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Maryland Grazers' Network News & Notables

COLLABORATIVE PARTNERS:

Chesapeake Bay Funders Network

University of Maryland Extension — Solutions in your community

USDA NRCS — United States Department of Agriculture, Natural Resources Conservation Service

Future Harvest — A Chesapeake Alliance for Sustainable Agriculture

Chesapeake Bay Foundation — Save The Bay

INSIDE THIS ISSUE:

Learning and Sharing the Good News of Rotational Grazing

Elmer Dengler, USDA-NRCS

A Meeting of the Maryland Grazers' Network

Wednesday, March 2, 2011

10:00 AM to 3:30 PM

Washington County Extension Office - Front Conference Room
7303 Sharpsburg Pike, Boonsboro, MD 21713

Call University of Maryland Extension - Washington County Office at 301-791-1304 if you plan to attend.

Do you feel uncertain how to explain soil quality?

Do you need a better explanation of why "Grazing is Good!"

Do you want to get a better understanding of what goes on in a mature soil teeming with life?

Do you want to be able to connect the dots on how pasture management effects water quality?

Photo by Edwin Remsberg

Come to understand how the Bay Model now correctly models pasture systems and how upland management (prescribed grazing systems) are as important as riparian corridor management.

This meeting will be lead by some of the most experienced grazing planners and agronomists in the nation. Four of USDA NRCS's East Region Specialists who provide technical assistance for NRCS's grazing program east of the Mississippi will be here to discuss key aspects of grazing planning and critical soil quality issues that can help landowners understand how good grazing systems are for water quality issues and the Chesapeake Bay.

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Learning and Sharing the Good News of Rotational Grazing … continued from page 1

Come hear about Agro-Ecology

Come to this workshop, if you have wondered what happens in a complex soil community and how what goes on there benefits both the agricultural production system and can be used as a tool to manage nutrients. The emphasis will be on pasture systems, but we will be looking at a lot of examples that overlap with cover crop management including cover crop systems. A lot of these concepts will help landowners explain the science behind sustainable grazing systems that enhance their farming and improve water quality management.

Pasture Design Should Include Shade During Summer Months

by Scott Updike

Photo by Edwin Remsberg

Winter is a good time to evaluate the design of pastures. Many pastures that have been designed with cost share from NRCS will have off stream water sources, hardened stream crossings, and/or fenced streams. These are all important aspects of environmental quality, but were the pastures designed for the performance of your cattle? On many farms, the only shade

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Learning and Sharing the Good News of Rotational Grazing

Meeting Agenda

Wednesday, March 2, 2011
10:00 AM to 3:30 PM

10:00 - 11:00 PM
Maryland Grazer Network Issues
Michael Heller

11:00 - 12:00 PM
Part 1 Pasture Agro-Ecology
Ray Archuleta, NRCS National East Technology Center

12:00 - 12:45 PM
Lunch

12:45 - 1:15 PM
Part 2 Pasture Agro-Ecology
Ray Archuleta, NRCS National East Technology Center

1:15 - 1:45 PM
PowerPoint's of Ron Holter's and Curvin Eby Systems

1:45 - 2:15 PM
Experience on High Intensity Systems in US
Kevin Ogles, NRCS National East Technology Center

2:15 - 2:45 PM
Discussion on evaluating the systems (including Key Line Systems) to capture all benefits including water quality - Open Discussion
Elmer Dengler, facilitating

12:45 PM
Discussion on Bay model issues and the new benefits we can claim
Elmer Dengler and Les Vough

Pasture Design Should Include Shade During Summer Months … continued from page 2

was provided by trees along the stream bank. If these have been fenced off, cattle may have no shade in which to go.

To better understand the importance of shade in a beef cattle herd, 20 Angus cow-calf pairs (bull calves) were kept in a rotational grazing system without shade during the 2010 summer and 20 Angus cow-calf pairs (bull calves) were kept in a rotational grazing system with shade. The study began the day after the bulls were removed during the breeding season. In August, the cows were checked by a veterinarian to determine if they were pregnant or not. Among the cows given access to shade, 85% were pregnant. Among the cows not provided shade, 40% were pregnant. This is a severe decline in pregnancy rates and supports previous studies which determined that heat stress during early pregnancy was more likely to induce loss of the pregnancy. Interestingly, the calves from both the shade and non-shade groups have performed similarly on test.

If your farm does not have large amounts of shade, consider conserving pastures around the shade for use during the middle of the summer or during heat spells. Also, as a long term plan, consider planting trees to provide natural shade for the future. The good things about natural shade is that it is more effective than artificial shade such as a portable shade system, but trees do create nutrient hot spots.

