

MOUNTAINS-TO-BAY GRAZING ALLIANCE



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

October 2017

Over-Grazing and Preventative Management Strategies

by Jesse Bussard and reprinted courtesy of Gallagher Northwest

Overgrazing is grazing a plant before it has recovered from a previous grazing. Overgrazing can be damaging, not only to the natural balance of grazing lands, but to producers' bottom lines, as well. To avoid overgrazing, managing livestock on grazing lands requires graziers to be flexible and understand the complex soil-plant-animal relationship involved.

"Grazing is a balancing act," says Dave Pratt, owner of the Ranching For Profit School, "Between animal needs, forage supply, wildlife needs, and your own needs."

Grazing lands are governed by a multitude of biological processes and systems. When these systems become out of balance, overgrazing can occur. Pratt explains, "Overgrazing is grazing a plant before it has recovered from a previous grazing."

Overgrazing is a factor of time, not animal species or numbers. It can happen in continuous or rotational grazing systems. According to Pratt, this occurs two ways—animals staying in a paddock too long or coming back too soon.

"Grazing is a balancing act, between animal needs, forage supply, wildlife needs, and your own needs."

During overgrazing, animals reduce plant leaf areas, decreasing plants' ability to intercept sunlight and grow new leaf material. This reduction in turn slows down plant regrowth, drains energy reserves, and if left unchecked, can lead to eventual plant death. Weakened root systems decrease soil stability and plants become more susceptible to drought and weed pressure.

A common indicator of overgrazing is animals running short of pasture. Species composition of overgrazed pastures is predominated by short-grass species such as bluegrass. More palatable tall-grass species slowly become sparse to nonexistent over time as they are repeatedly grazed.

Plant spacing and bare soil areas may also increase, leading to greater risk of soil erosion and weed encroachment.

To prevent overgrazing, taking plant-growth rate, natural processes of grazing lands, and animal grazing behavior into consideration are essential. There are many styles of grazing management to choose from: rotational, mob, cell, or holistic, for example. It is up to the grazing manager to choose which one will work best in each situation.

Whatever style is chosen, a well-designed grazing plan bases rotations on changing plant-growth rates throughout the year. In addition, animals are moved regularly. This style of management mimics the natural processes of wild migrating herds of large herbivores which evolved in unison with grasslands eons ago. When used properly, managed grazing has the potential to greatly improve grazing land conditions through improved soil health and forage production.

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New York grazing specialist, Troy Bishopp, advises producers to be conservative and realistic in their grazing planning.

“Take it one day at a time, keep asking yourself the ‘what-if’ questions and have clear goals as to what they want to achieve,” says Bishopp. “Start with something you can really manage instead of going beyond your means.”

He recommends producers use a grazing chart or planning worksheet to assist in the planning process. In addition, Bishopp says, “It’s imperative to walk the land and ‘ground truth’ (i.e.: know) what you really have before you get all giddy grazing and then run out of grass halfway through the season.”

Factors that will be used to design a managed grazing plan will include recovery periods, graze periods, stocking rates, and season of use, among many others.

It’s important to have a grazing plan. Recovery periods, also known as rest periods, should be adjusted with changes in plant-growth rates throughout the year. During slow growth, recovery periods should be long with short grazing periods and vice versa. This allows managers to take advantage of livestock’s selective grazing behavior while maintaining adequate recovery time for plants.

“Eight to 10 paddocks can stop overgrazing,” says Pratt, “But it isn’t enough to get the graze periods short enough for top animal performance.”

Pratt suggests 16 paddocks or more may be needed to keep performance high. Number of paddocks needed in each circumstance will vary with animal numbers and amount of forage available.

As with graze and recovery periods, stocking rates should be fluctuated to match seasonal changes in pasture carrying capacity. Matching the forage supply to the herd’s requirement will help prevent overgrazing.



Consolidating herds and using increased stocking density increases “herd effect,” improving pasture conditions and promoting more uniform grazing.

It is important to note, even in the most well-designed, managed grazing systems, sometimes overgrazing still occurs.

“Expect to make mistakes,” says Pratt. “You will get the recovery period too long or too short, more likely. You will get the graze period wrong at times. You will graze some places harder than you want or than you expected.”

“That’s OK as long as you learn from your mistakes,” Pratt adds. “And do your best to avoid making them a fourth or fifth time.”

To help things go right the first time around, Pratt suggests producers lay their economic and financial foundation first.

“Know your margins,” he says. “Keep overheads low. Know the turnover you need. Monitor cash flow. Make sure you put your capital in things that

make money, not fixed assets.”

Additionally, producers should create enterprise mixes that allow for easy destocking annually and seasonally in cases such as drought.

