Mountains to Bay Grazing Alliance

July 2022 Newsletter

Considerations for Managing Cool-Season Pastures in Summer

by Alston Horn, Chesapeake Bay Foundation and Matt Booher, Virginia Cooperative Extension

What is the most important component in managing livestock on pasture? The forage! Obviously, without adequate forage productivity here and now there's nothing for livestock to graze.

With the heat of summer upon us, however, our management needs to shift to a long-term focus on plant health. Here are seven tips to help your cool-season pastures withstand the stresses of summer and stay healthy and productive for a long time.

1) The main goal in managing grazing is to leave adequate residual (i.e. leaf area). This will encourage fast recovery and regrowth, maintain plant energy stores, and retain a healthy root system.

Let's say you've just rotated cattle off a pasture. Did you leave a proper amount of post-grazing residual? If the average height of the pasture when animals are removed is four inches or more, the answer is probably "yes."

Remember we are talking about an average; some plants may have been grazed to two inches and some to six inches. In a good rotational grazing system, the unfortunate plants that were hit a little harder will recover quickly with some rest.

In a system where livestock remain in the same field for over a week, those plants that were grazed hardest will get grazed again and again.

2) In most pastures, clover usually gets hit hard, while the grass seems almost untouched. In this case, we would use common sense on when to move animals.

Since white clover and bluegrass store their carbohydrates and buds close to the soil surface, they are protected and can take a little closer grazing.

Unless you are starting to get regrowth with animals returning to those patches of clover and bluegrass, we would probably key more off the other grasses in this scenario. Leave livestock in a little longer until they hit some of those grasses, but not long enough to start grazing regrowth.

3) Keep in mind however, that more time on a field is generally not the solution to getting better grazing uniformity.

The way to get uniform grazing is by increasing stock density. Graze with the largest group of livestock possible. That doesn't mean go get more animals; it means combine multiple groups into a single herd whenever possible.

Stock density can also be increased by subdividing pastures with temporary grazing equipment like polywire.

4) Managing cool season pastures in more southerly regions like Virginia can be difficult.

Unlike areas farther north, where there are extended ideal conditions for vegetative growth, our grasses can go from short and leafy to tall and stemmy in just a couple weeks during May and June. That makes them hard to keep up with and causes forage quality to tank fast. This is when you need to identify those pastures to remove from the rotation and allow them to stockpile for hay or summer grazing.

Fast-forward a month, and all of a sudden that rapid spring growth has come to a screeching halt. Overgrazing cool season grasses when they are stressed by summer heat and drought really hinders the ability of the plant to rebound when favorable conditions return.

5) If you are questioning whether to move them or let them graze another day...MOVE THEM! That inch of forage that you "waste" by moving them will pay you back many times over with faster regrowth through the rest of the grazing season.

6) Move livestock based on the growth and recovery of the plants, not on a schedule.

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Just because you could return to a given pasture after two weeks' rest in May doesn't mean that is enough rest in July.

Evaluating pastures and moving livestock based on forage growth may put you in a position where there is nowhere to graze.

Have a contingency plan in place: Graze the excess spring growth you've stockpiled, pull livestock into a sacrifice pasture, and feed hay, or plant a summer annual forage. Remember, the little bit of extra forage that you leave in the field is not wasted. Those plants will have stronger root systems, greater energy stores, and more leaf area to take off when the weather turns around.

7) Think about ways to add additional watering points during the summer months.

Many producers have done this by simply running temporary, plastic pipe on top of the ground or buried to a shallow depth. While not freeze-proof, in most areas of Virginia this type of setup can be used from May through October.

More watering points will dramatically increase your grazing management options and help to distribute manure nutrients throughout the pasture.

Good soil fertility (especially nitrogen) is critical to get cool season pastures going again once summer is over.

