

# Greene Lines

Greene County Soil & Water Conservation District Newsletter

Summer 2015



## Greene County Has a New District Conservationist

In February 2015 USDA Natural Resources Conservation Service (NRCS) implemented a long term reorganization moving from two county Field Office Service Areas (FOSAs) to four county FOSAs. Diana Sheridan was selected as District Conservationist for Dallas, Greene, Polk and Webster Counties. Diana began her career as a Career Intern in the Springfield Field office in October of 2003. Since that time she has worked as a Resource Conservationist in Barton, Jasper, Lawrence and Barry Counties and as a District Conservationist in Barton and Jasper Counties. “Working in southwest Missouri is a challenge and a pleasure.” says Diana. “In the handful of counties I have worked in I have

gotten to work with commercial row crop producers, organic high tunnel farmers, beef and small ruminant graziers, and producers with primary focus on wildlife and water quality improvements.” The reorganization intends to streamline administrative duties in order to get the field staff out working with the producers and not spending so much time at their desks. Diana is looking forward to implementing the reorganization and seeing the field staff in the field working with producers and getting conservation on the ground. Mark Green, the former District Conservationist in Greene and Webster Counties, has accepted the new position of Lead Resource Conservationist. This will allow him more time to work in the field with landowners in all four counties.

### Greene County SWCD Board of Supervisors

<b>Adrian Murray</b> Farmer, Ash Grove	<b>Chair</b>	<b>Pat Byers</b> UMC Extension - Appointed Member	<b>Secretary</b>
<b>David Hall</b> Farmer, Attorney	<b>Vice-Chair</b>	<b>Tom Huff</b> Farmer, Fair Grove	<b>Member</b>
<b>Joann Pipkin</b> Farmer, Republic; Freelance writer	<b>Treasurer</b>		

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# GRAZING MANAGEMENT, WHY SHOULD I DO IT?

by Mark Green, NRCS Lead Resource Conservationist

There has been a lot of information about grazing management out there in recent years. It's called Management-Intensive Grazing, Rotational Grazing, Intensive Grazing, Prescribed Grazing and several other fancy titles. The bottom line is, "Why should I be interested in splitting up my pastures and moving livestock around? Sounds like a lot of work to me. What do I get out of it?" Well, these are good questions. If you are not going to gain or improve something, then why do it! I hope to point out some reasons to try improving grazing management in this article.

**Reduce feed costs** - The most economical feed you can provide to any livestock is pasture. When compared to other feed sources the cost for other feeds can be 2 to 4 times the cost of pasture. If the animal can harvest the forage directly, it is always more economical than if you have to purchase or harvest that feed to feed later. Plus, a whole lot easier on your back!

**Decrease feed waste** - Grazing utilization is the amount of forage animals actually consume in comparison to the amount available in the pasture. When livestock are left on a field continuously (no rest), there is only about a 30% utilization rate. The livestock leave areas ungrazed and overgraze other areas. They also waste forage by laying on it and depositing manure and urine. However, if we start moving livestock from one pasture to another, this puts more livestock in a smaller area for a shorter time, therefore the utilization rate will go up anywhere from 40% to 70%, depending on number of pastures. We never want 100% utilization, the grass needs some leaves left to carry on photosynthesis and grow more grass.

**Improve fertility** - A cow will recycle 90-95% of the phosphorus and potash in forages through urine and manure. If livestock are in one big pasture, they will deposit the majority of this fertility under trees, around water tanks and in ponds. If pastures are split into smaller areas, livestock deposit more of this "fertility" back out on the forage to be used by the plant. If your soil fertility is in good shape, this could reduce the amount a purchased fertilizer.

**Increase legumes** - With continuous grazing, legumes will usually get grazed first. Livestock select what they like first and keep going back until it is gone. When livestock are removed from a pasture and it is rested, the legumes get a rest also. This gives them a chance to stay healthy and survive longer. Also, when livestock are turned into a smaller area and then moved after a short time, they will tend to graze all forage species in the pasture more evenly. This also gives the legumes a better chance.

**Improve forage quality** - The most nutritious part of plant is the blade or leaf. Whatever we can do to keep the plant vegetative will result in higher quality forage. By rotating livestock among smaller pastures, we can come closer to keeping the forage vegetative. The very first and basic step to good grazing management is understanding the grass plant. It gets 95% of it's food from the air and sun, only 5% from the roots. Grass leaves are food factories that supply food to the plant. If we leave some leaves out there and rest the plant, it will produce more leaves. These leaves are what feed our livestock.

**Increase animal production** - Rotational grazing may allow you to actually run more livestock. If continuous grazing is only giving 30% utilization and rotational grazing can give up to 60-70% utilization, this in itself can provide more forage and feed. However, if already overstocked, don't count on increasing your herd, but, you may not have to purchase extra feed to get through the year.

**Improve wildlife habitat** - When a rotational grazing system is set up, many times the landowner will fence out woody draws so he doesn't have to mess with them. Also, rotational grazing improves legumes and other desirable forages in the pastures. This can improve wildlife habitat on the farm.

