

MOUNTAINS-TO-BAY GRAZING ALLIANCE



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

January 2016

Innovative Program Supports Farmers Interested in Grazing

Pasture-based systems are coming of age. Listening to farmers debating the merits of mob-grazing versus New Zealand-style grazing, and countless variations in between, one quickly gains an appreciation for the sophistication of today's pasture systems. This isn't your grandfather's grazing! And there isn't a better time for farmers to give grazing systems serious consideration.

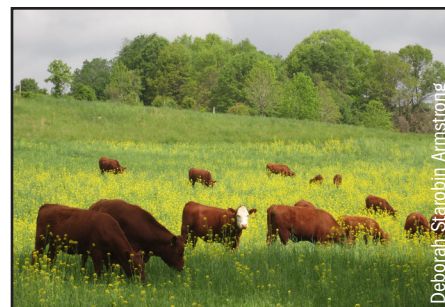
The opportunities for farmers are great—maintaining or enhancing farm profitability while improving the quality of farm life by reducing labor and input costs. In addition, farmers can tap into the rapidly expanding interest in locally-raised meats and dairy products. That quality of life extends to the farm animals, too. Grazing in the open air on a pasture diet is what ruminants (cows, sheep, and goats) evolved to do, and it makes for healthier animals. This translates to healthier farm products for consumers, as was noted by *Consumer Reports* in its October 2015 issue comparing the safety of grass-fed versus conventional grain-finished beef.

Pasture systems also build soil health, making land less susceptible to drought, and help improve water quality associated with runoff from farms into adjacent streams and rivers and then to the Chesapeake Bay. In addition, pastures are great at capturing carbon and mitigating climate change.

And now there is an innovative program that helps livestock and dairy farmers tap into the new management schemes and technologies that can make pasture-based systems so successful. Thanks to a grant from the U.S. Department of Agriculture's Natural Resources Conservation Service

(NRCS) to the Chesapeake Bay Foundation (CBF) and its partners, the Mountains-to-Bay Grazing Alliance has been formed.

This Grazing Alliance includes CBF, Future Harvest—Chesapeake Alliance for Sustainable Agriculture, Virginia Forage and Grassland Council, University of Maryland Extension, Red Barn Consulting, and Capital Resource Conservation and Development Area Council, Inc. The grant will allow the Grazing Alliance to support farmers interested in grazing, and so increase the number of pasture-based livestock operations in the Bay watershed portions of Virginia, Maryland, and Pennsylvania.



Raising livestock on pasture produces healthier animals and reduces costs.

A key element of the program is farmer-to-farmer mentoring. "This program is about farmers talking common sense to other farmers, and a whole community reaping benefits," said Michael Heller, manager of CBF's Clagett Farm in Upper Marlboro, Maryland. "Raising livestock on pasture produces healthier animals and reduces costs. Manure fertilizes the pasture rather than running off into nearby streams. Everyone downstream gets cleaner water for drinking, fishing, and swimming."

The grant will expand outreach and technical assistance for farmers who graze livestock in the three states and provide opportunities for current and new grazing farmers to share information.

The program will include activities such as two-day Grazing Schools and field days, an annual state-specific planning calendar for grazers, a regional conference, a quarterly electronic grazing newsletter, and an update of the Amazing Grazing Directory for direct marketing of grass-fed products. The hope is to create a regional network of more than 250 grazers in the three targeted states, as well as enrolling an additional 1,400 acres in pasture farming.

"Making sure that the land is covered with healthy, growing plants will reduce runoff, it's as simple as that," said Susan Richards, executive director of Capital Resource Conservation and Development Area Council, Inc. in Pennsylvania. "The density of pasture plants versus row crops does impact water quality. If farmers can find a way to economically do that, then I think it is a win-win, because they also will find in many cases that it helps their bottom line."

Seldom has one farming system provided so many benefits in such a variety of areas—farm profitability, global and local environmental health, soil health, and sustainability. Grazing's time has come, and its expansion across the region will be good for us all.

