated through



President's Message



Spring is upon us; however, if it weren't for the calendar, it would be hard to tell. This growing season is certainly bringing about many **Challenges** as we begin to look forward to a successful year. The **Challenges** before us are certainly multi-faceted.

To start, we have seen calf prices continue to drop from a year ago. The **Challenges** this brings is trying to maintain profit margins as we are beginning to realize the escalation of input costs such as fuel, fertilizer, and seed to simply mention a few.

Secondly, the **Challenges** of weather have certainly slowed the growth of forages used for both harvested feed and grazing. The lack of rain in the spring, and the extended colder than normal temperatures; compounded with multiple late frosts, have certainly slowed forage regeneration. These issues have begun to limit yields at a time when forage growth is normally very strong. This has forced many to continue feeding way beyond our normal late winter and early spring periods.

Thirdly, and certainly not the last is maintaining nutritional needs for livestock. This time of year not only puts forth **Challenges** of our management, but also the livestock we keep. It is important that we recognize what we are asking livestock to do. We want them to give birth, feed their offspring, rebreed back for the next production cycle and continue to grow. Without proper management and nutrition these **Challenges** are hard to overcome for both producers and their livestock.

Just as with this new agricultural production cycle, The Virginia Forage and Grassland Council continues to move forward with the **Challenges** of our mission to provide meaningful educational programming to our membership. VFGC is meeting these **Challenges** head on. We have already begun with several outstanding events this spring. We are also working on other educational events for both summer and early fall. You can continue to learn about these opportunities via this and future newsletters, our Web Page and Facebook Page. VFGC will continue forward meeting our **Challenges** and not rest on our past successes.

As producers of forages and livestock you are all aware that **Challenges** are what make your job and efforts not only difficult, but also at many times fulfilling when specific **Challenges** are conquered. Continue to charge forward for success in 2016 as will VFGC.

Until next time,

Jon Repair  
President, VFGC

Kelly Mercier and Gabriel Pent receive Dr. Harlan E. White Memorial Scholarships

By: Gordon Groover

It is an honor for Virginia Forage and Grassland Council to reward two graduate students in the Department of Crop and Soil Environmental Sciences (CSES) for their involvement and dedication to the forage industry. Both Ms. Mercier and Mr. Pent are perusing PhD's with a focus on forage-livestock systems.

Ms. Mercier grew up on a dairy farm in Wisconsin and graduate from University of Wisconsin-Stevens Point with a focus on forestry and soil and land management. She had



Gordon Groover presents Kelly Mercier with the Harlan E. White Memorial Scholarship.

extensive experience with conservation, soils, and livestock while in college and summer jobs. All of these formal and informal experience lead to her interest in, "grasslands and grad school, "so I could further my education and be able to pursue a job in a field that would allow me to work with farmers who are using sustainable agricultural systems." Her current research work involves silvopasture systems at the Southern Piedmont AREC. She says, "silvopastures called to me because they incorporate all of my favorite things, trees, soils, plants, and animals into one sustainable system that can be more productive than either a forest or a pasture alone." After graduation from VA Tech, Ms. Mercier plans to work for Extension and conducting applied research to support knowledge of forage-livestock systems by farmers and their advisors.

Mr. Pent, a native of central Florida but with strong ties to the Shenandoah Valley of Virginia where he spent summers with relatives on the family's home place in the Valley. In the sandhills of central Florida where he grew up was his first laboratory, where he conducted experiments on preferences for different shrub species by the goat herd. His interests in ecology lead to an undergraduate degree in Biology from the University of Central

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Jim Tate talking about grazing infrastructure at the Spring Forage Day at Swallow Hill Farm.

Overall this event was a great highlight to this demonstration farm project which will continue to be highlighted on the VFGC website under the demonstrations page. VFGC appreciates the terrific support from the forage industry sponsors at this event and acknowledges this program was partially funded by a USDA-NRCS Conservation Innovation Grant.

J. B. Daniel is the State Grassland Agronomist with Virginia USDA/NRCS and serves as a educational advisor to the VFGC.



Dr. Chris Teutsch discussing perennial forage options at the Spring Forage Day at Swallow Hill Farm.

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cultural means. I have planted enough cover crops into existing pastures over the last three years to testify that without suppression of the grass, the cover crops will not compete and will not perform well.

I would suggest that with the use of Multi Species Cover Crops we could improve on this recommendation and implement a program of improved grazing and an orderly transition from infected fescue to a clean operation.

The first advice is to do any conversion over time....not all at once. Pick the field that needs improving the most and start there. Maybe 10 percent and no more than 25 percent of the available acreage.

