

MARYLAND GRAZER'S NETWORK NEWS & NOTABLES

COLLABORATIVE PARTNERS:

Chesapeake Bay
Fundlers' Network



New Grass-based Mentoring Network

Grass-fed, pasture-raised, grass-finished - all phrases that are appearing more frequently in the agricultural press, at producer meetings, and in the general media as consumers seek out more locally produced and nutritionally enhanced food.

The phrase has captured so much attention and enough market share to prompt the USDA to issue a grass-fed standard in October 2007. But now that we have built a definition of "grass-fed," will more

producers adopt this production method?

The Maryland Grazers Network pairs experienced cattle or dairy grazers as mentors to work with farmers wanting to improve their grazing systems or begin a grazing system (farmer partners).

The project also provides an opportunity for farmers wanting to improve their marketing or to start a direct marketing operation to work with a farmer mentor who is doing creative mar-



keting to take advantage of the growing market interest in grass based beef. Mentors receive strong support from research and field experts in pasture management, marketing, and fencing and watering systems, and can bring this expertise in to help farm-

Continued pg. 2

Grass-fed: Marketing Matters

Inside this issue:

More about marketing	2
Getting the Most from Fertilizer	3
Rising Food Prices	5
Calendar	6
Structure of Grass	7
Other Resources	8

By Ginger S. Myers
University of Maryland
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There are cattlemen and dairy producers and then there are entrepreneurs and processors. These are not necessarily the same people. The beef business and milk processing

business are completely different than production business. You will need a completely different mental paradigm to market beef or dairy products to customers.

As a producer, you will need to prepare yourself to learn a

totally different set of skills and knowledge. You'll need to learn how the distribution system works, read journals to learn.

This article is the first in a series that will be distributed to all project partners, mentors and adopters to share information

(New Network continued from Pg. 1)

market interest in grass based beef. Mentors receive strong support from research and field experts in pasture management, marketing, and fencing and watering systems, and can bring this expertise in to help farmer partners where needed.

This project has several major initiatives:

Improving the bottom line \$\$ -

A major element is to carefully track costs and sales to ensure that new or improved practices/systems/marketing benefit the farm financially.

Grazing and water quality – Improving pastures should not only improve the bottom line \$, but also help improve water quality in nearby streams.

Marketing – Once a strong grazing system is in place,



the project will provide expertise to help farmers market grass-fed products to enhance farm profitability.

Contacts - If you are interested in participating in the Maryland Grazers Network contact either one of the people below:

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Marketing Matters (continued from pg. 1)

about the grass-fed industry and marketing grass-fed products. This project focuses on beef and dairy producers in the Chesapeake watershed. While there is significant interest in grass-fed small ruminant production and pasture-poultry for meat and eggs, those interests will not be addressed in this series.

Grass-fed producers have a host of alternatives for "adding value" to their products and to their farm. A short list includes adding value to your pastures through seeding selection and establishment plus rotational grazing and improved over-all pasture management. Dairy and livestock producers can add value to their stock through genetic selection based on grazing traits and meat quality and by becoming certified organic. Im-

proved recordkeeping, nutrient and feed management, and improved herd health all add value to a farm's bottom line.

Some producers have no desire to get involved in marketing their products beyond the farm gate. For them, working with a buyer, selling breeding stock, or selling to a cooperative is their best choice. But, by direct marketing at least a portion of your beef or milk, you will maximize its profit potential.

Grass-finishing cattle can take longer, so an increased profit is needed to cover additional production costs. Also, when grass-fed products are sold through conventional markets, the message is "meat is meat and milk is milk."

A marketing mix that includes direct marketing or value-added helps you capture more dollars for your product's unique selling point—healthy food, produced under environmentally sound management practices, by a local grower.

Regardless of whether you choose to market your products on the hoof, via the milk truck, or as a processed product, you need a marketing plan. The goal of *Maryland Grazers Network News & Notables* is to provide production information and to assist in helping develop marketing opportunities for grass-fed products.