Diversified Livestock Analysis

Dale M. Johnson, Farm Management Specialist, University of Maryland Extension
Michael Bell, Extension Agent, University of Maryland Extension

Some grazers are considering production of several types of livestock on their farms. This is particularly beneficial from both a marketing and production standpoint if you are direct selling to customers. The customers for your beef are also likely to purchase pork, poultry, lamb, etc., from you. And by offering "one stop" shopping for meat, you might attract additional customers. (See article in this newsletter on marketing).

From a production standpoint, various species of livestock prefer different plants in the pastures so that they are more efficiently grazed. Additional livestock enterprises can also employ underutilized labor and other resources.

Before embarking on diversified livestock grazing, it is useful to do an economic analysis to estimate the income, expenses, and

Dale Johnson kneels next to one of his pasture pens of Freedom Rangers, a variety of pasture type broilers. Notice the strip of grass to the left that has been grazed. The pen is moved twice a day to fresh pasture. Freedom Rangers finish out to carcass weights of 5-7 pounds in 8-10 weeks. They get about 30% of their feed requirements from pasture, while leaving behind well distributed litter that fertilizes the pasture without any risk of runoff.

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Diversified Livestock Analysis … continued from page 3

profit for each species and for the farm as a whole. The economic analysis will help you think through the inputs you will need. It will also help you determine the cost per pound so that you can establish a market price for your products.

Table 1 is a simplified example of a diversified livestock analysis for a small, part-time farm. The farmer has been selling 5-10 head of beef each year but wants to ramp up sales by producing hogs (25), turkeys (200) and broilers (1,000). Each species is put in a different column and then the income, variable expenses, overhead expenses, and profit are calculated for each.

Table 1. Example Diversified Livestock Analysis

1. Enterprise	Total farm	Beef	Hogs	Turkeys	Broilers
2. Number of livestock sold		10	25	200	1,000
3. Marketable weight per head		500	150	15.0	4.5
4. Total marketable weight		5,000	3,750	3,000	4,500
5. Average price per pound		$ 6.50	$ 5.50	$ 4.00	$ 4.00
6. Total livestock sales	$ 83,125	$ 32,500	$ 20,625	$ 12,000	$ 18,000
7. Percent of sales	100%	39%	25%	14%	22%
8. Variable expenses					
9. Cost of livestock	11,200	7,000	2,500	600	1,100
10. Feed purchased	18,100	6,000	4,500	3,600	4,000
11. Hauling and processing	8,750	2,000	3,750	1,000	2,000
12. Total variable expenses	$ 38,050	$ 15,000	$ 10,750	$ 5,200	$ 7,100
13. Overhead					
14. Seed, fertilizer, pesticides	1,500				
15. Gasoline, Fuel, and oil	2,000				
16. Insurance	4,500				
17. Interest	1,500				
18. Marketing	1,000				
19. Repairs and maintenance	2,500				
20. Supplies purchased	2,000				
21. Property tax	3,000				
22. Utilities	2,400				
23. Other expenses	1,000				
24. Depreciation	4,000				
25. Total overhead expense	21,400	8,367	5,310	3,089	4,634
26. Total V.&O. expense	59,450	23,367	16,060	8,289	11,734
27. Profit	$ 23,675	$ 9,133	$ 4,565	$ 3,711	$ 6,266
28. Total costs per pound		$ 4.67	$ 4.28	$ 2.76	$ 2.61

Lines 2-6 calculate the income from each enterprise. It is particularly important to estimate accurately the average pounds of meat sold per head (line 3). This is not necessarily the carcass weight (beef and pork), but the pounds sold to customers which figures in shrinkage. Equally important is estimating the price (line 5) which is a factor of marketing, production costs, and whether the meat is sold by retail cut or in bulk.

Line 6 calculates the total income from each enterprise and the total for the farm. Line 7 calculates the percent of total sales attributable to each enterprise. This is used to allocate overhead costs (line 25).

Lines 9-12 calculate the variable costs for each enterprise. These costs vary according to the number of livestock sold. This example farm buys young feeder livestock and finishes them out. The cost of the feeder livestock is on line 9. Usually, the biggest expense on a livestock farm is feed so it is important to analyze and calculate this carefully (line 10).

Lines 14 -24 are overhead costs that are difficult to allocate out to the different enterprises, so they are just totaled and the total is apportioned to the enterprises (line 25) based on their proportion of total sales (line 7). Depreciation (line 24) is not a cash cost but it is important to estimate and include since it reflects the annual costs (loss in value) of buildings, fencing, machinery, and equipment. Including depreciation gives a better estimate of profit.