**Grazing Schools** - I would advise anyone interested in improving grazing management to get all the information they can. There is a lot of information and experience out there. NRCS and University of Missouri Extension began conducting Regional Grazing Schools several years ago. These 3-day schools cover all aspects of grazing management. Topics include economics, grass plant, fence, livestock water, animal nutrition, matching forage & livestock, pasture fertility, grazing system design, and other topics. Schools are offered in various locations throughout Missouri from April through October of each year. If you are interested in attending a school, you can find this schedule on the Missouri Forage and Grassland Council website at <http://mofgc.org/index.html>.

With all this in mind, if I were wanting to get started in a grazing system, the first place I would start would be to contact your local "experts" and get their assistance. These experts might be neighbors, NRCS, SWCD, or Extension Service. In most cases these are government agencies that are paid by your tax dollars, so you might as well use them. You paid for them!

# Integrated Disease Management in our Vegetable Gardens

By Patrick Byers, Regional Horticulture Specialist, University of Missouri Extension

2015 will be a gardening year to remember – despite cooler temperatures and abundant rainfall, gardeners reported difficult gardening conditions. Among the problems that Ozarks vegetable gardeners had to address this season was diseases. Fruit rots, leaf spots, blights, and root rots were the norm. Why did we see such an abundance of diseases, and how can we address these problems in our gardens?

A useful way to understand the occurrence and severity of vegetable diseases is to consider the three points of a triangle. The first triangle point represents the disease organism, be it a fungus, bacteria, virus, nematode, or other organism. The second triangle point represents the vegetable crop. The third point represents the environmental conditions present in the garden. All three points must be present before we have a triangle, and all three conditions (disease organism, susceptible vegetable crop, and favorable environment) must be present before we have a disease outbreak. Assuming that the disease organism is present every year (generally the case in the Ozarks) and we are growing susceptible vegetable crops every year (also generally the case), often the factor that determines whether or not we will see a disease outbreak is the environment. Fungal and bacterial diseases in particular are favored by moisture – dew, humidity, and rainfall. In fact, many disease organisms can only penetrate vegetable plants when a layer of moisture is present on the plant. With the abundant and frequent rains this season, the environmental conditions were extremely favorable for disease development.

Integrated pest management is a responsible way to address vegetable disease problems. Critical to developing a management plan is understanding vegetable diseases. MU Extension has valuable resources that can assist farmers and gardeners in predicting when vegetable disease outbreaks will occur and the proper identification of diseases. Armed with this understanding, the next step is developing a management plan. With most vegetable diseases, the best approach is to be proactive. Whenever possible, plant disease resistant or tolerant vegetable cultivars. Many hybrid tomatoes, for example, are resistant to multiple tomato diseases. Provide optimum growing conditions in the garden. Conditions that favor good vegetable growth (good water drainage, adequate soil fertility, a healthy soil rich in organic matter) also contribute to a plant's ability to withstand disease attack. Rotate related vegetable crops (an example of related vegetables are tomato, pepper, potato, and eggplant) to a new place in the garden each year to delay the buildup of diseases. Mulches are very helpful to reduce contact between vegetable plants and disease-bearing debris in the soil. Water with drip or trickle irrigation early in the day during dry spells, to reduce the time that plants are wet and vulnerable to disease infection. Allow adequate space between plants, and consider trellising or supporting plants to allow for air movement around and between plants, which promotes rapid drying. Fungicides are available to provide protection against many diseases. Remember that most fungicides must be applied in advance of disease infection, and the protective fungicide layer must be renewed following rain of more than 0.75 inches. Farmers and gardeners are advised to carefully read and follow the usage guidelines on the fungicide label (generally found on the package), and to avoid using a fungicide on a vegetable crop that is not listed on the label.



# Start Planning Now for Tree Planting in the Spring!

By: Robert DeMoss, NRCS Area Forester

Are you considering adding trees to your farm? Whether they are serving as a windbreak around the homestead, providing shade for livestock, buffering a creek, or providing a future income from the timber growing on the back forty, trees can be an important component on the farm. As we enter the fall season, it's a great time to plan for this component.

Successful tree plantings start with a plan. This plan should take into consideration location (soils), competing vegetation, species desired, light and moisture requirements, and expected size at maturity in order to avoid potential problems with nearby structures and underground/overhead utilities.

Site preparation is the first step in establishing trees. Here in the Ozarks, that usually means eradicating fescue. On large plantings this is easily accomplished by a couple applications of glyphosate where the trees will be planted; once in the fall and then spring, prior to planting. Large area plantings usually use bare root stock, which can be ordered at a minimal price through Missouri Dept. of Conservation's (MDC) George White Nursery. They begin accepting orders in November through the end of planting season. Order early to ensure supply is available of the trees you desire. Trees are delivered to your door via postal service between January and May. You specify when you would like to receive them.