On the management front, Bishopp offers the following suggestions to avoid an overgrazing situation:

Have feed on-hand or stockpiled in the spring so you are not forced to graze too early. Use a grazing chart to plan out a rotation. Monitor grass growth and rainfall. Maintain proper pasture residuals for your area. Use your “gut instinct” on pasture management decisions in dry weather conditions. Have a contingency plan in place before you need it.

It is important to realize mistakes such as overgrazing are a reality. But, with good planning and proper grazing management, pastures can be healthy and productive ensuring grazing livestock are also healthy and productive. Producers with sound grazing management strategies in their arsenals will be better prepared to deal with these issues when they arise.

Prevent Parasites through Grazing Management

by Melanie Barkley and republished with permission of Lancaster Farming
Many thanks to Penn State Extension for furnishing the original article

Parasites continue to plague many sheep and goat producers throughout the grazing season. Internal parasites decrease growth rates and in high levels can even cause death.

However, sheep and goat producers can follow several practices to minimize the impacts to their flocks or herds. These practices center on grazing management, but can also include genetic selection.

Livestock pass internal parasite eggs in their manure. These eggs then hatch and go through several larval stages until they reach an infective stage.

It can take as little as six days to go from egg to infective stage. Therefore, producers can use grazing rotations to stay ahead of this cycle.

A key is to subdivide fields so that the animals have enough to eat for four to six days. Fields can be subdivided using temporary fencing such as poly-wire or electric net fence.

These smaller areas allow sheep or goats to graze the forages present in the field more evenly. Rotate animals into a new field within six days to stay ahead of the parasite life cycle.

In other words, the parasite larvae reach the infective stage after the sheep or goats have moved out of that field.

Larvae can survive for as long as 120 days when weather conditions are cool and moist. However, when the weather is hot and dry, those parasites quickly die.

Therefore, the challenge comes when producers balance between these weather patterns to ensure that infective parasite larvae are no longer present in the pastures.

This can be much easier to write about than accomplish because the goal is to keep fields lush and growing, which



creates an ideal environment for the parasites.

Harvesting fields for hay is one way to open up those areas to heat and sunlight to kill parasite larva. Another option is to have long rest periods so that the parasites die before the sheep return to that field to graze.

Parasites can also go into a hypobiotic or dormant state inside sheep or goats. Parasites can remain in this state until environmental conditions improve.

Sheep and goat producers often see problems when this occurs during the summer. Animals graze pastures short during extended hot and dry weather conditions.

Then, when weather conditions improve after a rain, a sudden parasite “bloom” occurs.

Parasites that remained inside animals as well as parasites that remained in the egg stage develop quickly to an infective state, which leads to large numbers of infective parasites.

Therefore, adequate rest periods of 65 days or more between grazings can be

critical during the summer.

Multispecies grazing also contributes to breaking the parasite life cycle. While sheep and goats share many of the same parasites, cattle and horses do not.

Cattle and horses grazed with sheep and goats help to break the parasite life cycles because the sheep and goat parasites cannot survive in those other species.

Sheep and goats can graze fields at the same time as cattle or horses, or they can graze in a leader-follower system that allows one species to graze and then, after an adequate rest period and forage regrowth, the other species to graze.

Another option to prevent parasite infections is to leave at least three inches of forage in the fields when animals move to the next field.

Some producers will rotate sheep or goats at taller heights. Most parasite larva are found in the first two inches of forage growth, so the goal is to

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move the animals out of a field before they graze down to levels where parasite larva will be consumed.

A final option is to consider the genetics of the sheep and goats. Producers should keep records that identify when they treat animals for parasites.

This information should include who was treated, date treated, and product used.

Producers should also track withdrawal dates to ensure that no medication residues are present when sheep or goats go to market.

Producers should cull animals that they consistently treat more often than most of the rest of the flock or herd. This allows producers to develop genetics that are more resistant to parasite infections.

The parasites will still be present, but the animal's immune system can better withstand the infection.

The National Sheep Improvement Program can take this selection practice a step further by identifying parasite resistant sheep and goats through estimated breeding values.

Producers develop these breeding

values through fecal egg counts from each lamb or kid in the flock. Those individuals with higher resistance produce lower fecal egg counts.

Producers enrolled in the program enter fecal egg count data along with other performance data and submit to LambPlan in Australia. For more information, check out <http://www.nsip.org> or call 515-708-8850.

Good pasture management as well as good selection practices can both lead to fewer parasite problems in sheep and goats.

Pennsylvania Grazing Workshop Rescheduled

Farmers interested in improving their grazing system for beef and small ruminants should attend South Central Pennsylvania Grazing Workshop and In-Field Training, with sessions for both experienced graziers and beginners, and plenty of opportunities to learn from each other.

It will be held on Friday, October 27, 2017 from 7:30 a.m. until 1:00 p.m., at Ono United Methodist Church, 9 Main Street, Ono.

