PLANTING IDEAS

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Boone County Soil & Water Conservation District

NEW SOFTWARE DESIGN PROGRAM IMPLEMENTED

Dudley Kaiser, NRCS Soil Conservation Technician
Kevin Monckton, Soil and Water Conservation District Technician

Photo courtesy of USDA NRCS

In July, the Boone County SWCD started a new cost-share year. Most cost-share programs stayed about the same but the biggest change came with NRCS changing the program we use to design terraces and sediment retention basins. The risers are the major thing that has changed that will be noticed by the owners and operators. We have observed the dirt work has changed very little. The new program does figure the dirt work quantities in terraces with curve, where the old program figured them as straight terraces which would sometimes causes shortages or excesses of dirt in the berm.

We are getting the bugs worked out of the program and figuring out how to use it. We have learned that we now have to take different shots than we used to take to make things work out.

This year the new layout has taken us a lot longer than what we had planned, but hopefully as we proceed we will get back to our regular timeframe of doing our layouts and designs.

With the new designs we are required to use the Type I Riser, which is capped on top with an orifice. We have a design limit of 90% loading of water in tiles so the pipe size will be a little larger than it has been in the past, but this will give us approximately the same drawdown time.

Photo courtesy of USDA NRCS

At least 30 years ago Soil Conservation Service, now Natural Resources Conservation Service, did design terraces using Type I Risers. Today the Type I Risers comeback is due to the absence of a stated pressure rating or PSI in the manufacturing process of UGO (underground outlet) tile. An example of this is Schedule 40 has a pressure rating but tile pipe does not. To keep from having pressure on a tile line(s) a reduced amount of water to flow is designed. Without an industry standard for loading the pipe, the designs are kept at the 90% capacity.

Several projects have already been designed with some projects already completed this fall. We learned that we had to make a few adjustments, but so far they have all worked out and we are proceeding down the cost-share list of producers with our layouts. We ask that you would please be patient while we are learning this new program. Please feel free to call Kevin Monckton or Dudley Kaiser if you have any questions concerning your cost-share project.

Boone County Soil and Water Conservation District

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Statement of frequency: Three/year
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Authorized organization's name & address:
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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.

FY 2013 END-OF-YEAR C-S REPORT
Boone County 7/1/12-6/30/13

Cindy Bowne, District Manager/Technician

		C-S DOLLARS CLAIMED	TONS OF SOIL SAVED
11 DROUGHT ASSISTANCE	IRRIGATION WELL	$ 35,744.58	N/A
	LIVESTOCK WATER DEVELOPMENT	$ 20,698.89	N/A
	LIVESTOCK WATER DISTRIBUTION	$ 36,657.45	N/A
4—DSL-44	TERRACE SYSTEM W/TILE	$ 32,840.74	1,637
2—DWC-1	WATER IMPOUNDMENT RESERVOIR	$ 12,984.33	560
6—DWP-1	SEDIMENT RETENTION STRUCTURE	$ 74,499.34	1,700
1—DWP-3	GRASSED WATERWAY	$ 13,199.77	1,360
1—N472	USE EXCLUSION	$ 3,590.22	460
25 CONTRACTS	8 PRACTICES	$ 230,215.32	5,717

The journey from drought to mud was a quick one. From the end of July through the end of October much of our efforts were directed by the drought assistance program. The program guidelines allowed cost-share for livestock watering or crop irrigation only if other water sources were not available. Boone County is fortunate to have excellent public water supply districts. If public water was already on site, then the site was not eligible for a well. During the time of drought, other earthwork projects were put on hold until there was adequate moisture for compaction. This delayed the implementation of terrace and sediment retention systems. Then a very wet spring threw projects further behind. By the end of the fiscal year we claimed $133,524.18 in sheet/rill/gully cost-share monies and only had to roll one project over into the next year.

We have been giving priority to projects that can be built in the summer following wheat harvest. Those plans went awry this summer when the new terrace/sediment retention design program went into effect and staff faced a steep learning curve. Hopefully, we will soon get back on track. There are fewer projects following wheat planned for next year. This will allow us to work a little farther through the waiting list for sheet/rill/gully erosion monies. There continues to be a three to four year waiting list there.

Money for Grassland Management, Sensitive Areas, and Woodland Erosion remains steady and have much shorter waiting lists.

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

TRACTORS IN THE WOODS

Joe Alley, Resource Conservationist/Forestry

The following article was adapted from a Penn State Extension publication found at the following web address: http://extension.psu.edu/business/ag-safety/vehicles-and-machinery/tractor-safety/e-55. My intent in providing this summary is to issue caution to anyone who operates farm tractors in the woods. Please take the time to "google" the article above and read it in its entirety. – Joe Alley

While farm tractors can be used safely for a variety of purposes, using them in the woodlot poses significant risk and is not recommended. Most farm tractors are not appropriately equipped for use in woodlots and this directly contributes to many fatal injury incidents. It is important to understand the differences between a farm tractor and heavy duty logging equipment found in the timber industry.