Controlling Summer Annual Weeds

by Matt Booher, Virginia Cooperative Extension

Now is prime time for summer annual weeds and any required herbicide control measures should not be far behind. While every situation does not require spraying, a year-after-year issue with weeds probably indicates problems with compaction, plant health, overgrazing, or soil disturbance.

Many summer annual weed species will not germinate when covered by an intact, shady forage canopy. In these instances, a change in management practices paired with herbicides may help wipe the slate clean so you can get a hold on things.

The following are some common summer annual weeds: pigweed, cocklebur, jimsonweed, lambsquarters, ragweed, nightshade, and perilla mint.

You may note that most of these species are thorny, prickly, bad-tasting, and otherwise undesirable to livestock—so controlling them with grazing is unlikely.

Many summer annuals are prolific seed producers, whose seeds can germinate any time soil temps exceed about 60 degrees. This means that stopping seed production on emerged plants and controlling the prolonged flush of germinating seedlings from the seedbank are critical components of a weed control program.

The herbicides in the tables above will work for general control of summer annuals. Best control will be achieved by applying to young, actively-growing weeds. Note that the herbicide options that possess residual activity will not only help control germinating seedlings for a couple of months, they are also strong on perennials.

General Weed Control, Mainly Annual & Biennial Weeds

Per acre	Per gallon of water (spot treatment)
4 pints 2,4-D ester	25 mL (3/4 oz) 2,4-D ester
8 oz non-ionic surfactant	3 mL (1/10 oz) non-ionic surfactant

Per acre	Per gallon of water (spot treatment)
2.5 pints 2,4-D ester	16 mL (1/2 oz) 2,4-D ester
8 oz dicamba	3 mL (1/10 oz) dicamba
8 oz non-ionic surfactant	3 mL (1/10 oz) non-ionic surfactant

Per acre	
0.5 oz *Cimarron Plus*	*Formulated as a water dispersible granule with low use rates, therefore, is often difficult to properly measure herbicide for use in spot treatments.*
8 oz non-ionic surfactant	

General Weed Control with Residual, Targeting Perennials

Per acre	Per gallon of water (spot treatment)
2.1 pints *GrazonNext HL*	13 mL (1/2 oz) *GrazonNext HL*
8 oz non-ionic surfactant	3 mL (1/10 oz) non-ionic surfactant

Per acre	Per gallon of water (spot treatment)
16 oz *DuraCor*	6 mL (2/10 oz) *DuraCor*
8 oz non-ionic surfactant	3 mL (1/10 oz) non-ionic surfactant

Per acre	
2.5 oz *Chaparral*	*Formulated as a water dispersible granule with low use rates, therefore, is often difficult to properly measure herbicide for use in spot treatments.*
8 oz non-ionic surfactant	

Can you control weeds with mowing? This is a common question, particularly from farmers wanting to reduce their herbicide usage.

Annual and biennial weeds like thistle, pigweed, perilla mint, mullein, deadnettle, downy brome, and yellow foxtail are all 100% dependent on seed in order to maintain a population in your pasture from year to year.

Mowing, therefore, can be effective in reducing seed production to minimize infestations of annuals and biennials. But there are no guarantees.

As you are surely aware, weed seeds can catch a ride to your farm in hay or manure and on wind and wildlife. There also may be a lot of weed seed in your soil already.

It's best to time mowing of annuals and biennials so that weeds are flowering or close to it in order to minimize weed growth. This can be a real challenge because many weeds (like pigweed) can germinate over many months and are present in various states of maturity at any given time.

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Many species will still set seed even if mowed, but plants will be short and seed production viability will be greatly reduced.

Perennials are a different beast altogether. While mowing may have an effect on seedling perennials, mowing established perennials does very little.

Anyone who has ever pulled up the taproot of a pokeweed, or tried to dig the rhizomes of dogbane, horsenettle, or stickweed understands the potential size and scale of these perennial storage organs.

Creeping perennials can form very large colonies with connected storage organs and an enormous capacity for regrowth.