In the afternoon, attendees will visit the nearby Garden Meadow Farm, a successful grass-based beef farm at 2013 Yordys Bridge Road, Annville, both in Lebanon County, Pennsylvania.

You may register for the school through the Capital Resource Conservation and Development (RC&D) Area Council, at (717) 241-4361 or www.capitalrcd.org. The \$15 registration covers lunch and snacks. Sponsors include: Pennsylvania Grazing Lands Coalition, Capital RC&D, National Grazing Lands Coalition, and Chesapeake Bay Foundation.

South Central PA Grazing Workshop and In-Field Training Agenda

Time	Topic	Speaker
7:30 – 8:00 AM	Check-in	
8:00 – 9:00 AM	Soil health and plant quality	Lindsey Bream, USDA NRCS
9:00 – 9:45 AM	Keynote Speaker	George Lake, Thistle Creek Farms
9:45-10:00 AM	Break	
10:00 – 10:45 AM 1 st BREAKOUT	a. Layout of paddocks b. What 100% grass fed looks like	a. Suzette Truax, USDA NRCS b. Ron Holter, Holter Farms
10:45 – 11:30 2 nd BREAKOUT	a. Estimating dry matter and animal demand b. Stockpiling	a. Titus Martin, USDA NRCS b. Dan Lehman, Hamilton Heights Dairy
11:30 – 12:15	Nutrition of Pastures	Kathy Soder, K bar K Farm and USDA Pasture Lab
12:15 – 1:00	Lunch	
1:30 – 2:30 PM	Overview of Farm	Brent Kaylor, Garden Meadow Farm
2:30 – 3:30 PM	Working with Nature	Greg Stricker, Spring Creek Farm
3:30 – 4:00 PM	Marketing opportunities for grass-based products	Informal Panel Discussion

Regional Events

REGIONAL GRAZING CONFERENCE

Tuesday, January 11, 2018

9:30 a.m.–2:30 p.m.

Washington County Agriculture
Education Center

7313 Sharpsburg Pike, Boonsboro, MD

The Mountains-to-Bay Grazing Alliance is pleased to present Gabe Brown, a North Dakota rancher, and Nicole Masters, from Integrity Soils in New Zealand at this regional grazing conference. Gabe will speak about regenerative agriculture farming that integrates animals, crops, and multi-species cover crops. Nicole will explain how to improve your soils so you can reduce or eliminate the need for purchased inputs. We will also host a farmer panel, featuring graziers from the Chesapeake Bay region. If you are interested in attending, please email Michael Heller at mheller@cbf.org.

Virginia Events

2017 VIRGINIA GRAZING SCHOOL

Wednesday, October 18 and

Thursday, October 19

12065 Chatham Road, Vernon Hill, VA

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. Contact J.B. Daniel at j.b.daniel@va.usda.gov or 434/392-4171 for more information.

Maryland Events

PASTURE AND CROP SOIL HEALTH TWO-DAY WORKSHOP

Wednesday, November 8 and

Thursday, November 9

9:30 a.m.–3:30 p.m.

Ernst Grain and Livestock
13646 Broadfording Road
Clear Spring, MD

Nicole Masters, New Zealand, is a soil ecologist who travels the world teaching about farming systems and how to improve soil health. At this workshop, you will learn how to improve the soil ecosystem (mycorrhizal fungi, bacteria, etc.) to boost pasture health and how you can eliminate the need for inputs over the long term. To register, email Jeff Semler at jsemler@umd.edu or Michael Heller at mheller@cbf.org. \$20 fee (for lunches) can be paid on the day of the event.

Pennsylvania Events

PENNSYLVANIA GRAZING WORKSHOP

Friday, October 27, 8:00 a.m.–4:00 p.m.

Ono United Methodist Church
9 Main Street, Ono, PA

Designed for advanced graziers with breakout sessions for beginners, attendees will hear presentations from experienced graziers and other experts. Participants will also visit a successful grass-based beef farm and have plenty of opportunities to learn from each other. To register, visit the Capital RC&D website at www.capitalrcd.org or call Capital RC&D at 717/241-4361.

FRANKLIN COUNTY WINTER GRAZING CONFERENCE

Tuesday, January 18, 2018

Chambersburg Mennonite Church
1800 Philadelphia Avenue
Chambersburg, PA

Learn more about grazing at this conference hosted by the Franklin County Graziers. More information to come.

New Grazing Video

The Virginia Forage and Grassland Council is excited to present a short video highlighting Ronnie Nuckols discussing his journey as a grazing demonstration cooperater over the last few years.

In this video, “A Step by Step Approach to Building Pasture Productivity and Soil Health,” Ronnie explains where he started, the challenge to change, how he transitioned to grazing management, and how he uses different forages along with grazing techniques to accomplish his production goals while building soil health.

Visit vaforages.org to view the video.

Mountains-to-Bay Grazing Alliance Partnership



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