

The second column (Expected NPV) shows that as a cow increases in age, her net present value decreases. We’d expect this since an old cow will give us fewer calves in the future. Once we know what this cow is worth to us today, we can look at the market value of our open cow by looking at sale barn cull cow prices. (Remember the numbers in the table are based on fall 2010 when cull cow prices were \$48 cwt, not \$78 cwt like they are now). We can now compare what this open cow is worth to us today versus what she is worth to somebody else at auction. This is done by taking the difference in the net present value (NPV) and the market value, which we’ve done in column 4.

When we look at the difference in net present value and market value, it is clear that the cow we do not want to sell is the open 2 year old. She is worth a lot more to us than she is worth as a cull cow. The open cows to sell are the cows over 5 or 6 years old. They have basically used up their useful life, but still have quite a bit of market value. I think there is a good argument for selling open yearlings as well since their market value is high and they may have reproductive problems that keep them from getting pregnant.

There are two more arguments for keeping young open cows that I want to mention briefly. First, keeping a young open cow is nearly equivalent to keeping a weaned heifer. Neither will have a calf for 1 ½ years and both have some cost during that period. Both have a good chance of becoming productive cows, but both also carry some risk. However, the weaned heifer has a higher market value. Therefore, keeping young open cows will allow us to sell more high valued weaned heifers. This decreases the number of heifers we have to hold back as replacement heifers to maintain our herd size.

A second point is that running young open cows over the winter builds flexibility into our nutritional program. If we run out of stockpiled fescue or hay over the winter, or the winter is harsher or longer than we expected, we can always sell an open cow. Running open cows gives us a list of cattle that will be the first to leave the farm if things don’t go as planned. This flexibility is essential for any grazing program.

Conclusion

I want to take you back to our open cow standing in the chute now and tell you what we do with her at Eldon Farms. Before we pregnancy check each fall, we recalculate Table 1 to see if the markets have changed the numbers significantly (interestingly, they usually say about the same thing). At pregnancy checking, an open cow below 5 years old gets a color Temple Tag with the year printed on it but stays in the herd. A cow that is open and is older than 6 years old or already has a Temple Tag (meaning she was open in the past) is culled. In addition, we cull all open yearling heifers.

I realize that not everyone is going to calculate the net present value of their open cows and make culling decisions based on these numbers. That is not my goal. My goal is to help foster some thought so that the next time you are standing at the chute making culling decisions, you think in terms of economics instead of genetics. The bottom line to all of this is that culling open cows is a financial decision, not a genetic decision.

John Genho is the farm manager for Eldon Farms in Woodville, Virginia. and also serves on the VFGC board.

The afternoon hands-on session was spent outside where participants gained practical experience with all aspects of fence building. A post driving demonstration was conducted to illustrate the proper method for safely driving posts and post placement. Instruction was given in the proper construction of braces, high tensile fence knots and splices, proper installation of high tensile electric fence, offsets, and water gates. The day ended with participants learning how to properly construct a fixed knot high tensile woven wire fence.

The VFGC would like to thank Lewis Sapp, Stay-Tuff Fence Manufacturing; Lee Ellsworth, Gallagher USA; and Rusty and Brian Tanner, Tanners Fencing for all of their help and support in putting the very successful fencing schools.

David Fiske is the superintendent of the Shenandoah Valley Research and Extension Center and is also the Treasurer of the Virginia Forage and Grassland Council.



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Stockpiling and Strip Grazing Saves Thousands for One Shenandoah Valley Grazier

By: J. B. Daniel

Most farmers have heard about the general benefits of stockpiling tall fescue during late summer and fall then strip grazing their livestock into the winter. This practice has been around for decades throughout the fescue belt, yet it is not widely adopted by a high percentage of livestock producers in VA. General benefits of the practice include extending the grazing season, increasing forage utilization, decreasing hay feeding days and improving manure and urine distribution throughout the pasture. These are generally accepted benefits but many farmers still question just how much they can benefit from this practice and whether its truly worth their time and effort to change the way they manage their herd through the winter.

In an effort to get more specific answers to farmers’ questions on this topic, the USDA-NRCS Field office in

Harrisonburg, VA, teamed up with Mr. Peter Hostetler, a local cattle producer from the Singer’s Glen community of Rockingham County. Peter grew up raising cattle in Virginia and in recent years has become more interested in his cattle grazing and less interested in the time, labor and expense of having to feed so much hay. After I first met Peter last July, I realized he was the perfect cooperater for a demonstration. He had already tried stockpiling his way in recent years but had not committed to fertilizing with nitrogen in August or strip grazing in the winter to maximize forage production and grazing days into the winter.

