



MOUNTAINS-TO-BAY GRAZING ALLIANCE

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

April 2016

Weeds or Forbs? Some Can be a Grazier's Best Friend

by Jeff Semler, University of Maryland Extension, Washington County

It is often said that beauty is in the eye of the beholder and nowhere is this truer than in the pasture. By definition, a weed is an unwanted plant or a plant out of place. To many livestock producers, a weed is any plant other than grass but this would be selling a lot of wonderful 'weeds' short.

Weeds constantly invade crop fields and pastures; therefore, it is important to know the potential quality of individual weed species in making management decisions concerning weed control. Some weeds are toxic or poisonous to livestock, and certain weeds are unpalatable—causing a reduction in total intake. Several weed species have thorns or spines that can injure the grazing animal's mouth and/or irritate its eyes, which may lead to pinkeye. Other weeds can cause the milk and meat of livestock to have a negative taste or odor.

In addition, it is often assumed that weeds have low nutritive value and livestock will not eat them, so expensive and time-consuming measures are often used for their control. However, many times this is not true and these weeds should more rightly be called forbs, as they provide valuable grazing and are positive plants in a pasture.

So what are forbs? They are broad-leaved, non-woody, herbaceous plants that differ from grasses in that the latter have narrow, linear leaves. Many forbs have significant food value for livestock and livestock even prefer them to grasses. Several of

these forbs have high digestibility at the vegetative stage that is even higher than some cultivated forages, such as orchard grass and clover.

For the past ten years the University of Maryland Extension Small Ruminant Team has run the Western Maryland Pasture-Based Meat Goat Performance Test located at the Western Maryland Research and Education Center (WMREC). In addition to evaluating the post-weaning performance of male goats consuming a pasture-based diet, we look at different forages as well, including forbs.

Over the years we have tested many of the more common pasture weeds that include marestail, lambsquarter, and burdock as well as planted forbs like Sunn Hemp. We have taken samples for the forage analysis shown in Table 1.

Crude protein is essential in all livestock diets, but the required amount is

dependent upon livestock type and stage of life. Most weeds and forages satisfy the crude protein needs of beef cattle, goats, and sheep.

Yet the quality of a weed or forage has no value if the animal will not eat it. Cattle tend to eat mostly grasses in a pasture, leaving herbaceous weeds and shrubs untouched. Sheep graze broadleaf plants before grasses and shrubs, while goats will eat the shrubs not grazed by sheep or cattle. Therefore, combining cattle, sheep, and goats in a pasture can lead to increased utilization and profitability.

While weeds are an inevitable component of pastures and hay fields, this article shows that herbaceous weeds can have digestibility that is greater than or equal to high-quality species like alfalfa. Producers should be knowledgeable about the nutritive value of weeds and forages so they can make the best management decisions for their particular operation.

Specie	Dry Matter	Crude Protein	TDN	RFV
Mixed Grasses & Forbs	30%	14.1%	65.8	111
Lambsquarter	28%	23.2%	89.6	289
Marestail	19.8%	19.2%	71.6	174
Sunn Hemp	16.8%	20.0%	75.8	278
Millet/Sunn Hemp	15.2%	21.8%	72.6	174
Orchardgrass	43.9%	9.9%	53.5	73
Alfalfa	26%	25.1%	70.2	234

Table 1. Forage Analysis Samples. RFV (Relative Feed Value) is an index used to compare the quality of forages relative to the feed value of full bloom alfalfa. RFV is used to compare similar forages for two important qualities—how well it will be consumed and how well it will be digested.

Summer Annuals: Deal Yourself a Better Hand

Wisdom from some grass-based farmers

by Kellie Rogers

Farming is a gambler's game. There are factors that you can control, such as production type, and some that you cannot, such as wet weather or drought. With education and plenty of repetition, you can implement practices and make adjustments to allow for a better hand. So before you fold, watch how these four Maryland grass-based farmers and mentors play the game in Washington County. You may find yourself itching to get into the next round this summer.

