

# PLANTING IDEAS

June 2014  
Volume 31, Issue 3

A County Publication of the  
Boone County Soil & Water Conservation District



## YOU ARE INVITED TO THE 2014 PASTURE WALK

The Boone County Soil and Water Conservation District and the Boone County Cattlemen's Association are hosting a pasture walk on Tuesday, June 10<sup>th</sup>. The pasture walk will be held at Brian and Jane Lease's farm located in northern Boone County on Hwy F. We will begin with a barbeque dinner at 6:00 p.m. followed by the tour.

Brian has been involved with managed intensive grazing for many years in northern Boone County. Brian is a cow/calf producer on owned and rented acres. He has installed best management practices to improve his grazing operation and to promote conservation. Brian worked with our office on many projects and participated in all types of programs through state cost-share, Missouri Department of Conservation, and the federal government. A wide range of best management practices have been utilized to cross-fence pastures, provide water through waterlines and tanks, inter-seed legumes, and exclude livestock from sensitive areas. Brian has invested many hours of his time and a lot of his own money to improve the land from what it was when he began.

Over the years Brian has assisted many other individuals in developing systems and gaining knowledge on grazing systems. He has hosted farm tours, served many years on the SWCD Board, and runs his own fencing materials business. He has helped his customers with instructions for installing fences and water, informed them of programs available, and provided information on how to design and manage a grazing system.

This pasture walk will be a great opportunity to view a nice grazing system and get ideas about how to start a grazing system or improve the one you already have on your own pastures. Please call 573-875-5540 ext. 3 to **RSVP by June 9<sup>th</sup>** so we can plan on having plenty of food for everyone. We're looking forward to seeing you. **Don't forget to bring your lawn chair!**

*Directions: Go north from Columbia on Hwy. 63 approximately 20 miles; take the Rt. F/Hwy. 22 exit. Turn left (west) on Rt. F and continue 3.5 miles to 2707 W. Hwy F on the north side of the road. Watch for signs.*



**2013  
PASTURE WALK**



The Pasture Walk is sponsored by the Boone County SWCD and the Boone County Cattlemen's Association and is funded in part from a grant made available through the Parks, Soils and Water Sales Tax through the Missouri Department of Natural Resources.

**Boone County  
Soil and Water  
Conservation District**

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**Kim Reitz, Resource  
Conservationist**  
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**MISSOURI DEPARTMENT OF  
CONSERVATION**

**Mark McCulloch, Private Land  
Conservationist**

Statement of frequency: Three/year  
Mailed in Columbia, Missouri

Authorized organization's name &  
address:

**Boone County Soil & Water  
Conservation District**  
**Parkade Center, Suite 213E**  
**601 Business Loop 70 West**  
**Columbia, MO 65203**  
**573-875-5540 ext. 3**  
**855-830-4752 fax**  
[www.swcd.mo.gov/boone](http://www.swcd.mo.gov/boone)

**Hours:**

**Monday-Friday 8:00 a.m. - 4:30 p.m.**  
**Closed 12:00 p.m. - 12:30 p.m.**

**Funding for information/education  
activities are provided in part by the  
Parks, Soils and Water Sales Tax  
through the Missouri Department of  
Natural Resources.**

## **EXPECTATIONS FOR TERRACES**

*Dudley Kaiser, NRCS Technician*  
*Kevin Monckton, SWCD Technician*

Boone County landowners have completed construction of many terraces over the years. There seems to be a misunderstanding on how terraces function and the size that they will be when designed. The height of the terrace is based on the size of the drainage area and the storage required/available to store that amount of water until the pipe will drain the water down.

Most producers are requesting tile outlets for terraces as opposed to waterway outlets. The advantage that tile outlets have over grass waterways is that no crop ground is lost. The disadvantage is that tile terraces are designed to store water and drain runoff water from the drainage area. In larger drainage areas, terraces are much taller than what people are used to. When grass waterways are used as an outlet, the terraces are not as high. An average height for waterway terraces is usually a little over a foot, and tile terraces have an average height of three feet. When going with tile terraces, you can expect higher berms than grass waterway berms.

*When we are laying out terraces we would like you to be on site and take a good look at the layout before we design them. Many times when we are in the field we get to a place where a decision needs to be made on how to do a particular area of the field. If we make that choice ourselves and it is not convenient for you to farm, you will not be happy with the terraces. If there are several options to choose from, you can decide which one would work best for you. We find that a little extra time spent at the layout stage will make things work much better for many years to come and everyone will be happier with the results.*

We have gone to a different riser type known as Type I. These were used many years ago. We have been using these again since last summer. Several Type I Risers have been installed and have functioned to meet the designed expectations. These risers have had several hard rains and show no problems. However, when 50% or more of the holes are plugged, then there is reduced flow in the riser/tile and that affects the drawdown time. We have been using the twelve-hour drawdown time which is about the same as we have designed in the past. One misconception that is out there is that a larger pipe will cut berm height drastically, but we have found it only reduces height by a small amount, a few tenths.

We have been watching terraces that have been constructed and have noticed that most have been tested by extremely heavy rains. Recommended terraces are designed to handle 5.3 inches of rainfall in a 24-hour period. A design using a 12-hour drawdown time means that a full terrace will drain out in 12 hours. One observation is that maintenance is required to keep these tile terraces in good working order. Large amounts of silt have been moved on some of these fields. There are several factors that affect sediment movement. Terraces control sheet/rill/ephemeral and small gully erosion. The protected crop ground is not what is above but what is below a berm.