After some discussion and a pasture evaluation we agreed to a stockpiling/strip grazing demonstration on a somewhat rectangular shaped 75 acre field. Peter grazed his 54 cow herd on this field the first two weeks of August, then moved the cattle to another field. Since much of this field was shallow and somewhat rocky we chose to only apply N on the most productive 35 acres of a Frederick soil in this field. Peter applied 50 lbs of N per acre (ammonium nitrate/ammonium sulfate) on August 23rd to a very dry pasture then waited for rain and better growing conditions. The extended heat and dry weather continued through August and much of September but rain and true fall weather prevailed in October resulting in good growing conditions for the last 6 weeks of the growing season. As forage growth stopped near mid November Peter had several questions;

- 1. Does this stockpiled fescue have sufficient nutritional value to meet the needs of my cow herd that will begin calving late December and reach peak nutritional demand around mid to late February.
- 2. How much forage did the short 2010 stockpiling season produce
- 3. How many grazing days should I expect by intensively strip grazing my cattle across the field moving the fence regularly to allow only 1-3 days forage

In late November we took measurements across the field to estimate yield then sampled and analyzed the stockpiled forage and compared those samples to the test results of Hostetler’s best hay (Table 1). Hostetler stated, “I can’t believe even the lowest quality stockpiled fescue has better nutritional value than my best hay!” But it was true; he helped collect the samples himself near the end of November. Even more impressive is the stockpiled fescue with 50 lbs N/acre that tested 21% CP and 71% TDN, easily surpassing the basic needs of a lactating beef cow.

Table 1. Quality Comparison of Stockpiled Fescue vs. Stored Hay in Late November.

Sample Description	CP (%)	TDN (%)	ADF (%)	NDF (%)
Early Cut Orchardgrass Hay	9.0	56.1	39.5	62.8
Stockpiled Tall Fescue No Nitrogen	13.0	64.9	31.7	49.3
Stockpiled Fescue w/ 50 lbs Nitrogen	21.1	71.2	26.1	38.9

Based on conservative estimates of standing stockpiled forage, there was on average 3,300 lbs dry matter per acre across that field (more on the productive soils fertilized in August with N and less on the shallow, rocky soils). By strip grazing in 1-3 day intervals and grazing the pasture to leave 2-3 inches residual, we estimated Peter would conservatively graze to around February 1st, but only time would tell how long his winter grazing would last.

Using a 12 volt battery powered fence charger, a long roll of polytape and step-in fence posts, Peter began strip grazing 54 cows on December 7th at the end of the field nearest the water source. A short period of trial and error helped him figure how far he needed to move the temporary fence and he was off to an easy start. After timing himself several days it only took 30 minutes to move the temporary wire and set up the next strip for grazing. The cows quickly adapted to strip grazing and preferred the stockpile fescue over any supplemented hay. Despite the cold weather and some snowfall this winter season Peter completely wintered this herd on stockpiled fescue and only supplemented with 16 round bales (600 lb) of hay. He moved the fence 26 times between December 11th and March 28th then pasture began greening up quickly.

Looking back over the winter Hostetler claims, “I’m a believer, stockpiling combined with strip grazing is definitely the most cost effective way to winter my cow herd. Not only did I save nearly \$8,500 in hay feeding costs this winter (after subtracting out the associated costs of N, temporary fencing and labor) but there was not a single concentrated feed area on the 75 acre field! The cows redistributed the manure and urine nutrients evenly across the entire length of the field. The calves were on clean grass every day (not around muddy feeders) and the cows ate high quality stockpile all winter, resulting in excellent body condition and rapid reproductive recovery for breeding back. “This grazing management technique resulted in my cows becoming more docile and made it easier to tag my calves right in the pasture. I definitely plan to continue this type of winter grazing management in the future.”

A structured approach to stockpiling and strip grazing combined with simple recordkeeping throughout the process, resulted in significant economic benefit to Mr. Hostetler while enhancing the soil, water, plant and animal resources in the system. You can achieve the same benefits too. It is time to start planning. For more information about stockpiling and strip grazing contact your local Conservationist at a USDA Service Center near you.



Hostetler’s cattle adapted quickly to strip grazing with a single strand of electrified polywire.

JB Daniel is a NRCS Grassland Agronomist & serves on the VFGC Board.

By: Dana Ernst
“Farming looks mighty easy when your plow is a pencil and you’re a thousand miles from the corn field.”

This quote by Dwight D. Eisenhower graces the front of one of my oft used manuals. It was given to me by either my Father or my Uncle when I announced that I no longer wanted to be a veterinarian, but a farmer. For the longest time I believed the quote was meant to discourage me or to disparage my college educated enthusiasm because both of these long term agriculturists thought I was nuts to farm and sought to redirect me. The redirection was somewhat successful because I decided to take a job with NRCS while I figured out how I could buy the family farm back. After being in the Service for awhile, I realized that the quote was really a warning. Farming is so much more cut and dry on paper and figuring out how to apply the knowledge from research that I had access to and the rules that govern the Agency programs to a farmer’s fields could be challenging.

Now, 20 some years later, I have a place of my own to “play with”, I’m discovering the wisdom of President Eisenhower’s statement. And I’m not even trying to grow corn, just grass! The concepts of grazing management are rather simple. You soil test regularly and apply nutrients as required, graze half and leave half, and limit the grazing period to less than a week to prevent grazing of the new sprouts. Polywire, step-in posts and solar chargers make this possible. Sacrifice paddocks where the animals can go when grazing conditions are not ideal are recommended.