The incentives to switching to grass-fed production are becoming clearer as the economic demands soar away from a commodity-driven market. As producers and consumers begin to learn more about the health benefits of grass-fed products to themselves, the animals, and the environment, many farmers have made or are looking to make the transition from feeding grains to rotational grazing. The growing market for grass-fed products is a driving force behind the transition but reduction in veterinary bills, an improved lifestyle, and reduced impact on the land are all contributing factors to this shift.

In a conventional farm setting, providing feed year round is not difficult when importing or storing grains and forages. Grass-based producers however are challenged more by the growing season. This challenging period when cool season perennial grasses begin to drop off in quality and yields due to high temperatures and reduced precipitation is referred to as the "summer slump." Often this is when farmers believe they must revert back to grain-fed production in order to keep costs low and production up. However, for producers who want to maintain a steady stream of high-quality forage year round and obtain a 100 percent grass-fed product, there are cost-effective alternatives. In this article we will explore the potential held by summer annuals.

As a farmer living in the Chesapeake Bay watershed, you have been dealt a challenging hand. How can you maximize profits, develop a solid marketing strategy, adjust to abiotic factors, and limit the impacts of your production on local waterways and a nationally-treasured estuary, the Chesapeake Bay? One strategy is implementing summer annuals into your grazing production. This will allow

you to maintain low overhead costs, reduce impact on the land, and produce a more marketable product.

Summer annuals are a welcomed addition to most rotational grazing operations as the grasses grow best at relatively high temperatures (around 80 degrees F) and under conditions of limited moisture. There are three major families of summer annual plants: grasses, legumes, and brassicas. The implementation of summer annuals is not a one-size-fits-all solution, as certain species yield higher under certain conditions. In some cases a mixture of the three families is best, while other times one clearly out-competes the others. Deciding what to plant for summer forage is based on a number of factors, including land type, soil type, intended use, yield potential, and feed value for a livestock program. Each summer annual crop has unique growth characteristics that require proper management for optimum production. Some of the desirable characteristics of summer annuals are rapid growth, excellent drought resistance, and good response to fertilizer and water. There are differences in growth rate, recovery after grazing or clipping, and forage yield and quality.

For this story, I traveled to Washington County, Maryland to hear stories of how summer annual implementation has benefited a number of grass-based producers. For years, these producers have experimented and advised on integrating annual plants as forage to fill the gap caused by the summer slump. They have tested mixtures, avoided prussic acid, and provided a high-quality forage for their animals to last them during the warm, dry summer months. These farmers offered up their stories to provide you with insight and practical advice as you consider integration into your own production.

Clear Spring Creamery is a family dairy farm, owned and operated by Mark Seibert and his wife, Clare. Seibert left his NRCS job to take over his fourth-generation farm and now tends to a herd of 40 healthy cows, milking them each just once a day. Clear Spring Creamery processes all of their milk on site, to be bottled as milk or turned into yogurt. Their grass-fed dairy products are sold exclusively at farmers' markets for 50 weeks of the year. Clear Spring Creamery serves devoted customers

at DuPont Circle, Tacoma Park, Arlington, Silver Spring, and Falls Church Farmers Markets.

The farm consists of 100 acres of pasture, and an on-site, Grade A processing facility. Every year Seibert plants 10-to-30 acres of Sudangrass, allowing it to grow about 30 inches or to waist height before grazing it he says "pretty aggressively." He harvests any surplus grass to be stored as haylage for winter feed. He plants the Sudangrass into a tilled seed bed and uses temporary fencing to designate paddocks with one day's worth of grazing. He also explains that he plants at a rate that is nearly two times the recommended rate per acre, which gives him higher yields in marginal soils. While a more diversified crop may be better in terms of resilience and would reduce the need for tillage, he has been unsuccessful with legumes and avoids brassicas as they can change the flavor of the milk. Happy cows and great flavor keep their customer base satisfied and coming back to the market every week. Seibert explained that he did not lose any productive perennial fields, as he was able to plant his summer annuals in areas where he did not like the existing pasture. Seibert uses summer annuals as an "opportunity to grow high-quality feed to fill in the gap and let other fields rest for six weeks to two months."