To kill a perennial plant by mowing you must exhaust all of these stored energy reserves with repeated cycles of mowing and regrowth—similar to how potatoes in storage soften and shrink as they sprout.

With established perennial weeds it may be a process that takes 5 or 6 mowing events throughout the growing season.

If you are willing to go this route, it is important to time mowing correctly. As perennial weeds first emerge in springtime, or as they re-emerge after being mowed, they pull from stored energy reserves until they have adequate leaf area to support the plant.

At this point they are able to send any surplus energy below ground for storage—in direct opposition to your goal of shrinking energy reserves to starve the plant.

For this reason, mowing is most effective after perennial plants have achieved perhaps one-third of their mature height; beyond that they are well past recovery and are actively expanding energy storage and growth.

Regardless of the weed life cycle, herbicides are generally more effective than mowing. But that doesn't mean mowing is useless. It can be combined with strategic herbicide usage to control weeds, perhaps more effectively when you consider that mowing often encourages livestock to graze overgrown areas they may have previously avoided, and it can often stimulate growth for a variety of grasses and legumes that compete with weeds.

Mowing in spring and spraying in fall, for example, achieves multiple goals at the same time: it creates higher forage quality in summer pasture, it improves pasture aesthetics, and it improves herbicide translocation by timing the application for when plants are sending sugars below ground in preparation for winter.

With annual or biennial weeds like thistle or pigweed, a spot-spray herbicide application when plants are young in early spring (thistles) or early summer (pigweed) is very effective, but will probably miss a percentage of them.

Taking a bushhog later in the season to any weeds that escaped would likely be more effective than spraying those mature plants (mature plants in reproductive stages take substantially more herbicide to kill than do seedlings).

What about using livestock to mow weeds? Goats are well known to eat weeds, but other livestock will likely not eat may weeds unless they have acquired a taste for a particular species somewhere along the line.

For the most part, pasture weeds are considered weeds because they taste bad, are tough, or have unpalatable hairs or thorns. But weeds can be just as nutritious as more desirable forages.

The amount of weeds livestock consume and trample is directly proportional to the density of livestock in the paddock.

High animal densities approaching or exceeding 10,000 pounds liveweight per acre force livestock to be a lot less picky about what they eat. Temporary electric fencing can be a great tool to help increase stock density and target certain weed problems.

Tips for Managing Droughty Pastures

by Matt Booher
Virginia Cooperative Extension

Continue to graze droughty pastures down to a 3-4 inch average height and then enclose livestock on to a sacrifice pasture to be fed hay. Feeding hay now will repay you with better pasture regrowth this fall when rains come.

Consider limit-feeding hay with some byproduct feeds such as corn gluten or wheat midd pellets to meet the nutrient requirements of the fall herd so they do not lose body condition as they approach calving. Most first cutting hay should be adequate for mature cows in spring herds and they should be able to make up in the fall any loss of body condition now. However, now is a good time to identify those animals that may need some special treatment or need to be culled.

Be on the lookout for perilla mint in your pastures. Drought makes livestock much more likely to experiment with toxic plants, and wilted perilla mint is actually more palatable to them. Perilla mint is responsible for more cattle deaths from toxicity than any other plant in the southeast—and often the incidents involve many animals at once.

Sorghum, sorghum-sudangrass, sudangrass, Johnsongrass, and cherry are all species that can produce toxic cyanide. Cyanide is possible in higher amounts when plants are under drought stress and it is generally more concentrated in young plant tissues. Do not graze drought-stressed or wilted plants and avoid grazing regrowth that is less than about 18 inches tall. Watch out for wilting cherry trees. The ensiling process greatly reduces cyanide content so it may be best to make baleage out of these crops if you can.

Annual crops (and some annual weeds like pigweed and lambsquarters) are known to accumulate toxic levels of nitrates during severe drought, especially if they were heavily fertilized with nitrogen. They can be at risk during drought and particularly in the 3-4 days following a drought-ending rain. Because nitrates accumulate in the lower part of the stem and lowest leaves, maintaining a grazing height of 6 inches should reduce the risk to a tolerable level. Nitrates are reduced by about 50% when forages are ensiled, so haylage or baleage may be the best way to use some of these crops during drought, if you can.