I had the horses already, so I bought the posts, the polywire and the charger...I was good to go. Last year I came to the conclusion I will never figure it all out but I will have fun experimenting but just maybe I could have picked an easier species to raise.

Horses present few management challenges that are not as pronounced in other livestock. First they do like to play, run, and buck, no matter what age they are. This behavior is especially prevalent when moving to a new paddock and after a rain. Secondly most mature horses are not nursing a baby, so are prone to becoming obese on high quality pastures. Horses are more susceptible to colic and founder than other species; obese individuals even more so. Third they are spot grazers.

My conclusions after 4 years or so are these:
Horses interpret the grazing mantra of ‘graze half and leave half’ to mean; graze THIS half of the field to the dirt, while ignoring THAT side of the field, accept to make it the herd latrine area.



Selective grazing of cereal Rye by horses. There are now 4 head on 0.3 acres and they still won’t graze those rough areas down.

Polywire is not visible to horses, especially horses celebrating being turned into a new field. Even three strands. Polywire makes an interesting sound when it is stretched beyond its limit and snaps.

Horses shouldn’t be turned into a new paddock at dusk; celebrating horses don’t see poly-rope much better than polywire. The rope, however, does take slightly longer to break, which not necessarily a good thing.

Allowing the foals to forward graze under the cross fence has turned out to be a bad idea. I now have a group of horses with no respect for fences unless the fence is really, really hot!

Sacrifice lots are a necessity with horses. Galloping feet on an 1800 pound animal takes ‘pugging’ to a whole new level. Sliding stops can peel up the sod better than a commercial machine, especially when the ground is wet.

Mistakes in grazing management early in the season can haunt you for the rest of the growing season, or even longer. I kept a pair of horses that were in transit for 2 weeks last spring. I figured since it was early May the fescue would recover just fine. However, the rains quit when the horses left, so I’m still waiting for that paddock to recover.

It takes about a week on good grass for a mature draft horse to become “over conditioned.” This makes managing them and the grass very complicated for the remainder of the year. Actually, unlimited access to hay can over condition an idle draft horse or pony.

My experiments in grazing horses keep the neighbors puzzled but amused. None of them can figure out why I build so many fences or why the cross fences end up looking like amebas. I am sure that they too think I’m nuts for doing all of this.

Last summer I experimented with Jamie Jackson’s paddock track system. Jackson is a farrier who spent several years observing the mustangs. Mustangs have few hoof problems, rarely colic or founder and are never obese. They eat a high fiber diet and have to travel upwards 20 miles a day to find enough food and water. In an effort to mimic nature, Jackson has recommended long narrow paddocks to force the horses to move.

My first paddock is 1500 feet long and 25 feet wide. There is shade at one end, water at the other and a feeding station in between. Because I have environmentally sensitive areas in each field, my paddocks dead end to protect them. There are gates at strategic locations to allow access to the center of the field for grazing. It worked well enough last summer that the mature mares stayed in average condition.

See Grazing page 11



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Southern Piedmont AREC Field Day
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434-292-5331
makenny@vt.edu

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August 11, 2011
Broadway, VA
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The Economics of Reproduction

By: John Gehno

It's fall and you are pregnancy checking your herd. You have a 2 year old cow in front of you that, despite your best efforts, just weaned the lightest calf she will ever wean and is in the poorest condition she will ever be in. You are thinking to yourself "If she can just get through the next few months, then things will look up for her." Then the vet tells you what you already knew but didn't want to hear. She is open. What do you do? Do you stick to your "no open cow ever spent the winter here" policy or do you have pity on her and roll her over one year?

Anyone who has ever raised beef cattle (raised beef cattle for profit I should say) has been in this situation. And the answer is not clear. I am going to attempt to address this dilemma with some science and some economics to help us better understand what we should do.

Genetics

To start with, let me give you the wrong answer. You decide you are going to cull this cow to improve the genetics of your herd. The problem with this answer is that pregnancy rates are very lowly heritable. A review of the literature puts the heritability somewhere below 15% with many estimates coming in below 5%. This means that less than 15% of the variation in pregnancy rates is due to additive genetics (which is the part you can select for). To bring this number down to earth, suppose you have a herd with an average cow age of 5 years old, your average pregnancy rate is 88%, the heritability of pregnancy is 15% and you begin culling all open cows. After 50 years, you can expect to increase your pregnancy rate by less than 1%. There is just too much environmental variation and you have too few opens each year to make selection for pregnancy rate worth it.

So if additive genetics are not the cause, what is the cause? There are two answers. The first and easy answer is the environment. Not enough feed, not enough rain and grass, sterile bulls, etc. all cause open cows. The second and more difficult answer is non-additive genetics (or heterosis). This is the part of an animals genetics that we cannot select for. Instead, we get this portion of the genetics by cross-breeding. It turns out that heterosis has a very large impact on reproductive and maternal traits. In comparison to our example above, if we forget about trying to select for pregnancy rate and simply run an F1 (or 1st generation cross) cow, then we can expect to increase pregnancy rate by around 3%. This of course depends on the breeds we are crossing. And as we move further away from the 1st generation cross, we lose some of this heterosis. However, this 3% increase in pregnancy rate from crossbreeding is a marked difference from the less than 1% increase in pregnancy rate under 50 years of selection, and we can do the crossbreeding in a single generation by running a crossbred cow.