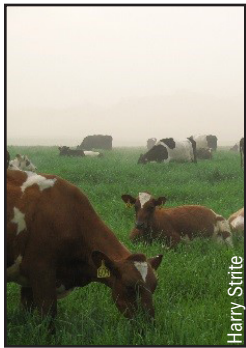
Harry Strite, owner of Creek Bend Dairy Farm, echoes Seibert's advice concerning seeding rates. Strite advises not to "plant it thin, go a little heavier than the company recommends, so if they say 25 go with 35." Strite, who has been farming his whole life, tends 120 acres with 48 cows, while renting an additional 80 acres to grow and make hay. He started to experiment with summer annuals years ago with a conventional herd of 100 cows. After transitioning from a conventional rotational grazing system, Strite now produces certified organic milk for Tricking Springs Creamery. He integrates



Mark Seibert transporting a calf and mother to a secluded area to bond without interference.

summer annuals into his grazing system as an opportunity to renovate pastures while providing good forage.

Strite plants his summer annuals around June 1, and after an initial 35 days, grazes it roughly once a month starting in the first week of July. As a fall seasonal producer, his herd is dry during the summer slump. Strite has had success growing legumes, which he likes due to their nitrogen-fixing properties. Unlike Seibert, he separates his crop fields into paddocks where the entire herd is grazing the same area together. He likes to add alfalfa in plant mixes, as it provides good quality feed and does well in dry weather, a common problem for other annuals during summer months. Harry does till



Cows grazing in a summer morning fog in Williamsport, Maryland.

his pastures, to counter soil compaction, because he plants winter annuals and grazes heifers on them.

While summer annuals can be planted over existing pastures, some fields such as those planted in ryegrass have to be tilled or sprayed before subsequent plantings. He often plants Sorghum Sudangrass and a brassica together. He begins to graze his Sudangrass at 20 to 24 inches and does not let the herd graze below 8 to 10 inches. When growing annuals for haylage, he does let the crop grow up to 30 inches and follows by planting no-till oats and annual ryegrass for his fall forage.

Just down the road, I met a father and son team, Steve and Josh Ernst, who run their seventh-generation farm growing grain and raising grass-fed sheep among other livestock. Their farming business, Ernst Grain and Livestock, supplies high quality, non-GMO feed to the surrounding four-state area. On their farm they grow and harvest grains not only to supply local farmers but also for their own livestock. Ernst Grain and Livestock was the first operation to be approved under the Farm Stewardship Certification and Assessment Program (FSCAP). The FSCAP accreditation is a voluntary program to distinguish great conservation work by farmers recognized under the Maryland Association of Soil Conservation Districts. In addition to being documented stewards of the land, Josh raises highly-marketable

grass-fed sheep with 14 acres of their land in summer annuals and another 22 acres in permanent pasture.

Depending on the time of year, Josh manages a flock ranging from 160 to 300, allowing them to graze on Brown Mid-Ribbed (BMR) Pearl and Japanese Millet. I asked about their choice of the BMR Millet as opposed to adding in a brassica. Josh explained that while the brassica took well in the soil, they did not have enough sheep to mow it down and make it a successful forage. The BMR varieties of Sorghum and Sudangrass developed through traditional breeding, are lower in lignin. The less lignin a plant has, the more digestible it becomes, benefiting both the sheep and the pockets of the grower.

Just like Seibert, the Ernsts plant their summer annuals in land that can be better utilized for pasture, such as areas where rock breaks make it unsuitable for row crops. Additionally they graze fields of fescue in the fall. Fescue is a desirable grass to stockpile for late fall and winter grazing, as it is both palatable and highly digestible. Josh is able to supplement the sheep's diets with haylage during the winter months and during lambing time, when energy needs are higher than normal. Josh and his father Steve plant the BMR Pearl Millet and Japanese Millet at a rate of 50 pounds per acre, a practice that they agree offers its own insurance by reducing chances of a total lost crop. The Ernsts do not plant on a definitive date; instead they plant when soil temperature in the grass sod is at 60 degrees at 10:00 a.m. (Can you tell that they do this for a living?) They allow their BMR Pearl Millet to grow to 6 to 12 inches before allowing the sheep on to graze. They move the sheep to another pasture before it is grazed to 3 inches, as nitrates can accumulate in the lower portion of some millet varieties.