To learn what resources are available to farmers and whom to contact, read the individual state articles in this newsletter, which provide more localized information.

Grazing in Maryland



It makes sense to be a grass-farmer. Our Maryland Grazers Network includes dairy, beef, sheep, goat, and bison farmers. The glue that binds us is a

common focus to have great pastures. At every gathering of our Network, someone always says, “I can’t believe everyone doesn’t get into grass-farming.” And yet most farmers aren’t yet pasture-based in their operations.

Well, for farmers intrigued but uncertain of the main opportunities and obstacles, the Mountains-to-Bay Grazing Alliance has lots of answers and support.

If you’re already grazing and just want to hone your grazing skills, or if you want to transition from a confinement operation to a grass-based operation, get in touch with our Maryland Grazers Network. You can simply join in on pasture walks and meetings, or take advantage of direct support on your own farm.

In Maryland, the Network will provide one-on-one support by farmers who have

years of experience to share. Your farmer partner will visit your farm and get you to visit his/her farm. That partner will be accessible at all times to answer questions and discuss ideas.

Our motto is “Make new, interesting mistakes.” You don’t have to make the same mistakes that lots of us have already made. Learn from our mistakes, try new and different ideas (many of which will work—some of which won’t), and share those with us. Never be afraid to make mistakes, but always assume there will be problems and evaluate.



Bob Fry/Judy Gifford

In addition to an experienced farmer partner working with you, the Network can provide lots of additional expertise to

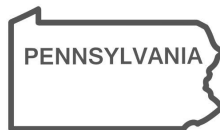
support your grazing operation:

- an Extension marketing expert to assist in creating a farm marketing plan, exploring marketing options and regulations,
- cost-share assistance to learn about the numerous, great opportunities for financial and technical assistance to put in fencing, watering systems, and stream crossings, and to help with field and paddock designs, and
- an Extension farm economist to help put together a farm financial plan that looks at how finances will be affected (immediately and over time) by any changes you make in your farm operation.

The Network is an informal group of farmers interested in pasture-based farming, but who all know we each still have a lot to learn. If you become involved, you’ll enrich the Network.

To get in touch contact:
Michael Heller, Chesapeake Bay Foundation, mheller@cbf.org, or Jeff Semler, Washington County Extension, jsemler@umd.edu.

Grazing in Pennsylvania



Pennsylvania’s partners in the Mountains-to-the-Bay Grazing Alliance are the Capital Resource Conservation and

Development (RC&D) Area Council and Red Barn Consulting.

Capital RC&D has been in the forefront of promoting rotational grazing in south central Pennsylvania, working with partners in the conservation districts and NRCS to provide farmer-to-farmer technical assistance for those interested in transitioning their land to pasture or improving their rotational grazing practices. Technical support for farms in south central Pennsylvania can be requested by contacting the Capital RC&D office at (717) 241-4361.

In addition, Capital RC&D is also documenting the long-term impact of prescribed grazing management on soil

health and pasture resilience. This part of the project has four focus areas:

1. examples of success in multi-species forages,
2. successful application of flash grazing of riparian areas,
3. successful examples of invasive species control in pasture, and
4. examples of soil organic matter improvement.

Successful grazers or “Grazing Champions” were selected for their experience in managing with respect to the focus areas. Video testimonies to showcase the Grazing Champions’ innovative techniques are under development, with introductory videos available on the Capital RC&D website project page, <http://www.capitalrcd.org/viewproject/grassroots>.

Pasture walks and other events will occur at the Champions’ farms during the



Andy Shield

spring and summer of 2016 and will be announced on Capital RC&D’s website. They will also be included in future editions of this newsletter.

In addition to providing technical support for grazing, Red Barn is a full service agricultural consultant with a range of agricultural, environmental, and engineering services such as conservation and nutrient management planning, facility design, and nutrient credit trading.

For more information, see <http://www.redbarnag.com> or call (717) 393-2176.