Getting the Most From Your Investment at Today's Fertilizer Prices

By Les Vough

*Forage Crops
Extension Specialist Emeritus
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With the dramatic increase in fertilizer prices over the last year or so, some forage producers are questioning the affordability of recommended amounts of fertilizer. A question posed to me numerous times in recent months has been "How much can I reduce my fertilizer application rates – I can't afford to fertilize as I have in the past." A number of factors need to be considered before making any changes. A decision to reduce application rates across the board may be more detrimental to the profit margin than not reducing application rates

"At today's fertilizer prices, growers need to know exactly how much lime and fertilizer is needed to obtain optimum yields"

at all. First of all, any changes should be made based on soil fertility information, so up-to-date soil test data is needed for all hay and pasture fields. At today's fertilizer prices growers need to know exactly how much lime and fertilizer is needed to obtain optimum yields. Blanket applications of common blends of fertilizer such as 10-10-10, 15-15-15 or even 0-10-40 for alfalfa should be avoided and nutrients applied as prescribed on the basis of soil test results to meet specific needs for each field. The use of common blends may over supply some nutrients (unnecessary financial cost as well as possible environmental risk) and not meet the crop needs for other nutrients (loss of yield). Following recommendations based on soil test results may be one way to save money.

And don't forget about lime, especially on pastures as they tend to be neglected more so than hay fields. If soil pH is low, applying lime may give a

higher yield response and better return per dollar of investment than applying fertilizer. Adjusting the pH to between 6.0 and 7.0 increases the availability of nutrients needed for plant growth and minimizes the availability of elements that can be toxic to plants. Proper pH also favors legume growth and persistence, which increases nitrogen fixation and nitrogen contributions to any grasses grown in mixture with the legume. Soil pH for clover-grass mixtures should be at least 6.0 to 6.4 and for alfalfa-grass 6.5 to 6.8.

Target your fertilizer applications for the most effective results, especially for nitrogen. If you usually produce more forage in late spring than you can effectively use, don't apply the full recommended amount of nitrogen in late winter/early spring. Fertilizer recommendations for grasses typically specify a nitrogen application at green up. But if you normally have a surplus in late spring, applying 50 to 100 lb N/acre at green up is a waste



(Fertilizer Costs continued from Pg. 3)

when you already have a surplus. In this case target the nitrogen applications to stimulate growth when more forage is needed. This would typically be in May and mid-August to early September. Reducing the late winter/early spring (green up) nitrogen application to 15 to 30 lb N/ acre will promote early growth for earlier grazing but have minimal affect on late spring growth.

The largest application might then be in May to promote late spring/early summer growth. This works well in years like 2008 with ample May and June rainfall. Nitrogen applications in June through early August are usually not beneficial on cool-season grasses due to the effects of high temperatures and limited rainfall. But a mid-August to early September application will promote additional fall growth

If there is ever a time to use legumes in hay and pastures, now is certainly one of those times! Legumes may be more valuable now than ever before. They are an alternative to ni-

trogen fertilizers. Depending on the species and the percentage of legumes in mixtures, they can supply from 50 to 250 lb/acre of nitrogen. Most states do not recommend nitrogen if the legume component of a mixture is 25 percent or more, but 35 to 40 percent is probably a more ideal target today. In addition to providing nitrogen, legumes also increase forage quality and yield (especially mid-summer yield) and improve animal performance. So legumes bring multiple benefits to forage and livestock systems.

Target fertilizer applications to the most productive hay fields and pastures if you can not afford all of the fertilizer needed.

Rather than reduce application rates uniformly across all acres, maintain recommended rates on the best stands and most productive soils and reduce rates on poorer stands and less productive soils or, in the case

of hay, even take them out of production. With the increased costs of fuel, pesticides, etc., it is much more profitable to get 5 to 6 tons of hay from one acre than the same amount from two acres, as shown by the data from Virginia Tech in the accompanying table. Doubling yield per acre greatly reduces costs of production per ton of hay and increases profitability – the maximum economic yield (MEY) concept. You might utilize poorer, lower producing stands by grazing if possible. Grazing is a much lower cost method of harvest than hay or silage systems so maximize the extent of grazing.

Figure the actual cost vs. return of fertilizer for your farm. Even at \$750/ton (\$0.815/lb) for urea and an application rate of 50 lb/acre, if the market price of grass hay is \$200/ton an increase of 0.2 ton/acre will cover the cost of the

fertilizer. If 100 lb/acre of nitrogen fertilizer will give you another 2 tons/acre of forage, it is a profitable investment. So run the figures for your operation before deciding to reduce fertilizer application rates – reducing rates uniformly across the board may be **penny wise and dollar foolish**.

Income Above Variable Costs - Orchardgrass

Yield (T/A)	Tot. Var. Cost	Farm Price (\$/Ton)			
		\$95	\$115	\$135	\$155
2.0	249.44	-59.44	-19.44	20.56	60.56
2.5	260.01	-22.50	27.49	77.49	127.49
3.0	270.58	14.42	74.42	134.42	194.42
4.0	291.72	88.28	168.28	248.28	328.28
5.0	312.86	162.14	262.14	362.14	462.14

Groover & Eberly, VA Tech, 2006

Why are Food Prices Rising?

