

MOUNTAINS-TO-BAY GRAZING ALLIANCE

News & Notes from the Mountains-to-Bay Grazing Alliance

March 2018

Grow Grass When the Sun Shines to Extend the Grazing Season

by Alston Horn, Chesapeake Bay Foundation

Everyone's heard the expression "make hay while the sun shines." Maybe it's a better idea to grow forage while the sun is out, so that you can spend less time feeding hay in the winter. I'm not saying that hay isn't needed; hay in the barn is the best insurance policy any livestock producer can have. But most farmers have off-farm jobs that require a 40-hour-a-week commitment, so time is valuable. What can farmers do to maximize available time? Using rotational grazing and extending the grazing season can save you time.

In the spring and the summer when the sun shines, we have more working hours of light than in the late fall and winter. Spending more time producing forage during the longer days can result in spending less time feeding when the days are short. Rotational grazing, summer stockpiling, winter stockpiling, and using strip grazing can accomplish this objective.

Rotational grazing is a great tool to extend the grazing season. This practice involves rotating livestock among paddocks to control how intensively the forage is grazed. Managing pastures in this way enables plants to rest and recover before livestock graze them again and allows for maximum forage production. It also improves root growth so that the plant can become stronger and access more water in dry times.

A good rotational system will have enough paddocks so that every one receives 30 days of rest and regrowth before the field is grazed again. This system requires a minimum of six paddocks.

During drier times like summer, more days of rest are required to produce the same amount of forage, so having more paddocks provides the flexibility needed to be adaptable. If stocked properly, a flexible, eight-paddock system can easily increase overall forage production and extend the grazing season with two key strategies.

Summer stockpiling is a tool within rotational grazing to provide forage during our normal "summer slump." The summer slump usually occurs in July and August when the days are hot and we go longer periods of time without rain.

The cool season grasses which make up most of our pastures do not produce as much forage when they are stressed by heat and drought. With summer stockpiling, we set aside two of our eight paddocks (about 25% of the fields) beginning at spring green-up.

While the stockpiled pastures accumulate growth, livestock rotationally graze the other six paddocks. The summer stockpiled



Cattle strip grazing winter stockpile.

pastures will rest until August or September, at which point we move livestock to them and manage with strip grazing.

While the livestock are grazing summer stockpiled fields, it is time to start preparing for winter by beginning fall stockpiling on other acreage. Where a summer stockpiling system has been used, there will be six other paddocks ready for fall use and winter stockpiling.

Winter stockpiling works best on fields made up predominantly of tall fescue. Fescue is a very hardy, cool season grass that often gets a bad rap during the growing season. But in the winter, after a couple of killing frosts, it becomes more palatable to livestock and it does a great job of holding its nutritional value when dormant.

As a basic rule of thumb, set aside one acre per animal unit (1,000 pounds of animal) for (story continues on next page)

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two months of winter feed. Fields selected for fall stockpiling should be grazed down prior to initiating fall growth. This practice removes any dead grass and stimulates new growth.

If the paddock is made up of 30% clover, let the field rest. The clover will provide the fescue with enough nitrogen for good growth.

If you don't have 30% clover, then apply enough nitrogen to provide the fescue with the nutrients for good growth. A good estimate is to provide 50 pounds of nitrogen per acre. Then set these fields aside to accumulate fall growth until your animals need the forage.

In the summer stockpile system described earlier, some of the earliest-grazed summer stockpile is often grazed a second time in order to wait as long as possible before getting into the fall stockpile.

The above techniques of rotational grazing and stockpiling can make a big difference to help you grow more forage and feed less hay. Using temporary fencing equipment like poly wire, step-in posts, and an energizer for strip grazing can increase utilization of the available forages to 50-75%.