Economics

So we're back at the chute looking at our freshly called open cow and trying to decide what to do with her. We now know that selling her isn't going to substantially improve the next generation's genetics over keeping her in the herd. But does it make sense to run her through the winter. We will incur a lot of costs and she isn't going to bring us any revenue next year. What do we do?

We've now got to the heart of the decision about culling open cows. Culling open cows is not a genetic decision; it is a financial decision. There are a few questions to ask ourselves that make the decision much easier. What is the chance she is is going to get

bred next year and stay in the herd in future years as a productive cow? How much would it hurt financially to wait a couple years to get any revenue from her? What is her value right now as a cull cow? What is the value of her future calves? If we can come up with a rough answer for these questions, we will be better able to make this decision.

As it turns out, there is already a way to think about problems such as these. It is called net present value (NPV). The details of net present value are beyond my space to write (and probably your patience to read), but the basic idea is to try to predict the revenue stream from this cow (which means we have to guess what calf prices are going to be in the future and whether or not this cow will have a calf in future years). This revenue stream of course has to include the costs we'll incur by running this cow, including the cost of the next year when we won't have any revenue. Once we have an idea of the revenue we can expect, we then "discount" the revenue to bring it back to a present value. The idea here is that \$1 next year is not worth as much as \$1 today. Once we have done this math, we know what this cow is worth to us today in dollar terms.

Last fall, we pregnancy checked approximately 1000 cows here on Eldon Farms, and of course we had some opens. Before we started, we calculated the expected net present value of an open cow to help us determine the type of cattle to cull. In doing this math, we decided that we would run an open cow for one year. If she was ever open again, we would sell her. The results are in Table 1.

Table 1: Net Present Value (NPV) of an open cow at pregnancy checking by age

Age at Preg Check	Expected NPV if Open	Market Value	NPV – Market Value
1	\$795	\$775	\$20
2	\$768	\$455	\$313
3	\$729	\$505	\$224
4	\$674	\$575	\$99
5	\$594	\$575	\$19
6	\$507	\$575	-\$68

See page 6 reproduction

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Demonstration Accesses Alternatives to Commercial Fertilizers

By: Carl C. Stafford

Jeremy Engh at Lakota Ranch reports on a field demonstration now underway at his farm in Culpeper County. Of the three treatments in the demonstration, one will not include fertilizer but is expected to be equal or better than the plant food treatments.

Here is the design. Three treatments: treatment A is one ton of poultry litter (\$35 per acre), treatment B is commercial fertilizer 30-0-30 (\$35 per acre) and treatment C is a liquid containing humic and fulvic acid and microbes (\$35 per acre). Cages placed in the treatments isolate grass away from grazing cattle to quality and yield sampling. I avoid using the product name until more is proven.

While keeping costs even, the manufacturer expects its product will show equal or better pasture quality and dry matter yield when compared to the two plant food treatments. They have two university trials in the literature so let us see if this works under Virginia conditions.

Folks, our risky farm businesses are now high risk what with the extra money flowing into, and out of most budgets. Our enterprises now have bigger upside cost risks and bigger than ever downside income risks. Watch out for unfounded claims and look for independent trials proving repeatability.

A report on the results of this demonstration will take place July 29, 6 pm at the farm. Plan to judge for yourself if this works or if you should stick to using plant food based on soil test results showing nutrients are limiting yield. Leaders try new things and then study their work. Many of us play Monday morning quarterback, making fun of the failures and quietly adopting the successes as our own. Visit their website for more details as the date approaches: <http://www.lakotareddevons.com/>

Carl Stafford is an Extension Agent in Culpeper County and also serves on the VFGC Board.

PUBLISHER'S NOTICE

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Robert Shoemaker is president of the VFGC. Contact Margaret Kenny at makenny@vt.edu if you need assistance with this newsletter.

Honoring Dr. White's Years of Service Page 9

The Virginia Forage and Grassland Council seeks your assistance in honoring the life of Dr. Harlan E. White. The Dr. Harlan E. White Memorial Scholarship Fund has been established by the Virginia Forage and Grassland Council and will be used for scholarships, education, research, and other activities related to the promotion and better understanding of the forage industry.

Dr. White dedicated his life to Virginia's forage industry. It is now time for us, the recipients of these good works, to dedicate ourselves and share some of the great gifts that Harlan bestowed upon us.

Dr. White's career was long and distinguished. He joined the Virginia Tech Agronomy Department in 1966 as an Extension Forage Specialist. In 1979, he was the driving force behind the formation of the Virginia Forage and Grassland Council which has grown to become a major voice for the forage and livestock industries in Virginia.