Trees are planted in early spring either by hand or by machine for larger blocks. Machine planters can be borrowed from MDC at no charge. They do require a tractor to pull them. Bare root seedlings usually establish with little maintenance. Mowing to keep competing vegetation down, mulching, and supplemental watering can be helpful for the first couple of years. After this period, the trees have established a good root system and some height and are able to take of themselves.

As mentioned, trees can be a benefit on the farm in various functions. Both, Natural Resources Conservation Service (NRCS) and your local Soil and Water District may have cost share programs available to assist in establishing trees for windbreak, riparian buffers, and forest improvement. NRCS also has a forester that can assist you in your planning needs and address any other forest issues that you may have. Contact your local NRCS or SWCD field office if you are interested in finding out more information.



For more information contact us @  
831-5246 Ext. 3  
[www.swcd.mo.gov/greene](http://www.swcd.mo.gov/greene)



**Mark your calendar**  
**Spring Forage Conference**  
**for 2016 March 1, 2016**

# **BOIS D'ARC Regional Grazing School**

## **October 20, 21, 22, 2015**

**Bois D'Arc, MO (NW of Springfield, MO approx. 10 miles)**

A 3-day seminar on Management-intensive Grazing for economic and environmental sustainability will be held on **October 20, 21, 22, 2015**

This school is sponsored by the USDA-Natural Resource Conservation Service, University of Missouri Extension Service, and The Greene County Soil and Water Conservation District

ALL SESSIONS ARE PART OF THE GRAZING SCHOOL AND MUST BE ATTENDED AS A WHOLE.

**Maximum Registration is 40 People**

Registration fee has been set at **\$145.00 per person and \$95.00 for additional persons** from the same operation (will receive only one set of books and reference materials). The fee includes lunches, breaks, plus: Missouri Grazing Manual from University of Missouri Forage Systems Research Center, Linneus, MO; Missouri Livestock Water Manual; Missouri Electric Fencing Manual; Missouri Forages Manual and other pertinent materials.

Registration is based on **first come - first serve basis, upon receipt of the registration fee.** If the class is full, registration fee will be returned. **NO CREDIT CARDS ACCEPTED**

**REGISTRATION FORMS AND PAYMENT MUST BE RECEIVED NO LATER THAN OCTOBER 9, 2015.**

**REGISTRATION FEE WILL NOT BE REFUNDED AFTER OCTOBER 9, 2015.**

**DIRECTIONS WILL BE SENT TO YOU WITH YOUR REGISTRATION CONFIRMATION LETTER**

Any questions, contact:

Greene County Soil & Water Conservation District/ NRCS

688 S. State Hwy B, Suite 200

Springfield, MO 65802

417-831-5246, ext.3

email: [mark.green@mo.usda.gov](mailto:mark.green@mo.usda.gov)

------(Cut off and return this portion with payment)-----

**2015 Bois D'Arc MiG Grazing School Registration Form**

**REGISTRATION AND PAYMENT MUST BE RECEIVED NO LATER THAN OCTOBER 9, 2015**

**NO CREDIT CARDS ACCEPTED**

Name \_\_\_\_\_ Individual \_\_\_\_\_ (\$145.00 ea.)

Name of Extra Person: \_\_\_\_\_ Extra Person \_\_\_\_\_ (\$95.00 ea.)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ County \_\_\_\_\_

Telephone (\_\_\_\_\_) - \_\_\_\_\_

Email Address \_\_\_\_\_

**Please enclose check for full amount payable to: "Greene County SWCD"**

Return check with registration form to: Greene County Soil and Water Conservation District

688 S. State Hwy B, Suite 200

Springfield, MO 65802

**Greene County Soil and Water  
Conservation District**

**Equipment For Rent In Greene County**

**107C Haybuster and John  
Deere 1590 No-Till Drills  
for Rent**

- \$10.00 per acre with a \$150.00 minimum
- Tractor with hydraulic attachments required
- 10' wide with 7" row spacing
- Double or Single disc openers
- Legume, Warm Season Grass and Grain boxes
- Large capacity boxes
- Ask about minimum HP requirements
- Ask about our other equipment



**Seeding Dates**  
**Aug. 15 – Oct. 1**  
**Jan. 1 – Feb. 15**  
**(Dormant)**  
**March 1 – May 15**  
**April 1 – June 15**  
**(warm season)**

[www.swcd.mo.gov/greene](http://www.swcd.mo.gov/greene)

**Other Equipment available includes: Haybuster 77C, Spinning Jenny, fence splice crimpers and soil augers.  
Call 831-5246, Ext. 3 for terms of usage.**

*Equal Opportunity Employer and Provider.*

**For information about  
State and Federal  
Cost Share Programs  
please contact us at  
417-831-5246 Ext. 3**

[www.swcd.mo.gov/greene](http://www.swcd.mo.gov/greene)

**Greene County SWCD  
688 S. State Hwy B, Suite 200  
Springfield, MO 65802**

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Permit 248

**Or Current Resident**