Factors behind the surge in prices include high energy and fertilizer prices, a declining U.S. dollar, drought in big producing countries including Australia, rising demand from fast-growing economies such as China and India, high oil prices that have pushed up production costs, and dwindling stocks.



Rising investment inflows in food commodity futures markets and hedge fund activity have hiked prices further.

Experts have also blamed a big push in biofuels programs that have diverted land and crops from food production.

Export restrictions imposed by countries including India and China on rice, and by Argentina, Kazakhstan and Russia on wheat, have cut international supplies. Actions by large rice importers, such as the Philippines, in floating large tenders to obtain needed rice imports, have boosted prices.

Forecasts by the U.S. Department of Agriculture and OECD-FAO say prices will remain high in 2008. The Agricultural Outlook 2008-2017 by the OECD-FAO shows this upward trend:

- Up 20 percent for beef and pork.
- Up 30 percent for sugar.
- Up 30 percent for rice.
- Up 40-60 percent for wheat, maize and skimmed milk powder.
- Up 60 percent for butter and oilseeds.
- Up 80 percent or more for vegetable oils.

Source: Reuters. Full story: <http://www.themoscowtimes.com/article/1010/42/368755.htm>

Calendar of Events



Maryland Cooperative Extension announces these upcoming Pasture Walks for Frederick and Washington Counties. It is also time for us to update our Pasture Walk mailing list. If you would like to be deleted from the list, please contact us by calling 301-600-3576, faxing 301-600-1588, or emailing Stan at sfultz@umd.edu.



August 7

Holterholm Farms (Ron and Kathy Holter), 5903 Holter Road, Jefferson MD. From Jefferson, take Holter Road. Go two miles to farm on the right. From Middletown, go south on Route 17 to immediate left on Franklin Street/Holter Road. Go three miles to farm on the left. 110-cow seasonal grass-based, organic dairy. This is their first year of feeding no grain.

Frederick and Washington Counties Pasture Walk Schedule for 2008 (All times are 10:00 to noon unless otherwise indicated)

August 21

David Herbst 14230 Misty Meadow Rd., Smithsburg, MD. From Smithsburg go north on MD 64/Smithsburg Pike approximately 3.5 miles. Turn right onto Ringgold Pike/MD 418 and go 0.6 miles. Turn right onto Misty Meadow Rd. Go 0.3 miles to farm on the right. 130-cow dairy using a TMR in addition to pasture.

September 20

Hedge Apple Farm, 3760 Buckeystown Pike, Buckeystown, MD **10:00 a.m. until 2:00 p.m.** Pasture Walk and Field Day. From Frederick, exit I-270 onto MD-85/Buckeystown Pike south. Go 4 miles to farm on the left. 80-head of brood Black Angus cows and grass-finished beef retail market. Call 301-662-7638 before Sept. 18 if attending so they can plan for lunch.

October 23

Gary & Donald Hendershot, 13316 Rockdale Road, Clear Spring, MD. From I-70 take exit 23, MD Route 63. Take Route 63 north towards Huyetts. Turn left on to US 40 National Pike. Follow National Pike approximately 4 miles to Rockdale Road. Turn right onto Rockdale Road follow the signs to the farm. 180-cow TMR/Pasture dairy.

December 4

Wilnan Farm (Billy and Nancy Horton), 15102 Liberty Rd, Mount Airy, MD. From Frederick go east on MD 26/Liberty Rd. 15 miles to farm on left. 60 Holstein and Holstein crossed with Jersey or Brown Swiss on 90 acres of grass. Billy is planning to plant brassicas, turnips and small grains in the fall for early winter grazing.

For more information, contact:

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Structure of a Grass Plant

The roots:

Water and dissolved mineral nutrients in soil, enter the plant by the roots. The roots can act as storage. The roots firmly anchor the plant in the ground.

In newly planted grass; the roots go deeply into the soil before the green of the new plant is observed. The number of tillers above the ground is closely related to the amount of root. Root growth is influenced by the carbohydrates supplied by the leaves. So when conditions are ideal for rapid leaf growth, root growth is usually rapid.

The Crown (The main growth point):

This area manufactures shoots, (tillers) and eventually seeds. Clever isn't it. It is the main growth point at the beginning of the season. (The vegetative stage) During stem growth this growth point is pushed up. It can eventually develop into a seed head. It also acts as a storage organ for carbohydrates surplus.

Secondary growth points:

These are at each node (the swollen part) and at the base of each leaf. These growth points are responsible for growth in the leaf, sheath and also stem growth. Auxiliary buds in tillers/shoots. (not included in sketch) are undeveloped growth points. They will produce shoots of their own.