Harlan was a recipient of many state and national awards recognizing his educational programs directed at improving the well-being of forage producers and their support industries. His work was always a cooperative effort partnering with individuals interested in improving forage production and utilization. His dedication to service and education was recognized by the Virginia Forage and Grassland Council (VFGC) when he was awarded the Medallion Award. His dedication to the forage industry continued throughout his retirement years by serving as both treasurer and advisor to the VFGC.

The Virginia Forage and Grassland Council is accepting funds from corporate and individual donors that wish to honor Dr. White. The goal is to establish a permanent endowment to provide scholarships to support Virginia forage education and research. VFGC has an ambitious plan to raise \$50,000 by 2013, and \$500,000 by 2015. The fund will be managed and administered by the Virginia Forage and Grassland Council Board of Directors. All funds will be audited on an annual basis and shall be dedicated to the sole purpose of the Scholarship Fund.

We are asking for your financial support in this endeavor and welcome all donations in any amount. The following categories will be recognized.

Platinum Medallion, \$10,000 or more;

Gold Medallion, \$1,000 - 10,000;

Silver Medallion, \$500 - \$1000;

Bronze Medallion, \$100 - \$500;

and Friends of the Fund, under \$100.

A donation form may be found at www.vaforges.org

Keep in mind that all gifts to the Dr. Harlan E. White Memorial Scholarship Fund are tax deductible. Your contributions qualify as a charitable contribution because VFGC administers the Fund and is a 501 (c)(3) organization.

2011 Funds Still Available to Restore Wetlands

Richmond, VA – Virginia’s conservation-minded landowners have a unique opportunity to obtain more benefits from marginal land while helping to improve water quality, provide essential wildlife habitat, and mitigate flooding. The USDA Natural Resources Conservation Service has funding available through the Wetlands Reserve Program (WRP) to help landowners protect, restore and enhance wetlands. The signup is continuous. Ranking periods are established annually.

WRP is the federal government’s largest wetland restoration program, providing technical and financial assistance to individuals for protecting and enhancing wetlands that have been degraded or converted for agricultural uses. Under WRP, the landowner still controls access to the land and may enjoy recreational uses such as hunting and fishing or other conservation-compatible uses. WRP offers landowners three options:

Permanent Easements – USDA purchases the easement and pays 100 percent of restoration costs.

30-Year Easements – USDA pays the landowner 75 percent of what would have been paid to purchase a permanent easement and 75 percent of restoration costs.

10-Year Restoration Cost Sharing Agreement – USDA pays the landowner 75 percent of restoration costs with no easement placed on the property.

Eligible land includes farmed wetlands that can be successfully and economically restored, wetlands farmed under natural conditions, and “prior-converted” cropland converted on or before December 23, 1985. Former or degraded wetlands that have a history of agricultural use are also eligible. Some lands currently enrolled in the Conservation Reserve Program (CRP) may also qualify. To be eligible, the land must have been owned for seven years.

During the application process, landowners offer an amount they are willing to accept for the easement. NRCS will use the lower of a market analysis-based geographic area rate cap or the landowner’s offer to determine the payment for the easement. Virginia’s proposed geographic area rate caps for perpetual easements range from \$ 2,550 per acre to \$ 5,000 per acre pending approval. Applications are ranked on a competitive basis.

Essential for a healthy environment, wetlands covered more than 220 million acres in colonial times but have declined to less than half that amount in the lower 48 states. To date, more than two million acres have been enrolled in WRP nationwide. To learn more about WRP, contact your local NRCS office or visit the website at www.va.nrcs.usda.gov.



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The Management Calendar

By: Gordon Groover

We live in a global market place with corn flirting with \$7.00/bu and beef and dairy prices increasing, in part because of export demand. The new crop season allows farmers to take advantage of these higher prices, but they also face higher prices for inputs including fertilizer, fuel, machinery, feed, and all forms of technology whether in seeds or vials. Farm business managers need to develop record systems on information that allow for quickly calculating enterprise profitability and ranking of alternatives based on potential profits. Basic enterprise budgets from Cooperative Extension can be updated to address the individual needs of a farm business. To properly use budgets all information should be changed to reflect your farms costs, yields, and prices. To find an example of an enterprise budget for Virginia see www.pubs.ext.vt.edu/category/enterprise-budgets.html. To locate enterprise budgets from all over the U.S. visit the Ag Risk Budget Library at www.agrisk.umn.edu/Budgets/CustomSearch.aspx. Careful use of enterprise budgets will give managers a chance to bring the complexities of the global market into focus as you help make production decisions.

Listed below are the items that need to be included on the farm business managers' calendar for spring of 2011.