Grazing in Virginia



In Virginia, CBF is working with the Virginia Forage and Grassland Council (VFGC)

and Dale Gardner (formerly with the Virginia State Dairymen's Association) to help Virginia farmers better understand ways they can have healthier cows and more productive farms by adopting innovative grazing practices.

We are targeting outreach to producers in Amelia, Augusta, Buckingham, Nelson, Page, Prince Edward, Rockbridge, Rockingham, and Shenandoah counties. We are looking for farmers who are interested in learning more about rotational grazing and will help farmers navigate the cost-share system to assist with this transition. One of the strengths

of this project is the farmer-to-farmer mentoring that provides real world expertise and advice to those wishing to change to more intensive grazing systems. VFGC is a leader in the Commonwealth in helping farmers learn more about transitioning to rotational grazing (learn more at: vaforages.org). VFGC will again host their highly successful, two-day grazing school for the next three years. If you want to learn more about grazing, this is the training opportunity for you! School "graduates" receive preferential ranking for EQIP funding.

Other opportunities to learn more about grazing techniques are through field days and VFGC's annual winter conferences, which will be held at the end of this month in Weyers Cave, Brandy Station, Wytheville, and Blackstone. This year, the conferences will focus on understanding

tall fescue in grazing systems.

We also just released this year's grazing planning calendar. You can get your copy by stopping by your local NRCS office or calling one of the contacts below.

If you are interested in learning more about grazing in Virginia, please reach out to CBF's Alston Horn at (540) 487-9060 or VFGC's/Virginia Cooperative Extension's Matt Booher at (540) 245-5750.



The Bottom Line: Economics of Grazing

It just makes sense to be a grass-farmer. Dale Johnson, an Agricultural Economist with the University of Maryland, has financial data from years of analysis comparing confinement dairy farms with pasture-based dairy farms. Even though this is a dairy analysis, it speaks to all livestock as well as dairy farmers. Beef and lamb farmers will relate to a lot of the line items in the chart presented here. Dale's work has been thoroughly peer-reviewed and published in the Journal of Dairy Science (J. Dairy Sci. 96:1894–1904 <http://dx.doi.org/10.3168/jds.2011-5234> © American Dairy Science Association®, 2013).

The bottom line is that you can make money grazing cows. The chart shows Dale's three-year rolling average, which is how he presents the data so that the numbers remain relevant.

If you look at the green highlighted line items, you will see that while the pounds of milk produced per cow in a pasture-based operation drops, the profit per cow is higher.

These line items have a couple of key economic implications. First, unlike many niche markets which can become oversaturated quickly when farmers jump in, with grass-based dairy, milk production per cow drops, so this market

gets stronger as more farmers get involved. And having significantly reduced input costs in a grass-based operation helps a farmer weather the more volatile economic and weather-related times.

the market potential is similarly positive, as there is a steady growth in the interest for locally produced, 100 percent grass-finished meats.

	Confinement 19 Farms	Grazing 11 Farms
1 Average number of cows	181	83
2 CWT of milk sold per cow	211	117
3 Farm income		
4 Milk sales	4,702	2,933
5 Cattle sales	341	351
6 Other income	780	167
7 Total income	5,823	3,452
8 Farm expenses		
9 Feed purchased	1,463	822
10 Seed, fertilizer, chemicals	571	195
11 Depreciation and repairs	877	530
12 Labor	392	90
13 Medical and breeding	212	74
14 Car, Truck, Fuel, Hauling	482	213
15 Rent	165	141
16 Interest	132	74
17 Custom hire	205	111
18 Other expenses	582	369
19 Total Expenses	5,078	2,618
20 Profit per COW	745	833

Something you don't see in these numbers is the new market opportunities that open up to pasture-based farms because it is easy for them to become organically certified. For example, Tricking Springs Dairy is currently paying \$42/cwt for organic, pasture-raised milk, whereas the conventional milk market is paying \$16/cwt. This value-added difference produces a tremendous improvement in a farmer's bottom line. For beef and lamb farmers,

But hidden in this chart are line items that underscore a lot more than economic benefits. The blue highlighted line items directly relate to farmers' quality of life benefits of grass operations. There is a significant drop in the labor required, and healthier cows (reduced medical bills) allow every farmer to sleep more easily.