In conclusion, Type I Risers are showing to perform adequately as compared to Type II Risers. Tile terraces will have higher berm heights compared to grass waterway terraces. Factors that affect tile terraces are the acres of drainage that a terrace has and the amount of storage that a terrace offers. With larger drainage areas and smaller storage areas, berm heights will increase. The concept of tile terraces was developed many years before the writers of this article were born. Today's tile terraces, how they are surveyed in the field, and how they are designed are the results of years of development. Tile terraces are an investment for protecting our natural resources that we all depend on for food and fiber.

# 2014 FARM BILL UPDATES

*Kim Reitz, NRCS Resource Conservationist*

The Agricultural Act of 2014 (2014 Farm Bill) was signed into law on February 7, 2014. So what does this mean for you? You will see new conservation programs, changes to some existing programs, and removal and combining of other programs. USDA will continue assisting landowners and operators with changes in the Conservation Compliance provisions and improving resource concerns on their land through the conservation programs.

One of the big changes is that conservation compliance links basic conservation practices to crop insurance premium subsidies for highly erodible lands (HEL) and wetlands. To maintain certain USDA benefits, program eligibility, and now crop insurance, fields designated as HEL must be protected from excessive soil erosion by applying an approved conservation system. Producers who do not have an HEL determination on fields that they are currently cropping and/or fields they are taking out of sod production to plant an annual commodity are required to stop by the Farm Service Agency (FSA) to request a determination prior to working the land. The wetland provisions are still the same. If a landowner or operator would like to clear or drain an area to produce a crop or make the land croplable, a wetland determination must be completed before clearing or draining.



## **Conservation Programs that are available or changed are the following:**

- **Environmental Quality Incentives Program (EQIP)** will continue to be offered to provide financial and technical assistance to agricultural producers in order to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, or improved or created wildlife habitat. Practices available for cropland and pastureland are adding no-till and cover crops to your operation, installing terraces, water sediment control basins, grass waterways, developing or improving an existing grazing system using practices such as installing cross-fences, water lines, interseeding legumes, converting crop to pasture, and managing grass heights. Other practices that can help improve water quality are using nutrient and pest management and limiting livestock from ponds and streams. A practice that extends the growing season for vegetables is installing a seasonal high tunnel. Funding is also available for producers that are organic or would like to transition to organic. For a complete list of practices visit our website at <http://www.nrcs.usda.gov/wps/portal/nrcs/main/mo/programs/>.
- **Conservation Stewardship Program (CSP)** was reauthorized to enroll acres annually and will help agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns. Participants earn CSP payments for conservation performance—the higher the performance, the higher the payment.
- **Wildlife Habitat Incentive Program (WHIP)** has been combined with the EQIP program.
- **Agricultural Conservation Easement Program (ACEP)** is a combination of the Wetlands Reserve Program (WRP), the Grassland Reserve Program (GRP), and the Farm and Ranch Lands Protection Program.
- **Conservation Reserve Program (CRP)** administered by the Farm Service Agency (FSA) is reauthorized through 2018, with modification. Sign-up periods will be announced at a later date.

If you are interested in more information or would like to apply for conservation programs, visit your local USDA Service Center or visit [www.nrcs.usda.gov/farmbill](http://www.nrcs.usda.gov/farmbill).

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***USDA is an equal opportunity provider, employer, and lender.***

# IT'S OUR 70<sup>TH</sup> ANNIVERSARY

The Boone County Soil and Water Conservation District was organized in July 1944. It was the thirteenth district organized in Missouri. In 1944 there were an estimated 2800 farms on approximately 387,000 acres of agricultural land. As of the 2012 census, there are an estimated 1170 farms on approximately 240,700 acres of agricultural land. Just in the last 10 years, we have dropped over 200 farms and 30,000 acres. These numbers certainly reflect the demographic shift in Boone County as we see more and more urbanization around Columbia and the movement of single family households into the suburbs of the incorporated areas.

The decrease in the number of farms has not decreased the number of requests the SWCD receives for assistance. Quite the opposite is true, however staff has seen a shift in the types of requests received. Current requests range from terrace designs on crop acres to recommendations for seeding small areas in urban neighborhoods. Boone County has such a diverse agricultural/rural/suburban/urban population that it takes a well informed, knowledgeable staff to respond to the widely varied soil and water conservation requests. The Boone County SWCD also relies on the Natural Resources Conservation Service, Farm Service Agency, and the Missouri Department of Conservation for support. Our landowners have a wealth of knowledge and experience available for their assistance.

In 1984, Missouri became the first state to enact a Parks, Soils and Water Sales Tax to fund parks and soil conservation projects. This tax has been renewed three times to continue these efforts. Conservation work to protect our soil and water resources has always been a priority for Boone County farmers. Structural practices, grass seedings, water quality improvement incentives, conservation tillage, and grazing systems have all been vital tools. Thanks to all of your efforts, we are accomplishing our goal of protecting our soil and water resources and will continue to protect them in the future.

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JUNE 2014 PLANTING IDEAS  
Boone County Soil and Water Conservation District  
Parkade Center, Suite 213E  
601 Business Loop 70 West  
Columbia, MO 65203  
573-875-5540 ext. 3



## CALENDAR OF EVENTS

- |             |  |
|-------------|--|
| June 3      | SWCD Board Meeting, 9:00 a.m.                                      |
| June 10     | Pasture Walk, 6:00 p.m.<br>Brian and Jane Lease's Farm             |
| June 11     | Deadline for claiming FY14 Cost-Share.                             |
| July 1      | SWCD Board Meeting, 9:00 a.m.<br>New State Cost-Share FY15 begins. |
| July 4      | Holiday, Office Closed.  |
| August 5    | SWCD Board Meeting, 9:00 a.m.                                      |
| September 1 | Holiday, Office Closed.  |