1. Make sure your Virginia state income taxes are postmarked by May 1.
2. Review first quarter livestock records and compare them to last year’s; look for problems and successes.
3. Livestock producers should develop a detailed feed budget each year. Include current feed costs, estimate this year’s production under average and drought conditions, and estimate demand until spring of 2012. Deficits should be addressed now. First, look locally for alternatives. For example, can you contract with a neighbor to buy their forages or grains, can you rent additional land, can you work with a grain farmer to harvest his grain crop as silage, can you buy grain at harvest at a discount, consider high moisture grain, and so on? Second, if you cannot find local solutions then look to reputable brokers for forages and try to line up part of your supply needs this spring. As the season progresses, keep the budget up-to-date to make sure you have covered your feed demand one year out.
4. Follow up with your lender to review and update your line-of-credit needs because higher feed, fuel, fertilizer, and input other prices may strain previous estimates.
5. Prepare a crop record keeping system for a new year.
6. Update your marketing plan by collecting information on prices and world market situations. Be sure to check with your local Farm Service Agency for changes in government programs and signup deadlines. Review USDA and other crop and price forecasts. You can receive notification of all USDA reports now via many different media. See the following web site for details: www.usda.gov/wps/portal/usda/usdahome?navid=USDA_STR

Listed below are the items that need to be included on the farm business managers’ reading list and calendar for the next two months.

1. Wondering about profitable use of nitrogen in your hay fields, then take a look at Greg Halich’s paper titled “Profitability of Spring Hayfield Nitrogen Applications – 2011 Guide” (AEC

See back page

The Benefits of Intensive Rotational Grazing

By: Ben Tracy

There has been a lot of interest recently about mob grazing and its benefits. Mob grazing essentially involves grazing livestock at extremely high stocking rates but moving the “mob” frequently - sometimes spending only a few hours on new pasture in extreme cases. Mob grazed pasture then is rested for 5-6 months before it can be grazed again. Its’ an interesting approach, but good experimental data to support, or refute, the benefits of mob grazing is almost nonexistent. This is especially true for humid grasslands like we have in Virginia. The stuff we hear about seems to be largely opinion. While that’s fine, I’d rather discuss grazing issues that have some good research to back up their claims.

This brings me to the topic of my article – some very interesting research from Wisconsin that recently compared continuous grazing with management intensive rotational grazing (MIRG) – essentially a less extreme form of mob grazing. The study was done using pastures dominated by orchardgrass, bluegrass and meadow fescue (a kind of cousin to tall fescue that grows in more northerly locations). The work was recently published by Oates et al. in Crop Science 51:892 (2011). The MIRG system was grazed by separate herds of 25 cow-calf pairs on 1.5 acre pastures. Replicate pastures were grazed for 2 d then rested for 28 d from April to October. Not exactly mob grazing but still a pretty high grazing pressure. Continuously grazed pastures were stocked comparably and grazed for 28 d periods with 2 d rest. Data was collected in 2006 and 2007.

The authors found some pretty striking results. Potentially useable forage was 30 to 40% higher in the MIRG system compared with continuous grazing. Forage quality was also much higher in MIRG compared with continuous. These trends were even evident during a droughty year. The authors felt the positive results were largely a function of the ability to control grazing pressure in MIRG. Higher grazing pressure kept grasses in a high quality “juvenile” state and probably reduced selective grazing. In continuous pastures selective grazing likely reduced orchardgrass abundance and this had a negative effect on forage production. Forage growth also benefitted from more available nitrogen in soil, which was related to more rapid N cycling in MIRG pastures.

The benefits of MIRG have been questioned by some – mainly from studies in semi-arid rangelands. I wrote about this issue some time ago in the Forager. This recent study was done in humid grasslands, like those we have in Virginia, and it clearly shows the benefits of MIRG. Its’ doubtful this research alone will get many producers to convert over to MIRG, but maybe it will at least get people talking. Less extreme MIRG systems, like those documented in this research, are probably a better fit for most producers and maybe worthy of further consideration.

Ben Tracy is the grassland ecosystems management specialist at Virginia Tech and also serves on the VFGC Board.

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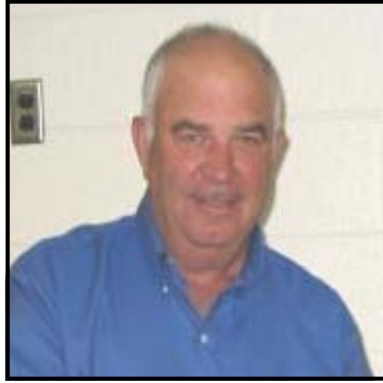
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President's Message



As we say in the country, "Spring has Sprung". After not getting much moisture this winter, we now seem to be getting showers every week and in some areas it's too wet to get things done. The temperature has finally warmed up and the grass finally seems to be growing. Every spring seems to be different, but we work hard and somehow get hay made and the crops in. So it is with the VFGC. This spring we had our March meeting and elected a new president and had all our new board members in attendance. It was great to see so many new members in attendance and eager to participate. The VFGC Board "Spring has Sprung" and we now will work hard to get the coming year's work done!!

So as I step down as President, I want to thank everyone, old board members that have gone off the board, board members still serving time on the board, all the advisors who serve our board, you the members, who continue to support our programs with your attendance and your membership and last but not least, Margaret Kenny who works hard as our Editor of the

Virginia Forager and Administrative Assistant.