Sheep and Solar Panels: Using Solar Sites for Pastureland

by Ad Crable, courtesy of the Bay Journal News Service

A solar power boom generated by new renewable energy mandates is unfurling in the Chesapeake Bay region. Virginia, for example, was ninth in the nation for new solar capacity in 2021.

With many solar arrays ending up on farmland, a movement is fast taking hold to make sure that they will benefit the environment, agriculture, and wildlife, and not just create a sea of silicon.

Allowing sheep to graze among solar panels has become one attractive antidote.

Grazing by sheep and other livestock joins other dual uses: planting ground cover to benefit pollinators, growing marketable plants such as cherry tomatoes and lavender under the panels, installing beehives, and maximizing soil health practices to improve the land for later agriculture use. Projects that combine farming and solar energy are called agrivoltaic.

State agencies in Virginia, Maryland, and New York have all created pollinator-friendly scorecards for solar developers, underscoring the expectation that environmentally beneficial ground cover will become the norm on both rural and urban solar farms.

"Solar [arrays] on farmland should be required to be dual use," said Arjun Makhijani, founder of the Maryland-based Institute for Energy and Environmental Research.

The use of solar sites for livestock grazing is still in its infancy, but flocks of sheep are already grazing contentedly under and around glass panels in Pennsylvania, Virginia, Maryland, and New York.

By welcoming the graziers, solar operators save money on land maintenance. After the cost of leasing the land, vegetation management is often their top expense.

Sheep owners get access to new grazing pastures while receiving payments to boot, adding precious income at a time when many farmers are struggling. Studies find that sheep farmers often are paid $300–$500 an acre.

There are environmental benefits as well. For example, a new study funded by the

PHOTO: JARED PLANZ

National Renewable Energy Laboratory found that native vegetation munched on by sheep shows an uptick in carbon capture and improves the soil by increasing the cycling of nutrients, carbon, and water.

The synergies of grazing and leaving the ground undisturbed can actually improve a farm's soil during its use as a solar site, according to a study by the Institute for Energy and Environmental Research, based on solar projects on three Maryland farms. Farmers want and financially need the opportunity, the study said.

Why are sheep the most popular choice, at least for now? Because most solar arrays are too close to the ground to accommodate cattle. A solar project being built in Howard County, MD, though, has panels 6 feet off the ground so cows can graze on hay planted underneath. Goats tend to eat wiring and jump onto the panels. Pigs wallow.

Sheep, on the other hand, fit nicely under the panels, typically built 2–3 feet off the ground, and they keep their heads down for the business at hand. The panels provide shelter and shade. Studies are also finding that vegetation planted for grazing under solar panels helps keep the panels cool, boosting energy production.

"Normally, we hired crews with lawn mowers and Weed Wackers. For a solar business focused on sustainability, the idea of using fossil-fuel equipment is counterintuitive," said Keith Hevenor of Nexamp Inc., one of the largest solar developers in the nation. The New Jersey-based company has sheep grazing at 14 sites in New York and may double that total by the end of the year.

"It's been a great fit for us," he said.

And then there are the optics. At some sites, solar grazing has blunted the concerns of those rattled by the conversion of farmland to energy production. Twenty states have sheep grazing on solar sites.

It seems too good to be true. But it's not, said New York sheep farmer Lexie Hain, who helped form the grassroots American Solar Grazing Association in 2018 to connect and mobilize sheep farmers and solar operators around the country.

"Sheep are the natural fit for solar. It's creating a shift," Hain said. "This is a land-use change as well as a business opportunity for people, and they are responding. Solar grazing is happening on its own because it works better than mechanical mowing. It's kind of remarkable."