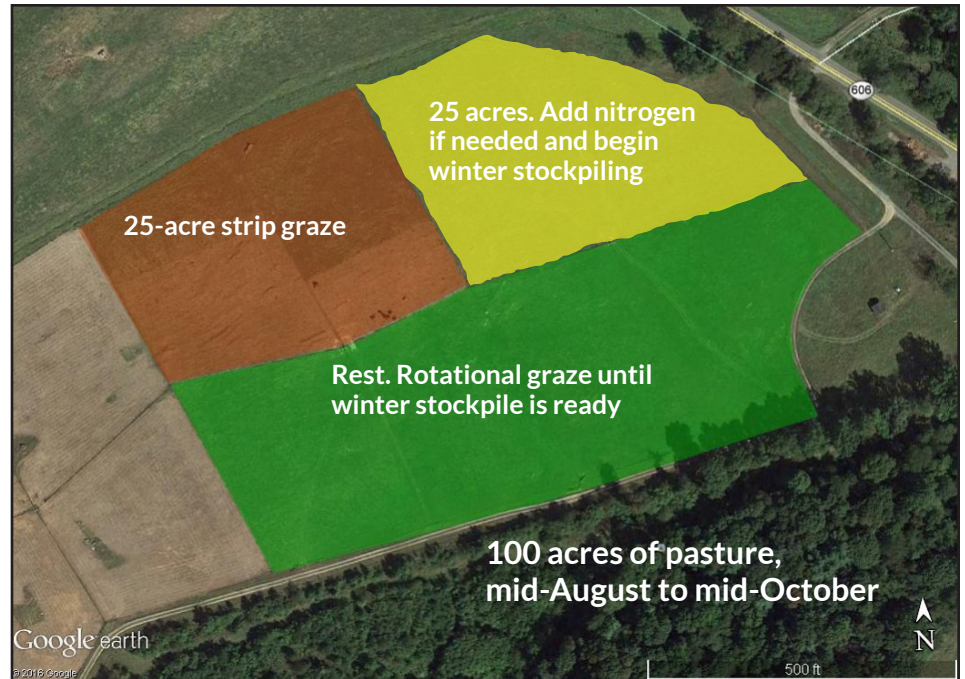
You can set up poly wire in strips (small paddocks) to limit grazing on the summer and winter stockpile. The amount of time you want to spend moving the poly wire will determine the amount of pasture you allocate to the livestock in each strip. Some producers like to move cattle every day; others don't have the time for this practice.

Farmer Profile: Jimmy Crosby

by Bobby Whitescarver, Whitescarver Natural Resources Management



Jimmy Crosby runs Cros-B-Crest Farm in Staunton, Virginia.



I recommend allocating enough pasture for three days starting off. Begin with the livestock close to the watering source and let them graze away from it.

A back fence isn't required with either stockpiling system, since the forages will not be actively growing when the livestock are grazing these paddocks. This also allows the livestock to back-graze when they are moving to and from water.

With multiple poly wire reels, a week's worth of feeding can be set up at one time. On the third day the first poly wire can be reeled up and there is another three-day section of feed available in the next strip. This system works well when time is limited during the week. Multiple days of feeding can be set up on Saturday or on your day off; then during

the work week it takes less time to move livestock.

This practice also reduces the amount of time spent feeding livestock. Especially in the winter, spending a couple of hours a week feeding cattle is easier to schedule than a couple of hours a day feeding hay.

Spending more time managing livestock grazing and producing forages during the long spring and summer days can save valuable daylight hours in the fall and winter.

If your time is valuable to you and you want to make the most of the daylight hours, look at extending the grazing season with rotational grazing, summer and winter stockpiling, and strip grazing. Happy grazing and time management!

Jimmy Crosby doesn't take a lot of "bull" when it comes to his soil health. The former professional bull rider left home 16 years ago to join the rodeo but has now returned to his family's Virginia farm with a passion for making it more productive and profitable.

Though he's a fifth-generation farmer, Jimmy only recently took over management of the cash grain operations at Cros-B-Crest Farm in America's legendary Shenandoah Valley. Cash grains on this family farm are mainly corn, wheat, and soybeans.

"When I came home to farm, we needed to diversify our operation to create additional, steady income, corn after corn just wasn't working," Crosby said. "Healthy soil is the key to making money in the cash crop business."

Now operating tractors and combines, he took a fresh look at the land and became concerned about soil erosion and excessive nutrients in the farm's streams and wetlands. Jimmy reached out to USDA's Natural

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Resources Conservation Service (NRCS) to get help designing a cropping system to improve soil health and water quality for increased profits.

With funding through the Environmental Quality Incentives Program (EQIP), he has implemented crop rotation, residue and tillage management, cover crops, and nutrient management practices on the land. His “Beginning Farmer” status qualified him to receive incentive payments of up to 90 percent of installation costs for recommended conservation practices.

“Organic matter is the most important soil ingredient,” explained Crosby. “To build healthy soil, my goal is to reach five percent organic matter. Our highest yielding field has 4.9 percent organic matter, producing the most with the least amount of inputs and rainfall.”

Crosby has now gone well beyond bull riding’s acclaimed “eight-second” mark to score high as a true Virginia soil health champion. In just a few short years, he has transitioned from beginning farmer to president of the Virginia No-Till Alliance (VANTAGE).