I look forward to working with Robert Shoemaker, our newly elected President and the new board members listed below: Industry – Brian Jones of Pioneer Hybrids, Marnie Caldwell of Rockingham Coop., Butch Johns of Evergreen Seed Co. – Earnie Dodson of CFC Farm & Home; Producers – John Genho of Woodville - Will Clark of Saltville – Patty Johnson of Culpeper, Charlie Wootton of Farmville; Agency- Carrie Swanson an Extension Agent Albemarle County – Animal Science, Beverly Cox an Extension Agent Dairy Rocky Mount.

I hope the spring is good to you and we all have a good crop year!

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

Message From the New President

Let me thank everyone for the many successes during the past year. VFGC events were well attended and received. 1100 folks attend our Winter Conferences. The Board of Directors devoted many volunteer hours. Our sponsors, even in hard times, were unwavering in their support. E. N. Garnett, our President, and Margaret Kenny, our Executive Secretary, held it all together. Our members and friends attended our events in record numbers.

VFGC should never lose sight of the important mission it has to promote and educate people about Virginia's forage industry. It performs this mission without the benefit of government check off dollars afforded to other commodity groups. The only avenue VFGC has to survive is to develop quality education programs that are well received by our sponsors, members and others.

Virginia's forage industry far surpasses \$1 billion annually according to 2007 census data. Cattle and calves sold for \$575 million, dairy products were \$330 million, hay sales were \$77 million, and horse sales were \$47 million. Imagine what that number would be today with elevated cattle prices! This does not take into account related services such as agritourism, other related revenues, or sales of sheep and other animal groups.

Virginia's forage industry encompasses over 50 percent of the agricultural landscape. Of Virginia's 8 million acres of total farmland, approximately 4.5 million acres were devoted to some type of forage production. Approximately 3.1 million acres were in some type of pasture. This included 2.1 million acres of permanent pasture plus another 1 million acres of pastured woods or cropland. There were approximately 1.3 million acres in hay or green chop and another 120,000 acres of corn silage production.

Our future events will continue to provide an opportunity to learn more about proven methods of agricultural production and the latest technologies. From time to time we will also include speakers that are a bit controversial but will also challenge you to put on your thinking cap and make up your own mind.

VFGC will work hard to make it worth your time to attend one of our events. I hope to see each of you at one of our Field Days or Conferences during the coming year.

Best Regards,
Robert Shoemaker
New President, VFGC



Amazing Grazing

By: Carl C. Stafford

As I write this article at the end of March, a new growing season is about to begin while last year's grazing season is about over, concluding another year of grazing. It never is easy to graze through the winter, but with it now almost complete, I must say it was one of the easiest in recent memory.

Easy because there of limited amounts of snow and easy because the soil remained dry enough to allow for concentrating cattle on small strips of stock piled fescue until mid-March. Then in our area, torrential rains forced adjustments in grazing management to avoid destroying the sod.

Not until mid-March was there enough moisture to force a change in management to avoid punching holes in the sod. Many readers are accustomed to sod being damaged, an accepted result from wintering cattle. However, it is the last thing a pasture manager is willing to accept, no matter if you own or rent land, but particularly if you rent from a landowner who understands the value of a good pasture sod.

An interesting side bar here relates to leased land. Some of our sods are being converted to crops, which is fine. However, the sod killed to grow crops took years to create. Simply planting grass seed at the end of the agreement does not return the sod to its original condition. Sod establishment takes time and puts pressure on the manager to work at it. If you lease your land, require anyone converting pastureland to crops, to agree to return your land back in an equivalent condition.

To continue the discussion of the grazing season, we know many people graze livestock during the growing season, be they small ruminants, horses, cattle or llamas. Pasture is a natural use of our land, it is simple, requires only a few tools and it is the most efficient way to feed an animal capable of digesting forage. In the cattle industry, there is a phenomenon known as grass fever. Simply stated, this means buyers know spring is coming, they want cattle to graze their pasture, and they will pay to get them. They graze cattle during the growing season until it ends in the fall, and then the cattle come back to town with their summer gains.

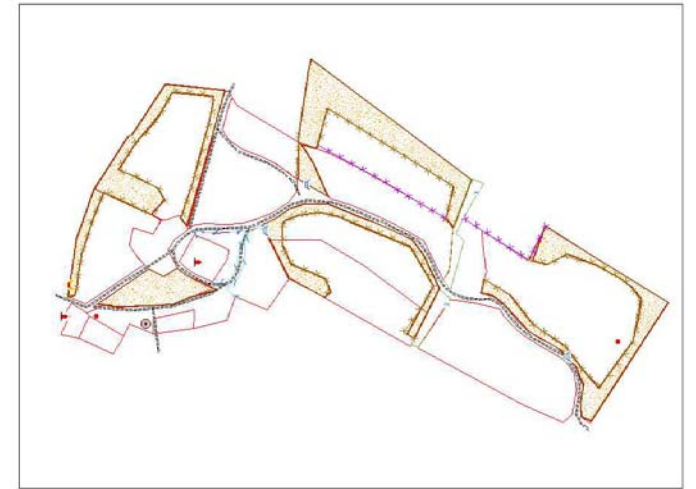
While this is a traditional use of pasture and probably the most common use for livestock owners in general (to graze during the growing season), I challenge readers to consider extending grazing to months when grass does not grow. It is not traditional and not learned from our typical experience.