She and her nonprofit are being flooded with requests for advice and have helped launch grazing at solar arrays in Virginia, Pennsylvania, New York, and other states. Hain and a business partner graze 1,400 of their own sheep at eight solar sites in New York and Pennsylvania.

The growing interest has already prompted a seed mix specially designed for solar grazing

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by sheep. Fuzz & Buzz by Pennsylvania-based Ernst Conservation Seeds combines various nutritious grasses favored by sheep with blooming plants that draw pollinators and improve soil health.

Fat as butterballs

In the spring of 2020, John Fisher and his son, who are Amish sheep farmers near Gettysburg, PA, turned loose 100 lambs inside the newly opened 130-acre Nittany 1 solar array erected by Lightsource BP on former farmland.

"Those lambs gained weight like crazy, more than sheep ever gained on our pastures," Fisher said.

Things went so well that this past season the brothers have increased the number of sheep they grow for meat on the property to 480. To keep from overgrazing the ground bare, the sheep are rotated into new areas of the property every few days with movable fences.

The best grazing was under the solar panels themselves, he said. Studies have shown that "microclimates" of heat and moisture develop under panels, providing ideal growing areas for an assortment of vegetables, berries, and marketable niche plants such as saffron.

"I couldn't have found a better pasture for my sheep, in all honesty," Fisher said when asked if he was satisfied with the grazing arrangement. Coreopsis, goldenrod, ox-eyed daisies, milkweed, and other flowering plants added to the mix to benefit bees and other pollinators had "blooms all over the place," the grazer reported.

About 100 miles east, near Sunbury and the Susquehanna River, grazer Caroline Owens lets 40 sheep she raises for meat, wool, and public education fatten up on a 14-acre solar array. The panels there power 30% of the surrounding campus of Susquehanna University. The college initiated the grazing venture with her three years ago. Now, the sheep share the site with a beehive and communal gardens for students.

"They have everything they need. They're butterball fat," she said.

Are there enough sheep to do the job?

With the accelerating interest in solar grazing, the question may soon be if there are enough sheep to go around. On average, it takes about one to five sheep per acre to keep plant growth trimmed.

In Virginia, where an estimated 7,500 to 35,000 acres will be needed for solar projects to meet the state's goal of 50% renewable energy by 2020, there are 72,000 sheep. Approximately 417 solar projects are awaiting approval from PJM Interconnection, the nation's largest electric grid operator. At the upper end of the estimated need for solar acres, there would not be enough sheep to cover that ground.

Pennsylvania has about 96,000 sheep, according to the National Agricultural Statistics Service. Under Governor Tom Wolf's 2019 executive order to lower greenhouse gas emissions by 80% by 2050, some estimates say 80,000 acres of solar arrays will be needed in the next eight years. Approximately 437 solar projects are awaiting review by PJM Interconnection, a majority on open land. Pennsylvania would have a deficit of sheep unless only one or two sheep are needed to keep grasses shorn.

In Maryland, the state had mandated that 14.5% of its energy come from solar sources by 2030—triple the amount installed now. That was before the Climate Solutions Now Act became law this spring, speeding up the targeted rate of greenhouse gas reductions. Under the former law, a governor's task force estimated that 7,766 to 33,033 acres of farmland would be needed to meet the goal. Currently, there are an estimated 23,400 sheep on 925 farms of various sizes. That would not be enough sheep to handle the upper estimate of needed solar acres.

"I think there's a lot of interest [in solar grazing] in Maryland. I'm not certain we have enough sheep," said Susan Schoenian, a sheep and goat specialist at the University of Maryland's Western Maryland Research and Education Center.

New York, which has one of the most ambitious clean-energy goals in the nation, has 80,000 sheep.

Challenges include transportation to distant solar sites and lack of awareness of solar grazing opportunities. That's why Todd Schmidt is working on a three-year study, funded by the U.S. Department of Agriculture and Schmidt's own Cornell University, for ways to increase solar grazing in Pennsylvania, New York, and other mid-Atlantic and New England states.