The yellow highlighted line items speak to both global and local environmental benefits of grass farming. Reduced feed needs are an important difference as more and more discussion surrounds the climate change impacts of grain production. In addition, pasture systems are known to be valuable carbon sinks and, as such, important in the mitigation of climate change, as well as in building soil health.

Increased soil health along with less use of seeds, fertilizers, and chemicals has a positive benefit for the water quality associated with runoff from farms. There are more reasons than profitability to feel very positive about becoming grass-farmers.

The Grazing Corner: Finishing Beef on Grass? Learn from Dairy Farmers

by Michael Heller



Michael Heller and
Dandelion

I think the best grazers tend to be dairy farmers. Each day the milk tank tells them how their grazing is going. I remember a

good friend, Myron Martin, a dairy farmer in Washington County, Maryland, telling me that when he sees a couple-hundred-pound drop in milk one day he checks on his grazing and pastures to see what might be different.

This constant and instant feedback hones grazing management skills and awareness of forage quality.

Not being a dairy farmer, my “milk check” is the weight of my weaned calves and lambs. But they only come once a year—not quite as much feedback as the milk tank.

Walking farms with various dairy farmers, I’ve learned about grazing techniques and forages, but also some of the things to observe when watching the cows graze. These ideas have helped my beef and lamb finishing tremendously.

Simply grazing, even rotational grazing, won’t provide the high quality beef and lamb that today’s consumers demand. Keen attention to ensure that animals get high quality forage every day throughout the year is essential.

In some cases this means planning for the summer grazing slump by planting a mix of warm weather annuals like millet, cow peas, sun hemp, and/or sorghum/Sudan grass hybrids. Then in fall have oats and brassicas for the animals to graze to supplement fall pastures. Winter can be a challenge, and it takes long-term planning to have stock-piled fescue or Triticale that’s been drilled into pastures to complement high quality stored forages.

Check out winter grazing meetings where you can talk with other farmers. Learning from each other’s successes (and mistakes) is a great way to sharpen our own finishing skills.

Maryland Events

FUTURE HARVEST SUSTAINABLE AGRICULTURE CONFERENCE

Friday, January 15 and
Saturday, January 16, 2016
College Park Marriott Hotel and
Conference Center
3501 University Boulevard East
Hyattsville, MD 20873

A grazing track features six different sessions/speakers on pasture-based animal operations. For more information, visit <http://www.futureharvestcasa.org/conference/2016-conference>.

ON-FARM, GRASS-FED PRODUCTION WORKSHOP FOR ADVANCED GRAZERS

Tuesday, April 12 and
Wednesday, April 13, 2016
Washington County, Maryland
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.

If you wish to participate or need more information on any of these events, please contact Michael Heller at mheller@cbf.org.

Virginia Events

2016 WINTER FORAGE CONFERENCES

Tuesday, January 26, 2016
Southern Piedmont AREC
2375 Darvills Road, Blackstone

Wednesday, January 27, 2016
Wytheville Meeting Center
1000 E. Main Street, Wytheville

Thursday, January 28, 2016
Weyers Cave Community Center
682 Weyers Cave Road, Weyers Cave

Friday, January 29, 2016
Brandy Station Fire Department
19601 Church Road, Brandy Station

This year’s Winter Forage Conferences will focus on understanding and managing tall fescue in grazing systems. To register, please visit www.vaforges.org. The conferences are hosted by the Virginia Forage and Grassland Council and Virginia Cooperative Extension.

If you wish to participate or need more information on any of these events, please contact Alston Horn at (540) 487-9060.

Mountains-to-Bay Grazing Alliance Partnership



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