The variable and overhead expenses are totaled on line 26 and subtracted from income on line 6 to determine total profit for the farm and each enterprise on line 27.This helps to understand importance of each enterprise. On this example farm, beef is the most important product, yet hogs, turkeys, and

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Marketing Strategies for Diversified Livestock Producers

Ginger S. Myers
Marketing Specialist, University of Maryland Extension
Director, Maryland Rural Enterprise Development Center

Photo by Edwin Remsberg

The phenomenal growth in the number of farmers' markets nationwide can be attributed in part to the increased diversity of products many markets now offer. While fresh fruits and vegetables are still the keystone products, many markets now offer shoppers dairy products, meats, baked goods, and a wide array of specialty food products.

Consumers want variety in their food purchasing choices. They also prefer the convenience of purchasing multiple items at one stop, even if prices are slightly higher than in the grocery stores. These purchasing behaviors are in response to two well established methods for improving sales and increasing customer loyalty—up-selling and cross-selling.

Up-selling is the practice of offering customers a product in addition to the product they are currently purchasing. A diversified livestock producer may have a customer who intends to purchase ground beef, but might also purchase pork chops and chicken, if the products are available and they can do so all in the same transaction. Think of it as "filling their cart."

Cross-selling refers to selling items that are related or can be integrated with the other items being sold. For example, offering eggs paired with bacon and ham sales.

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Diversified Livestock Analysis … continued from page 4

broilers all contribute significantly to the total profit of the farm.

It is useful to calculate the cost per pound for each enterprise (line 28). This is done by dividing the total cost for each enterprise (line 26) by the total pounds for each enterprise (line 4). The selling price should take into account the cost per pound to produce each enterprise plus a margin for profit which, in this example, must cover the farmer's labor and management.

This is a simplified example. You may be thinking about other livestock enterprises such as lamb, goats, ducks, geese, eggs, and rabbits. This analysis can be expanded for the number of enterprises you are considering. You may have costs that were not illustrated here. For example you may have a cow/calf operation where you have breeding livestock costs instead for feeder livestock costs. You may also want to break out costs for more detail. For example, you may want to separate feed costs into forage and concentrates. You could change or expand this analysis to meet your own needs.

This analysis can be used for projecting the future or for analyzing historical income, expenses, and profit.

For questions or to obtain a fact sheet on diversified livestock production including a more comprehensive Excel spreadsheet to do your own analysis, contact Dale Johnson at dmj@umd.edu.

Marketing Strategies for Diversified Livestock Producers … continued from page 5

Marketing holiday turkeys? Offering sausage for the stuffing and recipes for serving turkey leftovers are also examples of cross-selling. Both these techniques can increase sales volumes and provide a valuable service to your customers.

Diversified livestock products also allow for more diversified product offerings. Diversifying both production output and market offerings is a smart way to manage on-farm business risks. If one portion of the operation is in difficulty, another enterprise in the operation may be able to make up the difference between operating in the black and operating at a loss.

Offering customers a diversity of products can also help producers differentiate themselves in the marketplace from those offering only one species of meat products. Other attributes that may be utilized to differentiate products include:

- **How it's grown: Production methods —** grass-fed, cage-free, free range, organic, natural, or a third-party certification designation.
- **What's for sale: Product types —** livestock sales or packaged products. Products can be differentiated by processing methods, labels, package sizes, packaging design, and additional value-added processing.
- **Where it can be purchased: Market outlets —** On-farm retail sales, farmers markets, CSAs, institutional sales, cooperative marketing groups, and retail food stores.

Diversified livestock production can allow for a wider range of products and marketing outlets. But, it also requires more resources — land, fencing, building, and labor. Producers should develop a separate marketing plan for each species so that resources such as freezer space, packaging costs, regulations and licensing fees, and labor can be allocated efficiently. Marketing materials tell the producer's "story" but also address each species separately. Brochures and websites should let customers know the advantages of purchasing multiple products in one transaction.

Frost-Seeding: Seeding Clovers Will Improve Pastures

Les Vough, Forage Crops Extension Specialist Emeritus, University of Maryland

Photo by R.R. Smith, USDA Natural Resources Conservation Service.

If your pastures have very few legume plants present, frost-seeding red and white clovers before the grass breaks dormancy and begins to green up will not only increase the yield and nutritional quality of your pasture but save you money as well. By far the easiest, quickest, and cheapest technique to introduce clovers into your pastures is frost-seeding (broadcast overseeding in late winter when alternate nighttime freezing and daytime thawing of the soil surface is occurring).