Economics can line up in your favor if you can figure out when profits are made and lost. This should be when carrying cost is highest – in the winter. If you limit your spending then and animal performance does not suffer, more money should be left over in the end.

Carl Stafford is an Extension agent in Culpeper County and also serves on the VFGC Board.

To JOIN the *Virginia Forage and Grassland Council* a membership form can be found on the web at <http://vaforages.org> - Contact Margaret Kenny at makenny@vt.edu or call 434-292-5331

Last fall, I decided to put 'tracks' in all of the fields, so I initiated another fence building frenzy. The horses came through the winter in good condition and are being strip grazed now. Since it has been raining, there is grass. Now the challenge will be to see how long I can make it last, get an even utilization and keep the horses from gaining too much weight.



The farm layout, with all tracks shown in the speckled pattern. I still 'farm' with a pencil. It's easier to move fences on paper than in the field!

There is one more track to complete and more temporary cross fences to put up. That should keep the neighbors entertained for another season!

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



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- 2011-04) is available at: www.ca.uky.edu/cmspubsclass/files/ghalich/ProfitabilitySpringHayfieldNitrogenApplications2011.pdf.
2. Interesting article from the Richmond Federal Reserve on small business lending alternatives see: www.richmondfed.org/publications/community_development/marketwise_community/011/vol02_issue01.cfm?WT.mc_id=110012.
 3. Looking for information on a broad range of demographic, economic, and agricultural data on rural areas across the United States? The Atlas of Rural and Small-town America, developed by USDA's Economic Research Service, provides county-level mapping of over 60 statistical indicators depicting conditions and trends across different types of non-metro regions. To start searching see: www.ers.usda.gov/data/ruralatlas/atlas.htm#map
 2. Want to understand the breadth of the U.S. beef cow-calf production system? If yes, take a look at the USDA -ERS publication, "The Diverse Structure and Organization of U.S. Beef Cow-Calf Farms" found at www.ers.usda.gov/Publications/EIB73/.

Gordon Groover is an Ag. Economist with Virginia Tech and also serves on the VFGC.

THE

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VFGC Holds Successful Fencing Schools

By: David Fiske:

Proper fences are an essential part of any good rotational grazing program. It is essential that fences be constructed properly to get the best quality finished product and maximize the longevity. Because this is such an important component of all grazing operations, the VFGC, in cooperation with Virginia Cooperative Extension held four very successful and educational Fencing Schools throughout Virginia in March and April. Over 75 participants attended the schools at all locations.

During the morning classroom session of the schools, participants learned about fence economics and current Virginia fence laws. The remainder of the morning classroom session was spent going over proper construction techniques required to build strong and long-lasting permanent fences and learning about the different type of fences needed for various species of livestock for perimeter and cross fencing.

All aspects of electric fencing were covered including energizer selection, proper grounding, temporary fencing, and trouble shooting.

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2011 Virginia Forage and Grassland Council Summer Forage Field Days

Shenandoah Valley

The 2011 VFGC Regional Summer Forage Field Day will be hosted by Mike Phillips at Valley View Farm in Broadway, Virginia, on Thursday, August 11, 2011. Registration will begin about 2:00 pm and the program will run from 2:45 pm to 7:30 pm including an evening meal. This field day will highlight the strategic use of different forage species and grazing management techniques to maximize forage utilization, grazing days and pounds of beef weaned from the operation while building the soils, pasture condition and enhancing water quantity. Mike's fescue based system is complimented with warm season annuals and perennials. Mark your calendar now and plan to spend the day with us at Valley View Farm in Broadway, VA. Call the Shenandoah Valley SWCD office at (540) 433-2901 x101 to register for the event (\$10 registration fee) so we can plan for your meal. Visit the VFGC website at www.vaforges.org to view a full agenda complete with speakers and to confirm details of the field day program closer to the event.

Northern Piedmont

The Northern Piedmont Hay Field Day is scheduled for Friday June 10, 2011 from 9 – 2pm. Our host is Stanley Hawkins at Belle Meade Farms in Culpeper County, Virginia. All types of modern hay making equipment will be on display and used in field demonstrations. Plan to see machinery operations including mowing and tedding, hay processing, baling, and wrapping. A special demonstration will be the Mount Pony Farms hay processor designed to be pulled in tandem behind a wheel rake and used to cut long stem hay into shorter lengths to improve texture, appearance and marketability. Payne Hay and Straw will describe how they add value by re-baling large bales into small squares. In addition, you will hear how experienced producers and Extension are finding solutions to the problem with Orchard Grass. Call the Culpeper Extension Office at (540) 727-3435, x0 to register and help us plan your meal. Registration by June 1 is \$5.00 or \$10.00 at the gate. Visit the VFGC website at www.vaforges.org to view a full agenda and to confirm details of the field day program closer to the event.



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Reporting the progress of Virginia's forage industry