Here are the components of a timber harvest "tractor" (usually called skidders) that are **missing** on a typical farm tractor:

- A heavy steel skid plate to protect the machine's underside and allow it to "slide" over stumps and rocks
- Protective grill for the radiator
- Engine side guards
- 10-12 ply, flat-side walled tires with valve protection plates welded to the rims and rim to tire securement
- Tire chains for soft ground or snowy, icy conditions
- Front-end weights to improve stability during dragging of logs
- A 10 lb. ABC fire extinguisher
- A spark arrester exhaust system
- A Category II FOPS* (falling object protective structure) with seat belt
- A protective grill for the rear window of the FOPS cab to prevent winch cables and hooks from flying through the back of the cab
- Protective side grills in the FOPS to prevent poking/intrusion hazards
- Higher ground clearance
- Lateral stability due to axle rotational allowances
- Nearly equal front/rear axle weight distribution

**Category II FOPS meet OSHA requirements and have been ISO (International Standards Organization) tested to withstand penetration into the operator cab of a 500 lb. weight dropped from 17 feet.*

Tractor manufacturers producing farm and timber equipment have manufactured their products for safe use in specific applications. The intended use of farm tractors when used in woods management activities should be limited to specific applications such as firewood transport or stationary work such as log splitting, propulsion, or operating elements with PTO, hydraulic, or electrical systems. Any forestry applications such as pushing, dragging, and loading of logs should be left to logging machines. Retrofitting normal farm tractors for timber harvest operations, even when technically possible, would likely prove to be cost prohibitive. Planning for logging activities should take in safety considerations including specialized training for that task, using equipment designed for the job, and evaluating the use of contractors equipped and trained to do the logging or clearing work needed.

Not all tree cutting activity takes place deep in the woods. Cleaning up fencerows or expanding field acreage by cutting trees is common. These trees may be felled safely but still must be dragged for processing for firewood or burning. There are equipment and practices that significantly increase the safety of dragging and pulling logs and trees with farm tractors. Skid cones, log arches, 3-pt mounted grapples and 3-pt winch equipped skidding implements can be reasonably purchased for use. Any device which prevents the log from twisting or rolling out of control while being dragged will increase safety to the operator. Log dragging practices that reduce risk are:

- Only use tractors with FOPS protection. If the tractor has a ROPS cab, a protective grill should cover the rear window. If the tractor uses a 4-post type of FOPS, the rear opening should be covered with a grill.
- Use slider hooks or bell chokers to attach to the log and place them within one foot of the end of the log to reduce the need to re-choke the log and to insure they will stay in place.
- If only chains are used for dragging logs, the chain should be attached only to the drawbar.
- Chains used for dragging logs should not be so long that they will catch on the rear tire when the tractor is turning right or left.
- Be sure that on-the-ground helpers are clear of logs and cable before winching or dragging logs.
- Use of arches, grapples, and winches are much preferred for any dragging operation.
- If log arches, grapples, or winches are used, their size needs to match the size and power of the tractor. Be sure to check manufacturer's recommendations.
- With PTO driven winches, be sure to keep PTO guards in place.
- Use a remote controlled winch to prevent winch cables and chokers from striking the operator should the cable or choker fail.
- Lower all 3-pt mounted equipment and lock brakes before dismounting the tractor.
- Inspect and replace damaged cable. Ensure cable splices, hooks, and eyes are installed correctly and that these components have the same strength standards as the cable.
- Use personal protective equipment consisting of hard hat, eye protection, steel-toed work boots, and leather gloves when dragging logs and working with steel cable.

Tractors in the Woods. Dennis J. Murphy, Extension Safety Specialist; Lee R. Stover, Wood Products Extension Specialist; William C. Harshman, Extension Assistant. Pennsylvania State University.

USDA PARKING NOTIFICATION

The USDA Service Center has reserved parking available for our customers just east of the front door. There is now a whole row of parking painted "RESERVED" in white on each individual parking space instead of being marked with USDA signs. We also have two handicapped parking spaces in the next row painted in blue and outlined in cinderblocks for anyone with handicap permits or handicap license plates. Feel free to use any of these parking spaces whenever you visit the USDA Service Center for any business with the FSA, NRCS, MDC, or the SWCD.

NOVEMBER 2013 PLANTING IDEAS
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CALENDAR OF EVENTS

November 28	Thanksgiving Day Holiday, Office Closed
December 3	SWCD Board Meeting, 10:00 a.m.
December 16-18	SWCD Training Conference, Tan-Tar-A Resort, Lake of the Ozarks
December 25	Christmas Day Holiday, Office Closed
January 1	New Year's Day Holiday, Office Closed
January 7	SWCD Board Meeting, 9:00 a.m.
January 20	Martin Luther King Jr.'s Birthday Holiday, Office Closed
February 4	SWCD Board Meeting, 9:00 a.m.