Josh's seeds of advice to anyone considering planting a summer annual are not to "get caught up in what everyone else is doing; you have to consider your own operation." After a brief pause and a few pats on the heads of their two dogs, he explained that those considering the transition are "going to have to think about what machinery they have, who they are going to have to hire, because ultimately it is about profitability. In our case we decided that planting a palatable, digestible, high-quality feed would get us through the summer months," a practice that the father and son team believe is well worth the investment in their operation.

My day traveling around Washington County talking to these producers was organized by Jeff Semler, the educator for the county University of Maryland Extension agriculture division. After talking about his previous careers and current position with the extension, it became clear why he is as respected as he is within the agricultural community. In his role as extension educator, his areas of expertise lead him to work in strengthening the profitability of agriculture. In addition to advising farmers across the county, he also is a member of a research team that raises grass-fed goats on the University of Maryland Western Maryland Research & Education Center, where they test the animals for parasite resistance and resilience. At the research farm, he plants a mixture of millet, sun hemp, and rapeseed using a no-till drill which allows for minimal soil disturbance.



Jeff Semler, the Extension Educator for the UMD Extension helps the public and farmers across the county understand the importance and benefits of summer annuals.

Semler echoes the opinions of many farmers throughout the county and across the watershed. "The types of annuals and the process of integrating them into a grazing system varies greatly by what animals you are trying to feed and the land they will graze on," a statement that rang true throughout the day. As I did with the other farmers, I asked him what one piece of advice he would give to someone looking to implement summer annuals. He advised that one should "always walk before you run, start small, plant one field." Even by planting just one field, a producer is able to figure out what plants or mixtures make the most sense for their operation. So despite the variability from acre to acre and animal to animal, Semler "believes that summer annuals have a place in every livestock feeding system," a feeling shared by many producers across the region.

Dual Purpose Cover and Forage Crop Mixes

Above and below ground, there's more than meets the eye!

by Genevieve Slocum, King's AgriSeeds Inc., Ronks, PA

Editor's Note: We asked Genevieve if she would share some of King's experiences with summer annuals and mixes: what have they seen as the best seed combinations for different grazing and stored forage needs to help get through the summer slump.

The need for soil building, erosion control, and nutrient scavenging doesn't end with the onset of warm weather; if anything, it only accelerates. It's an opportunity to be seized, especially since warm season annuals establish quickly, fill gaps in the rotation, tolerate drought and other challenging conditions, and produce large amounts of forage or biomass in as little as 30 to 40 days. Combined, these benefits help you stretch your supplies and/or build your organic matter, depending on your goals.

Even a simple mix of two or three species can work wonders for your fields this summer, whether it is for cover crop use, forage, or both. A mix left strictly as a cover crop will provide close to its potential maximum organic matter and nitrogen fixation to soil, but a crop taken as forage will provide many of the same benefits and maximize your land value. Increasingly often, we are working with producers who are searching for that key combination that can provide a productive "double duty" forage and soil building cover crop.

Whether you have two species or ten, carefully considering the benefits of each is important. Most summer cover crop species work well together to provide a unique, synergistic benefit, especially when you take care to balance grasses with legumes and broadleaves.

A mix of two or more species is almost always preferable to a straight stand. Not only are you packing the benefits from multiple species, you've diversified your risk rather than relying on the performance of one species.

Combining different species also creates balance between nitrogen fixers (legumes) and nitrogen users (grasses and forbs); deep and shallow root structures; below- and above-ground niches for nutrients, water, and light; and crops with varying carbon-to-nitrogen ratios (C:N). Different proportions of carbon to nitrogen cause the crop residue to mineralize

nitrogen at different rates, moderating N release and creating balance between N immobilization (caused by higher C:N ratios) and large flushes of nitrate (lower C:N ratios). The amount of carbon overall in the mix will help determine how quickly the residue breaks down and releases nutrients, although some species will be much higher or lower than the average. Each component also has a slightly different allelopathic effect, which helps inhibit the germination of different weed species. Many species also flower and attract beneficial insects, creating a break crop for pests, and lower-growing, canopy-forming species suppress weeds.

Two combinations that work nicely in a double-crop rotation with a winter annual small grain forage or blend are barley and ryegrass, and triticale and crimson clover. In the Mid-Atlantic and south, you may also be able to fit in a third cool season annual like forage oats or spring peas before or after the summer annual.