My thought would be to use the spray – smother – spray with an extended smother phase. What I mean by that is to run two or three sequential cover crops in the smother phase. This would offer several benefits. We have already discussed how the annual cover crops can augment productivity in a grazing program. They can reduce the exposure to the toxins as they are not host to the endophyte. They can serve to smother the fescue. But I think it is asking a lot of a single cover crop to smother out fescue in a single iteration. Also by using sequential cover crops you are not as locked in to a particular season to start the transition. You could spray in the fall and then plant a cool season cover crop (preferably a Multi Species Cover). Using MSCC that includes deep rooted species and some legumes, you get the opportunity to build the soil health during the transition period. Graze or hay that crop as needed. Then come spring there is a opportunity to spot spray for Fescue that is still there. Then Plant a Summer Cover (preferably a MSCC ) and again graze or hay as needed. Then in the fall you have yet again another opportunity to check for and if needed treat any lingering infected fescue and then plant your new crop.

To start in the summer go Summer MSCC, Then Fall Cool Season MSCC, Then Summer MSCC, then fall plant Novel Endophyte.

Using this system you could start a new block every year with no loss of productivity.

By integrating annual diverse cover crops you can actually increase forage production while making the transition to a higher quality novel endophyte with all the benefits of fescue with none of the drawbacks of fescue toxicity.

I hope at least some of this makes a little sense. I have tried to compress a full days worth of presentations by industry leading researchers and teachers and temper it with my own interpretations. I confess to being a bit excited over some of these new revelations. I am hopeful that this genetic testing for tolerance will be a quantum leap forward. I see a natural role for a project I have invested the last few years in to aid in improving total forage management. A test for levels of endophyte infection is a major step forward.

To those who might not have planted the Novel endophyte fescues after talking with me...I offer my apologies, as I may have been wrong.

We owe it to the livestock under our care to provide the best environment we can. The animals health and well being contribute toward a more positive bottom line and it is incumbent upon stockmen to provide the healthiest environment possible to the livestock in our care...

Jim Tate, Conservationist with the Hannover-Caroline Soil and Water Conservation District. Editor's note; the following is an excerpt from Jim's blog. Look for additional excerpt's in future issues of the Forager.



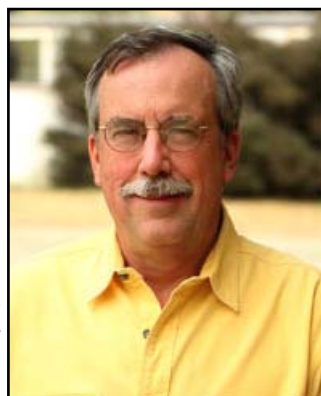


VIRGINIA FORAGE AND GRASSLAND COUNCIL  
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Crewe, Virginia 23930



## Virginia to Host 2017 American Forage and Grassland Council Annual Conference

"Opportunities in Grassland Agriculture" will be the focus of the 2017 American Forage and Grassland Council's Annual Conference that will be held in Roanoke, VA on January 22-25. The keynote speaker for this year's conference is author Courtney White. Courtney's address, entitled, *Grass, Soil, Hope: Regenerative Solutions for Changing Times*, will inspire conference participants to think about low cost and low input solutions to address big problems facing our planet. Following Courtney's opening address, a series of workshops over the next two days will outline opportunities in grassland agricultural for "Turning Grass into Cash" including grazing dairies, beef cattle operations, small ruminant production, pasture finished livestock, and restoring productivity to rundown farms through the power of grazing. It does not matter if you are 16 or 60 years old, if you are interested in profitable grassland agriculture and being a part of the solution to the monumental challenges facing our planet, this is a conference that you do not want to miss! For more information on this conference and to view the program, please visit [www.afgc.org](http://www.afgc.org).





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## VFGC Grazing School Hosted at Steele's Tavern

By: J. B. Daniel

The VFGC 2016 Grazing School held on May 2-3, 2016, was a tremendous success. This 2-day intensive learning experience was hosted at the Shenandoah Valley Agricultural Research and Extension center in Steele's Tavern, VA. Thirty-five farmers attended this session from different regions of VA as well as participants from NC, WV, and even one from New York City.

All participants were welcomed to fields of green grass and beautiful scenery with the back drop of the Blue Ridge Mountains. The course included classroom style presentations on soils, fertility, stocking rates, forage supply, forage quality and grazing economics. These were balanced with outdoor small group sessions learning plant identification, pasture condition scoring, estimating standing biomass and a pasture walk with David Fiske comparing different stock densities and varying levels of grazing management demonstrated in some of the ongoing research at the farm.

Everyone also had the opportunity to see and discuss



*Grazing school participants practice estimating standing forage yield at Virginia Tech's Shenandoah Valley AREC.*

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## VFGC Spring Forage and Soil Health Field Day

By: J. B. Daniel

The field day hosted by Tim and Susan Tobin at Swallow Hill Farm was a terrific success. A total of 141 participants attended this regional field day learning how Tim is using different forages and intensive grazing management to build soil health while meeting his forage production and quality goals. The participants heard from the host farmer and what his background was, how he got started in the livestock business and how he has networked with local Extension, SWCD and NRCS agencies to improve his farm operation. He explained the vision for the future of his farm and how his involvement with VFGC and its partners are helping him learn as he goes by participating in the Conservation Innovation Grant (CIG) demonstration project.

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*Tim Tobin owes and operates Swallow Hill Farm with his wife Susan.*

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Reporting the progress of Virginia's forage industry