“Leaving crop residue on the land and planting cover crops are the easiest ways to increase organic matter in the soil,” Crosby added. “It has laid the foundation for a successful, sustainable row-crop operation.”

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The Virginia No-Tillage Alliance or VANTAGE exists to maximize farm productivity and profitability by promoting the successful implementation of continuous no-till systems through shared ideas, technology, conservation, and education.

Currently, VANTAGE has a board made up of farmers and agribusiness representatives in the Shenandoah Valley region of Virginia. Another group is actively engaged in the Rocky Mount area of Franklin County.

If you are interested in learning more about VANTAGE, please visit their website at [www.virginianotill.com](http://www.virginianotill.com), email them at [vantage@virginianotill.com](mailto:vantage@virginianotill.com), or call them at 540/564-3080.

## Don't Give It Up, Give It Back

by Matt Kowalski, Chesapeake Bay Foundation

“I don’t know if I can give that land up.” This is one of the phrases I hear a lot when I suggest that farmers put up fences to keep their livestock out of the streams on their land.

In order to qualify for many cost-share programs that exclude livestock, there may need to be 35 feet or more between the stream and the new fence. So, fencing off 1,000 feet of stream with a 35-foot buffer means giving up 70,000 square feet [1,000 feet x (35 feet x 2 sides)] or 1.607 acres. And because it is near the stream, this land is often some of the richest and most productive soil in a pasture. Add to that the fact that a farmer, or her father or grandfather, may have put a lot of hard work clearing trees from the farm to create that pasture. So, farmers are often very invested in that acreage, even though it may seem like a small strip of land.

I’m suggesting a different perspective that may make it easier for a farmer to give up that narrow strip along the stream. Don’t think of it as giving up the pasture—think of it as giving back the buffer to the stream.

You see, that area of vegetation between the stream and the fence won’t be “wasted.” It will actually go to work immediately. It will absorb excess nutrients from surface and groundwater. It will slow down and trap sediment from the pastures and surrounding fields. It will grow deep roots and help stabilize the streambanks while taking carbon dioxide from the air and locking it up as carbon in the soil.

And that’s just the beginning. If that 35-foot wide buffer is planted with trees and shrubs and other native species, or just allowed to regrow native plants, the work that the buffer does increases.

Shrubs and trees stabilize the soils along the stream and the banks. They provide shade, which helps cool the stream, increasing dissolved oxygen and the ability of fish and beneficial insects to survive. And a healthy, wooded stream



A pair of fishermen angle for trout in a restored section of Mossy Creek (Augusta County, Virginia), surrounded by a buffer of native wildflowers, grasses, and forbs

provides habitat for a variety of wildlife that may otherwise find no food or shelter on a farm that is mostly cool season grass pastures.

Stream buffers can serve as wildlife corridors, connecting forested areas to each other, even connecting and expanding the distribution of once-rare species like the Fisher or the native brook trout.

Healthy stream buffers help absorb excess rainfall, and slow the flow of stormwater, reducing flooding and stabilizing stream flow. This can help save your pastures from erosion, protect your livestock from drowning, or help avoid the creation of high-risk calving areas like wetlands and steep, muddy banks.

Stream buffers also reduce pollution like fecal bacteria. Another phrase I hear a lot when I work with older...I mean, more mature, farmers is, “We used to swim and catch fish in that stream when we were kids.” “Used to” because the water is now too dirty to swim in, or maybe the fish just aren’t there anymore.

A stream buffer does more than keep the livestock out of the stream. It allows the stream to heal, and become more than the water that runs through the field. A healthy stream is its own special place, an ecosystem connected to the land that surrounds it.

So if I hear “I don’t know if I can give that land up,” I may just reply, “But could you give it back?”

# Considerations for Early Spring Forage and Livestock Management

by John Benner and Matt Booher, Augusta County Extension

It has been a fairly seasonable winter, not overly harsh, not excessively mild. That cold snap back at the onset of January felt like it would never end. March definitely came in like a lion and extended winter for the whole month. At least we have caught up with moisture. Now we just have to avoid making ruts and dealing with mud.

As we get close to the verge of spring and the beginning of green-up, we wanted to take a minute to provide reminders for some practical management steps that should keep us on track for a successful growing season.

Many of us are still in the thick of calving and lambing season, and just about all of us have a daily workload with several hours being dedicated to feeding animals. With respect to some of the differences in where we might be in our production cycle, here are some management considerations to contemplate:

## **Provide high mag mineral to cow herd.**

Late winter and early spring are always the season for grass tetany. If you have not already done so, consider switching to a high mag mineral for your cow herd.