Depending upon how and when winter weather breaks, late February to early March is typically the time to broadcast the seed in most parts of state. The higher elevations of Western Maryland will obviously be later in March. Old-timers have said to seed when the last normal snowfall is on the ground (you can see your tracks and maintain proper spacing as you

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Frost-Seeding: Seeding Clovers Will Improve Pastures … continued from page 6

Courtesy by USDA Natural Resources Conservation Service.

make trips across the field).

Normally, we tell you not to overgraze your pastures, but this is the one time overgrazing is beneficial and recommended. The pasture to be overseeded should have been grazed extremely short during the winter to remove the plant top growth and expose as much bare soil as possible. Otherwise, much of the seed may be hung up by the plant material and not reach the ground.

Seeding must be done before established grasses break dormancy and initiate spring growth. Once the existing vegetation breaks dormancy, it is hard for the legume seedlings to compete and they may be smothered out. One advantage of red clover is that the seed germinates quickly and seedlings are much more vigorous than most other forage legume seedlings. Thus, if red clover is planted before the grass starts to grow, the seedlings can become established and compete successfully with the established grass.

On well-drained, dry soils where tracking and compaction are not a problem, the trampling effect of animals can improve seed-soil contact so having animals on the pasture for a short period of time after seeding can be beneficial. Animals should be removed when germination of the seed begins, which may be as short as 5 to 7 days in the case of red clover.

Once the grass reaches a height of 12 to 15 inches, turn the animals into the newly overseeded pasture and flash graze the top off of the grass. You may need to do this several times to allow the clover seedlings to become established. Do not graze closer than 5 to 6 inches or the top of the clover seedlings the first time. With each subsequent flash grazing you will need to increase the grazing height to prevent grazing of the new clover seedlings. Observe closely each time the animals are put on the newly seeded pasture to be sure that the animals are not nipping off the clover seedlings – they quickly learn that there is something young and tender underneath the grass.

Be sure to use certified seed of improved varieties rather than common seed. Just because the name of a well-known variety may be printed on the bag does not necessarily mean that you are getting that particular variety. Unless it is certified to be of a named variety, it is what the seed industry terms as "common" seed and can be of any origin, and in some cases does not even trace back to the named variety.

The seeding rate is 6 to 8 lb/acre red clover with 0.5 to 1 lb/acre white clover. If legume seed is not pre-inoculated, be sure to inoculate it with the proper nitrogen-fixing bacteria just prior to seeding. This seeding rate should provide you at least 25% legumes in your pasture and provide sufficient fixed-nitrogen to meet the nitrogen needs of the grass, thus saving you money on nitrogen fertilizer.

Broadcast frost-seeding of grasses has a much lower success rate than clover. Seeds of orchardgrass and tall fescue are light and fluffy and good seed-soil contact is difficult to achieve. Recent research at the University of Wisconsin showed that perennial ryegrass and orchardgrass had the best success of the major cool-season grasses when frost-seeded.

Do not use nitrogen fertilizer or manure when overseeding grass pastures because they will stimulate growth of the established grass and increase competition with the seedlings.

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Poultry and Rabbit Processing Certification Training Scheduled

Training workshops for On-Farm Poultry and Rabbit Processing Certification Workshops to be held from 9:00 AM to 5:00 PM at 3 locations. Registration check-in begins at 8:30 AM.

Clear Spring, MD - Tuesday, March 1, Clear Spring Town Hall, 146 Cumberland St., Clear Spring, MD.

Annapolis, MD - Saturday, March 12, MDA, 50 Harry S. Truman Parkway, Annapolis, MD.

Cambridge, MD - Wednesday, March 16, Eastern Shore Hospital Center, 5262 Woods Rd., Cambridge, MD

This workshop is part of a voluntary certification program to assist small poultry and rabbit operations to meet the Maryland Department of Health and Mental Hygiene's approved source requirements to sell poultry and/or rabbit (off-farm) at farmers' markets or to restaurants and retailers in Maryland.

The training fee is $20 which includes lunch and materials. To download a copy of the registration form, visit: **http://www.mda.state.md.us/pdf/poultryrabbitwkshp.pdf**

For questions, call Karen Fedor at 410-841-5773 or email: fedorkm@mda.state.md.us

To learn more about Maryland's Poultry and Rabbit Program and requirements, visit**: http://www.mda.state.md.us/feed-food_safety-grading/food_qual_assur/poultry_rabbit/index.php**

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