Sunn Hemp works nicely in a double-crop rotation.

MasterGraze and Cowpeas: High Quality Forage, Weed Control, and Break Crop

MasterGraze, a BMR tillering corn that is ready for grazing in 60 days, really benefits from the addition of cowpeas, a vining summer legume. It is a highly productive forage to extend corn silage supplies as well, and it works for grazing during the time when cool season grasses enter the "summer slump." MasterGraze can be slow to take off, and the leafy cowpeas suppress weeds in the gaps before the MasterGraze canopy closes. Cowpeas have been substituted for soybeans in this role, mostly because they make a more palatable forage and their viney nature makes the MasterGraze an ideal "trellis" to support their growth. Cowpeas have deep taproots to weather drought and fix nitrogen as well.

MasterGraze is a corn and must be planted with a corn planter. It is often planted in 15-inch rows at approximately a 44,000 population (double back to split the rows with a 30-inch-spaced corn planter). To establish cowpeas, go back over the field with a drill in a perpendicular direction to the MasterGraze planting at approximately 40 pounds per acre.

As for feeding, if harvested or grazed just before tasseling, the mix will produce at least 12 percent protein, but it actually feeds at a higher level than this because MasterGraze is so digestible at this stage, and often protein supplementation won't be needed. This mix can be difficult to handle, however, just because it produces so much material. It can be grazed; direct chopped and fed as green chop; or cut, wide-swathed, tedded 3 to 4 hours after cutting, left to wilt, and then windrowed and baled. Success is more difficult with baleage, though. Because of the sheer mass of the material, raking and tedding increases ash content and lowers forage quality. For that reason, we'd much rather see the crop in a grazing or green-chop scenario.

Cowpeas fit well with BMR Sorghum Sudan and Sudangrass products too, but the MasterGraze gives a premium in yield, protein, and digestibility, and those who use this combination to stretch corn silage supplies report a smooth transition with no drop in milk production.

Ray's Crazy Mix: Soil Building Diversity and Grazing for Beef Cattle and Dry Cows

This mix was developed to maximize diversity and flexibility in a short window of opportunity. With seven species, summer grasses (millet and Sorghum Sudan) are balanced out by legumes, brassicas, and sunflower. Cowpeas fix nitrogen and create a shading, weed-suppressing canopy effect, while grasses build soil with fibrous roots. Allowing the crop to grow longer produces more biomass and lets the cowpeas fix the most nitrogen.

If you notice a weedy or thinning pasture, it may be time for a break. The diversity in Ray's Crazy Mix makes it an excellent break crop for renovating pastures. Terminate a pasture in the spring, then plant Ray's Crazy Mix before reseeding a pasture mix in the fall. The unique blend

of species will disrupt weed and pest pressure and build soil with roots and above-ground growth. The mix grows quickly, keeps ground covered, and tolerates stressful conditions like heat, drought, and poor soil. In addition to a nitrogen-fixing legume, cowpea, the mix contains several deep rooted components, such as Daikon radish and sunflower, which scavenge and hold nutrients for the following crop. The radish's thick tuber root also helps penetrate and break up compacted soils. Left to bloom, components like the sunflower, cowpea, and brassica will attract many types of beneficial insects.

Ray's Crazy Mix will provide high quality, highly digestible forage, though dairy cows can be more particular about selecting it than beef cattle. They may especially shy away from the brassica and sunflower components, depending on what they are accustomed to. This mix makes an excellent dual application as cover crop and forage, but it is best approached primarily as a cover crop and/or for grazing, and only secondarily as a stored forage. Just be sure to take special care when using it for stored forage, since the brassica component is high in moisture and low in lignin, which makes it difficult to dry for baleage.

The mix will reach the ideal combination of quality and yield when the millet and Sorghum Sudan reach 18 to 20 inches. Past this point, lignin content increases, reducing digestibility. Deciding whether you are maximizing biomass for soil health or targeting optimal quality for grazing will help determine management of the crop as it reaches maturity. For best regrowth, stop grazing at a six-inch stubble height. The mix is best suited for grazing or as a cover crop.