Sheep farmers forming cooperatives that can buy and share transportation—even marketing sheep meat as "produced under solar arrays"—are among the ideas to increase the sheep-solar connection.

"I think from a policy standpoint, there is considerable interest from state legislatures that this needs to be considered," Schmidt said.

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Hain and others said that they believe the demand for solar grazing creates growth in the sheep industry. Plus, the relatively low costs of starting a sheep farm is attractive to entry-level participation by young and beginning farmers, as well as people of color.

"Sheep farming in the United States hasn't really taken off because it hasn't been a profitable venture," said Caleb Scott, a New York sheep farmer and vice president of the American Solar Grazing Association. "But now, with the opportunity to provide a service through feeding your sheep, it's increasingly making sheep farming maybe one of the most profitable animal husbandry markets that's scalable."

A workable tradeoff?

Despite its multiple benefits, sheep grazing among solar fields has not been universally embraced and is seen by some as enabling the conversion of prime farmland to energy production. Some think solar belongs only or primarily on rooftops, parking lots, abandoned mine land, and industrial or commercial sites.

Especially where prime soil is taken out of production, some groups don't want to see farmland converted into industrial energy sites, even if theoretically the land can resume agricultural use, on healthier soil, after solar contracts end, typically in 25 years.

Roughly 61% of solar arrays built on Virginia farmland so far have been on the highest-rated soil, according to a study by Aaron Berryhill of Virginia Commonwealth University.

"The scale and pace at which this is happening means reasonable mitigation measures need to be strengthened," said Ethan Winter, the American Farmland Trust's northeast solar specialist.

While solidly endorsing solar energy, the Chesapeake Bay Foundation says solar arrays should avoid prime farmland and the removal of trees. A planned 7-acre community solar project on the foundation's Clagett Farm in Maryland will incorporate an existing herd of sheep for vegetation management and to increase the herd size.

Grazing may not address all concerns, but it is playing a role in handling the increasing pressure for multiple benefits from solar sites.

"It doesn't necessarily solve the problem of prime farmland going into solar developments and loss of farmland," Schmidt said. "But maybe it's a middle-ground strategy."

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PHOTO: JARED PLANZ

New Podcast Released by the Virginia Soil Health Coalition

Soil is much more than the dirt below your feet. This critical, finite resource naturally stores carbon and water, provides habitat for billions of organisms, and is the foundation of all food production.

Last year, Virginia Tech, Virginia Cooperative Extension, and USDA's Natural Resources Conservation Service (NRCS) teamed up with the Virginia Soil Health Coalition to raise awareness for soil health and show more Virginians why they should be "4 the Soil."

Part of this outreach work includes a series of podcasts about soil health. The latest episode, *Keeping Water Clean: Farm by Farm, Lawn by Lawn*, is currently available. To hear it, visit https://www.speaker.com/user/15343676/episode-22-15-keeping-water-clean-farm-b.

In this episode, Jeff Ishee and Eric Bendfeldt caught up with Matt Kowalski of the Chesapeake Bay Foundation (CBF) at a recent field day to talk about soil health and water quality. Matt emphasizes that keeping water clean needs to happen farm by farm and lawn by lawn, and that we all can do our part to improve water quality and save the Chesapeake Bay.

For information about year-round lawn care and ways to possibly incorporate a legume like Dutch white clover into your lawn for water quality and pollinators, please visit https://www.dcr.virginia.gov/soil-and-water/document/yardcare.pdf and https://www.fairfaxcounty.gov/soil-water-conservation/you-your-land-landscape.

As always, please join the Virginia Soil Health Coalition and 4 The Soil movement. You can commit to doing your part to build soil health and protect water quality by taking the pledge at https://www.4thesoil.org/take-the-pledge.html.
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Farmers Visit the Chesapeake Bay

This spring, the Chesapeake Bay Foundation (CBF) was honored to host a group of farmers from across the watershed at our Port Isobel Island Education Center for a Farmers to the Bay trip.