Just as importantly, keep mineral in front of the cow herd at all times. This should increase the chances that each cow will have an opportunity to consume what they need.

## **Delay grazing until forage heights exceed 8 inches.**

Play it safe. Multiple studies have indicated that delaying grazing after green-up can increase total pasture yields for the year.

If you have some hay on hand, particularly if it is older (two or more years) but of decent quality, it may be advisable to provide the herd hay and stay off the pasture an extra week or two in order to help jumpstart the forage.

This principle is termed “Feeding Hay to Grow Grass” and has a positive impact on root growth and soil nutrient utilization by the forage.



## **Soil test pastures and hay fields.**

If not done already in the fall or within the past three years, soil tests may be in order, especially on a field that seem to be underperforming.

Though we are getting late in the season for frost seeding, it may be a worthwhile practice to evaluate forage stands that may need some interseeding or renovation.

Weed control plans may be adapted and implemented.

If possible, reserve highly productive pasture for weaning fall calves. For early spring growth, quantity is limiting, rather than quality. Having a full buffet of grass for freshly weaned calves will meet nutrient requirements while reducing stress.

Although marketing situations and goals vary, costs on post-weaning are greatly reduced by grazing as opposed to feeding cattle on a high percentage concentrate ration.

If you are turning calves out on grass, push

the pencil on estimated costs of gain. If you are turning out on an unimproved fescue pasture, consider costs and benefits of supplementing.

Recent Virginia Tech data has shown gains in feed to gain efficiency may help offset supplement costs.

## **Preg check fall cows.**

There are several valid viewpoints on when the absolute best time is to preg check. 60 days post bull removal gives adequate time for fetal development and reduces the risk of missing some of the short bred females.

Make marketing decisions on opens. If spring herd, make culling decision on those females that have lost a calf.

## **Spring breeding season.**

Once all calves have dropped, it's time to booster cow herd vaccines. Label recommendations vary on timing so be sure to check with your veterinarian on the best plan to minimize reproductive disease risk during the breeding season.



# Unroll Hay to Spread Manure and Nutrients

by Matt Kowalski, Chesapeake Bay Foundation

While pasture management techniques like rotational grazing and stockpiling forage can help you minimize the need to feed your livestock, there are just some times when you need to feed hay.

Regardless of whether you are feeding hay to get through a bad summer drought, waiting for the grass to get high enough to graze that first spring flush, or feeding because your forage is all gone, there are some ways that you can feed hay that will benefit your pastures.

Most producers have made the move to round bales. If you are one of them, you can unroll those bales and help your pastures when you feed hay. By unrolling the bales, you encourage the animals to spread out while they eat. When they are spread out, they are also spreading out their manure and urine. Additionally, any hay that is not eaten will also be spread out, distributing the nutrients and organic matter in the hay, and creating healthy soils.

Everyone knows that there are nutrients in hay—that's the whole point in feeding. You need to keep giving nutrients to your livestock.

What not everyone may know is that between 70 and 90% of the nutrients removed from the soil by grazing a pasture or cutting hay are returned to the land as urine and manure.

Some quick estimates prepared by Virginia Cooperative Extension (see Figure 1) show that an average 4 x 5-foot mixed-grass roundbale contains around 12 pounds of nitrogen, five pounds of phosphorus, and 18 pounds of potassium. So, there is about \$20 worth of fertilizer in each bale!



Billy Royston unrolled hay bales in this Warren County, Virginia pasture over the winter. The unused hay and manure piles are now evenly distributed, spreading the available nutrients throughout the pasture.

If you are importing hay onto your farm, you are also adding these nutrients to your pastures.

No need to feel bad about that uneaten hay either. While some hay may go uneaten, it is definitely not “wasted” since those nutrients are also going back on the fields.

If you unroll those bales in a new place each time you feed, you can achieve a great distribution of the nutrients in the manure, urine, and hay.

Something to keep in mind whenever you feed hay is that seeds in the hay will also be distributed wherever you unroll.

That can be a good thing if you are also spreading clover seeds that were in the bale, but if you have hay with weed seeds in it, be aware that you could be distributing those

weeds into otherwise clean pastures. If you know your hay is clean, you can unroll and feel good doing it, knowing that you are feeding your animals and creating healthy pastures.