The Leaves:

Photosynthesis takes place in the leaves. Each new leaf emerges from the sheath of older leaves, and it grows from the base of the leaf. (The oldest part of the leaf is the top of the leaf.) The bottom bit of the leaf forms a sheath

which protects young shoots. (see diagram just above where "tiller or shoot" is printed) Sunlight and warm temperatures increase the emergence of new leaves.

Ligule:

A thin membrane found at the bottom of the leaf blade and sheath. Most grasses have ligules. Ligules are different in each grass species, so they can be used to identify the type of grass when there is no seed head.

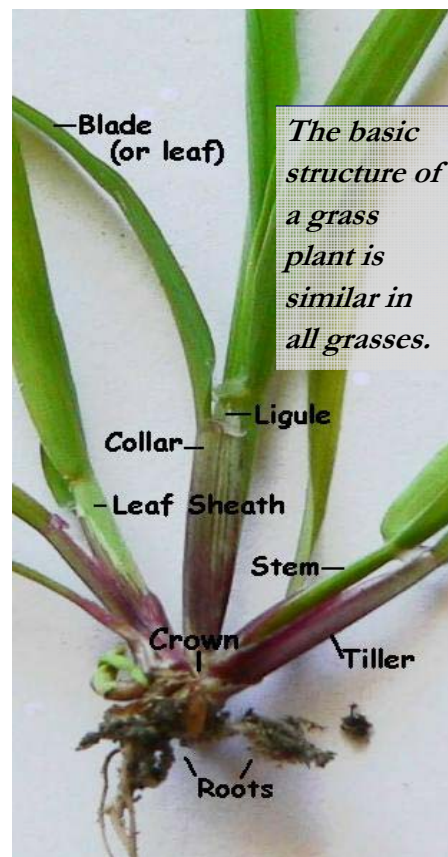
The Flower /seed head:

The forming of a flower may begin in early spring (in ryegrasses). Prior to "elongation" of the stem it remains protected in the leaf sheaths surrounding it. Seed head development, once started (usually) takes priority over the development of tillers and new leaves.

Growth of tillers and leaves recommences when: The flower has been removed, or the flowering is finished.

Stolons & Tillers:

A tiller is a miniature of the parent plant. When plant sugars are in an abundance, and new leaf development is accomplished some grass species then develop rhizomes. The formation of tillers is at it's most rapid during autumn, winter, and spring. It ceases when the plant flower is growing. (The rhizome goes underground as per the sketch) Rhizomes originate from an adventitious bud in the crown zone.



From the rhizome tillers are created. A stolon remains above the ground. (Many soporiferous grasses are invasive & nuisance grasses) Like rhizomes stolons originate from adventitious bud in the crown zone. Grazing, and the intensity of light encourage tillers formation. The formation of tillers is at it's most rapid during autumn, winter, and spring. Rizomes originate from an adventitious bud in the crown zone.

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Source: <http://www.2farm.co.nz/pasture-farming.html>

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Ryan Bapst - Beef	301-874-0258
Myron Martin - Dairy	301-432-2974
Ned Sayre - Beef	410-808-7615
Eddie Draper - Beef	410-827-6016

Resources on the Web

The Economics of Grass-based Dairying

<http://attra.ncat.org/attra-pub/ecodairy.html>

The grass-based dairy allows the animals themselves to harvest as much of their feed as possible. This approach can significantly reduce the activities and expenses of cutting, storing, and feeding harvested forages. This publication discusses economics of dairies, land requirements for grazing dairies, supplemental feed, seasonal dairies, labor and profitability.



Eatwild.com

<http://www.eatwild.com>

An excellent source for safe, healthy, natural and nutritious grass-fed beef, lamb, goats, bison, poultry, pork, dairy and other wild edibles. This website:

- Provides comprehensive, accurate information about the benefits of raising animals on pasture.
- Links consumers with local suppliers of all-natural, delicious, grass-fed products.
- Provides a marketplace for farmers who raise their livestock on pasture from birth to market and who actively promote the welfare of their animals and the health of the land.

FIND OUT MORE ABOUT OUR MARYLAND GRAZER'S NETWORK PARTNERS:

Chesapeake Bay Funders Network

<http://www.chesbayfunders.org>

Maryland Cooperative Extension

<http://extension.umd.edu>

USDA National Resources Conservation Service

<http://www.nrcs.usda.gov/>

Future Harvest

<http://www.futureharvestcasa.org/>

Chesapeake Bay Foundation

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