The trips welcome farmers and other agricultural professionals for three days of education, discussion, and exchange of ideas. During their stay, the farmers have an opportunity to interact with local watermen to learn about how watermen and farmers lead similar lives.

CBF's Port Isobel Island Education Center helps foster these discussions, as it is located a short distance from Tangier Island, home of a close-knit community, many of whom make their living from the Bay's bounty.

The trips are intended to improve and increase dialogue between the farm community and watermen, and to discuss issues relevant to both restoration of the Bay and preservation of Virginia's agricultural resources and communities.

This spring's trip focused on farmers interested in learning more about better pasture management and improved grazing techniques.

During the trip, farmers learned from each other and CBF staff about how best to graze their cattle—to improve both water quality and their bottom-lines. Additionally, time was spent exploring the Chesapeake Bay via hikes, paddle trips, and fishing trips.

Want to learn more? Check out this video, which includes interviews from participants on this spring's trip.

Sad that you missed this adventure? You still have an opportunity to participate, as CBF will be hosting another trip this fall! If you are a farmer or technical service provider and wish to join us, please email Elizabeth Ronston at eronston@cbf.org.

Farmers, especially those interested in learning more about better grazing practices, are welcome!

Farmers who attended this spring's Farmers to the Bay trip get ready to throw a crabpot overboard as they explore the Chesapeake Bay (above) and discuss the intersections between farmers and watermen (below).

UPCOMING EVENTS

Maryland Beef Webinar Series:
Stockpiling Forage
August 9, 7:30 PM
During this session, we will discuss tips for stockpiling forage to extend the grazing season. Register at extension.umd.edu/resource/maryland-beef-webinar-series.

Pasture Walk at Sines Family Farm
August 26, 6:00 PM–8:30 PM
2336 Friendsville-Addison Road
Friendsville, MD
Join University of Maryland Extension, NRCS, and the Sines family for an educational field day focused on extending the grazing season. The Sines raise registered Angus cattle and will discuss strategies they are using to extend grazing days while minimizing inputs and maintaining high animal performance on forages. Register by visiting go.umd.edu.augustpasturewalk.

Pasture Walk at Kefauver Farms
September 22, 6:00 PM–8:30 PM
11845 Rocky Meadow Road
Clear Spring, MD
Join University of Maryland Extension, NRCS, and the Kefauver family for an educational field day focused on multi-species grazing. The Kefauvers raise sheep and cattle and will discuss some of the benefits of multi-species grazing and the strategies they are using to manage these animals successfully while maximizing forage utilization and working to extend the grazing season. Register by visiting go.umd.edu.septemberpasturewalk.

Maryland Beef Webinar Series:
Utilizing Crop Residue as a Forage Source
October 11, 7:30 PM
During this session, we will discuss the utilization of crop residue to extend your forage supply. Register at extension.umd.edu/resource/maryland-beef-webinar-series.

Advanced Grazing School
October 18, 9:00 AM through
October 19, 4:00 PM
Renbark Barn
8668 S. Blue Ridge Turnpike
Rochelle, VA
These workshops are designed for farmers looking to transform their farm operation into a profitable business with less work and stress. Dave Pratt has helped thousands of farm families improve the health and productivity of millions of acres and will be leading this two-day advanced workshop. Registration costs $100-$150. Visit vaforages.org to sign-up.

SAVE THE DATE!
Regional Grazing Conference
December 8
Washington County
Agricultural Education Center
7303 Sharpsburg Pike
Boonsboro, MD
Stay tuned for more details about our annual grazing conference—and save the date!

Mountains-to-Bay Grazing Alliance

FUTURE HARVEST
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CAPITAL RC&D
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PAGLC Pennsylvania Grazing Lands Coalition

USDA United States Department of Agriculture
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Saving a National Treasure

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