Summer Feast: Grazing that also Works as a Cover Crop

Summer Feast, or a variant on this mix, is the crop that many graziers actually want when they ask for Ray's Crazy Mix. Its diversity and digestibility lie in two species. Comprised of Wonderleaf Pearl Millet and Forage Brassica, it's a high-protein, high-energy blend of varieties that complement each other well for both feeding and agronomics. Millet, a summer annual grass, provides effective fiber to slow the rate of passage of the brassica's rich

quality. The brassica itself contains as much as or more protein than a legume. Agronomically, brassicas have an allelopathic effect on weeds and a biocidal effect on some pests. They also take up lots of space, producing a natural weed-suppressing canopy beneath the grass with their broad leaves. The combination presents two levels of grazing for the animal.

This mix provides a good answer for those who want a highly nutritious grazing mix first and a solid cover crop second. It doesn't provide the sprawling diversity of Ray's Crazy Mix, but if you target the mix carefully to your needs, you may not need as much diversity as you think you do.

Again, grazing is the ideal application for this crop, as the brassica is higher in moisture and more difficult to dry.

Other Custom Mixes to Fit Soil and Livestock Needs

Summer Feast is a pre-made mix, but if you want to make your own formula, it has several good stand-ins. You could substitute MasterGraze, Sudangrass, or Sorghum Sudan for the millet and still achieve a similar effect. We also now carry Exceed millet, a brown midrib product that is more digestible and lower in lignin than Wonderleaf. Just be aware that Sorghum Sudans and Sudangrasses have prussic acid danger after frost, while millet does not.

It is quite likely that a two- or three-species mix will be enough to fulfill your soil or livestock needs. Mix and match one or two warm season grasses, a brassica, and/or a legume. For strictly cover crop uses, buckwheat and sunn hemp, both excellent smother crops and soil builders, can be added. Consult with King's AgriSeeds to determine which species work best with your specific plans.

No Matter what Your Cropping Scenario is, Summer Annuals Help

No matter which mix you choose, summer annuals are a boon to your rotation. They diversify a pasture or agronomic cropping situation and can help mitigate many problems. Most of them provide high-quality forage, too, and in a time crunch, you could be surprised at their ability to stretch your forage inventory in a shorter growing window than corn silage, and to be productive at a time of year when your staple pastures are waning.

The Grazing Corner: Stockpiling Fescue—It Really Saves Money!

by Buck Holsinger

Holsinger Homeplace Farms, Broadway, VA

Editor's Note: April may seem like a curious time to talk about winter grazing of stockpiled fescue. But it's the best time. To be successful with stockpiling takes some long-term planning. Which fields to save for stockpiling when the time comes? Which other pastures to graze when these fields are set aside? Planning ahead is one of a grazer's most important tools!

The largest expense in most livestock operations is the feeding cost. Most producers harvest forages all summer and fall to feed to their livestock when nothing else is growing in the winter and early spring. Even though this is a common practice there is another way to reduce these costs: stockpiling tall fescue. Stockpiling tall fescue is not a new practice but is often overlooked as a great way to lower expenses and have high-quality feed.

Stockpiling tall fescue is a simple practice. In August, the designated field should be grazed down and then nitrogen should be applied if the field has less than 30% legumes. Then it is a matter of praying for rain and watching the grass grow. Following a killing frost or colder weather, it is time to start grazing. After the frost the fescue becomes more palatable and does a great job of holding its nutritional value long into the winter months. To increase livestock utilization, producers can use temporary fencing to limit the movement of the livestock. This makes the livestock eat more and waste less.

I use this practice every winter on my farm. I even sampled the fescue to make sure the cattle were getting the nutrients required to sustain the mothers and produce a calf. Lactating cows require an average of 10% crude protein and 58.7% Total Daily Nutrients (TDN) to sustain themselves, and a cow in late gestation requires 8.7% crude protein and 55.7% TDN. Our fescue during the first week of February tested at 13.2% crude protein and 58.6% TDN. The fescue more than delivers the nutrients that the cattle need.