## Figure 1.

Each ton of hay removes about:  
 36 pounds nitrogen  
 13 pounds phosphorus  
 54 pounds potassium

So a 4x5' round bale removes about:  
 12 pounds nitrogen  
 5 pounds phosphorus  
 18 pounds potassium

Currently about \$20 worth of fertilizer in a 4x5' bale

*Courtesy of Virginia Cooperative Extension*

## Mountains-to-Bay Grazing Alliance Partnership



CHESAPEAKE BAY FOUNDATION  
 Saving a National Treasure



## MARYLAND EVENTS

### Small Ruminant Health

Saturday, May 19

9:00 a.m.

Crooked Fence Farm

2050 Geist Road

Reisterstown, MD

Join Future Harvest CASA for this workshop. More details to come on Future Harvest CASA's website at [www.futureharvestcasa.org](http://www.futureharvestcasa.org). In the meantime, email Carolin Selle at [caroline@futureharvestcasa.org](mailto:caroline@futureharvestcasa.org) with questions.

### Farm Tour

Thursday, May 31

St. Brigid's Farm

12246 Locust Grove Road

Kennedyville, MD

Tour St. Brigid's Farm with experienced dairy and beef farmer, Judy Gifford, and learn her methods for creating pastures. For more information, visit Future Harvest CASA's website at [www.futureharvestcasa.org](http://www.futureharvestcasa.org) or email [niamh@futureharvestcasa.org](mailto:niamh@futureharvestcasa.org).

### Pest and Disease Scouting Workshop

Saturday, June 23

Cottingham Farm

28038 Goldsborough Neck Road

Easton, MD

Learn to identify pests and diseases in the field. University of Maryland Extension experts Emily Zobel, Entomologist, and Manish Poudel, Plant Pathologist, will lead the identification with farm owner Cleo Braver. For more information, visit Future Harvest CASA's website at [www.futureharvestcasa.org](http://www.futureharvestcasa.org) or email [niamh@futureharvestcasa.org](mailto:niamh@futureharvestcasa.org).

## PENNSYLVANIA EVENTS

### Transition Cow Management

Thursday, April 19

9:00 a.m.–2:00 p.m.

Troy Vet's Club

1830 Veterans Drive

Troy, PA

This workshop will feature the science and practices to improve the performance of transition cows. Different practices and recommendations to achieve good standards will be discussed, including animal comfort, feed management, physiology, metabolic profile, and health monitoring. Visit Penn State Extension's website at <https://extension.psu.edu> for more information.

### Optimizing Forage for the Grazing Dairy

Tuesday, May 22

10:00 a.m.–2:00 p.m.

Backwoods Organic Dairy

174 Renolds Road

Mansfield, PA

This spring pasture walk will focus on forage quality in the grazing paddocks and hay fields, including identification and discussion of various grass, legume, and forb species, and what they can bring to the animals' diet and health. Some discussion regarding higher-energy, summer annual forages may be included as well, as farmer Mike Geiser strategizes how to keep good energy in his milking herd through the summer slump. This is a good walk for graziers looking to optimize their pastures and gain exposure to a farm transitioning into a grass-fed management system. For more information visit Pennsylvania Association for Sustainable Agriculture's website at <https://pasafarming.org> or contact Aaron de Long at [aaron@pasafarming.org](mailto:aaron@pasafarming.org).

## VIRGINIA EVENTS

### Virginia Fencing Schools

Wednesday, April 4

8:00 a.m.–5:00 p.m.

Louisa County Extension Classroom

Louisa County Administration Building

1 Woolfolk Avenue

Louisa, VA

Thursday, April 12

8:00 a.m.–5:00 p.m.

Virginia Tech Middleburg

Agricultural Research Center

5527 Sullivan's Mill Road

Middleburg

Join Virginia Cooperative Extension and Virginia Forage and Grassland Council for an overview of fence law, fence budgets, selecting the best wood fencing products, and construction basics. These will be hands-on fence building as well. Visit the Virginia Forage and Grassland Council website at <https://vaforages.org> for more information.

### Grazing School

Tuesday, April 24

Wednesday, April 25

8:00 a.m.–5:00 p.m. each day

McCormick Farm

128 McCormick Farm Circle

Raphine, VA

Designed with beginning and experienced producers in mind, this two-day, intensive course will teach everything needed to know to better manage grazing on a farm. Participants will have hands-on opportunities to work with grazing tools, try out fencing materials, and practice allocating pasture to livestock. The last day of the school features a workshop where attendees can sit down with instructors to begin developing a custom grazing plan. Early registration costs \$125 and includes all meals and course materials. For more information, visit the Virginia Forage and Grassland Council website at <https://vaforages.org>.

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