The sample was taken after 28 inches of snow had melted. My cattle could smell it and dug it out through 8 inches of residual snow to get to the stockpiled fescue. The cattle preferred to dig through the snow to get to the fescue instead of eating first-cutting purchased hay. Stockpiling fescue extends the grazing season and can reduce feeding costs, and, at least for my cattle, it is preferred over hay.

Maryland Events

GRAZING WORKSHOP FOR ADVANCED GRAZIERS

Monday, April 11 and
Tuesday, April 12

Peace Hollow Farm, Washington County
Called "one of the best dairy farms in the whole country," by University of Maryland Ag Economist Dale Johnson, Peace Hollow Farm is an ideal location to improve your grazing skills. Join guest presenters and other farmers as we look at different pastures and discuss grazing topics, including: finishing high-quality meats on grass, learning to love fescue, building healthy pastures above and below ground by understanding soil quality and forage quality, and answering all your grazing questions. Sponsored by the Maryland Grazers Network and the University of Maryland Extension, with support by the Department of Animal and Avian Sciences, University of Maryland, through an endowment from the Jorgensen Family Foundation.

For more information, contact Ginger Myers at gsmyers@umd.edu or Michael Heller at mheller@cbf.org.

If you need more information on grazing in Maryland, please contact Michael Heller at mheller@cbf.org or Jeff Semler at jsemler@umd.edu.

Pennsylvania Events

SOUTHWEST PROJECT GRASS BUS TRIP TO YOUNG'S CATTLE CO.

Friday, April 29, 7:30 a.m.-7:45 p.m.
Spend an afternoon on Rick and Jayne Young's farm, where they maintain 400 cow-calf pairs and turn 5,000 head of stocker cattle annually on 3,283 acres of reclaimed strip-mined soil. Hear their story of environmental stewardship and making a living. For more information, visit the Pennsylvania Grazing Lands Coalition website at www.paglc.org.

SOUTHWEST PROJECT GRASS GRAZING FIELD DAY

Thursday, May 12, 9:00 a.m.-2:45 p.m.
High Ridge Farm LLC is a 110-acre forage-based farm that implements a rotational grazing system on 16.7 acres with 25 Hereford cattle. Recently, the farm has installed additional best management practices to improve productivity. For more information, contact the Washington County Conservation District at 724/206-9446.

If you need more information on grazing in Pennsylvania, please contact Red Barn Consulting at 717/393-2176 or Capital RC&D at 717/241-4361.

Virginia Events

SPRING FORAGE AND GRAZING FIELD DAY

Thursday, April 14, 9:30 a.m.-3:00 p.m.
Swallow Hill Farm in Caroline County
Featured speaker Dr. Matt Poore will discuss the right forages and grazing management to meet your production goals and build soil health. Early registration is \$10 by April 11; late registration is \$25.
Register at www.vaforges.org.

2016 GRAZING SCHOOL

Monday, May 2 and Tuesday, May 3
Shenandoah Valley Agricultural Research and Extension Center
McCormick Farm, Raphine
Designed with beginning and experienced producers in mind, this two-day intensive course will teach you everything you need to know to better manage grazing on your farm. Early registration is \$75 (through April 18) and is \$100 afterward. Registration includes two lunches, dinner, and course materials.
For more information, visit the Virginia Forage and Grassland Council's website at www.vaforges.org.

If you need more information on grazing in Virginia, please contact Alston Horn at 540/487-9060 or Matt Booher at 540/245-5750.

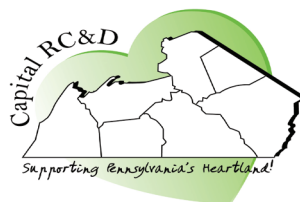
Amazing Grazing Wants You: Free Marketing Opportunity

If you own or operate a grass-based farm operation in Virginia, West Virginia, Delaware, or Maryland, we would like to profile your farm products in our new, online, interactive map! The Amazing Grazing Directory is a comprehensive listing of grass-based farms in the Chesapeake Bay watershed that sell directly to consumers, intended to connect consumers and grass-based farmers.

If you are a grass-based farmer interested in having your grass-based farm and products added to the Amazing Grazing online map, please contact Shannon Varley at: shannon@futureharvestcasa.org or 410/549-7878.

Mountains-to-Bay Grazing Alliance Partnership

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Saving a National Treasure



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