

http://www

Grundy County Conservation Update

<http://www.swcd.mo.gov/grundy>

April 2009 – June 2009
Volume 1 Issue 3

Grundy County Soil & Water Conservation District, 3415 Oklahoma Avenue, Trenton, MO 64683
www.swcd.mo.gov/grundy Heather.Keith@swcd.mo.gov Phone 660-359-2006x3 - Fax 660-359-3249

2009 Cooperator of the Year

By HeatherK

Hats off to our 2009 Cooperators of the Year

Lyndell and Janice Clevenger of Laredo!

INSIDE THIS ISSUE

- 1 Cooperator of the Year
- 1 Board Election Results
- 2 2009 Poster Contest
- 3 Area Mapping of County
- 4 Cost-Share Report
- 5 2009 Stewardship Week
- 5 Soil Series by Encarta
- 6 Soil Series Cont.
- 7 Kid's Corner
- 8 Annual Customer
Appreciation Day Pics
- 9 Designer Placemat Pics
- 10 Equipment Update



Photo Courtesy of Diane Lowrey - Trenton Republican Times

Please see *2009 Cooperator of the Year* on page 2

Board Election Results

By HeatherK

The Landowners in Grundy County have spoken...

Mike Trump and Kendall Foster have been re-elected to serve 4 more years on the Grundy County Board of Supervisors.

The Soil & Water Conservation District Board of Supervisors are composed of 5 members. Of these members, 4 are elected by Grundy County Landowners to serve a term of 4 years. The 5th member is appointed, currently the MU Extension employee.

Grundy County is divided into 4 areas. Please see the map on page 3 for clarification of areas.

***"Thanks to Diane Lowrey
Republican Times for the
great pic!"***

Please see *Board Election Results* on page 3



"The excitement for this year's theme is remarkable!"

2009 Poster Contest

By Marggie & HeatherK

The excitement for this year's theme is remarkable! Students as well as teachers appear ready for **Dig It! The Secrets of Soil**. This year the rules have given room for exceptional talent and creative minds to work marvels.

In February Marggie and I visited area schools to give poster contest presentations and materials. We have supplied this information to S.M. Rissler Elementary, Trenton Middle School, Spickard R-2, Laredo R-7, Pleasant View R-6 and Grundy R-5. The poster contest reaches students in Grades 4-6. Between all of these schools we had approximately 362 students who can participate.

We are looking forward to a high number of completed posters from all area schools.

Information about the 2009 Poster Contest can be found at our website www.swcd.mo.gov/grundy - choose the Local Projects Link-2009 Poster Contest.

Would it be good to know how your poster is judged? Absolutely...and here is the secret:

1. **Conservation Message - 50%**
2. **Visual Effectiveness - 30%**
3. **Originality - 10%**
4. **Universal Appeal - 10%**

Please see *2009 Poster Contest* on page 4

2009 Cooperator of the Year from page 1

Lyndell and Janice Clevenger have been involved in farming for approximately 20 years. The farming was part-time until they sold their heating and air-conditioning business at Chillicothe in 2000. At that time, they purchased a farm east of Laredo where they presently live. Since then they have operated as a full-time operation. They now own approximately 1000 acres and raise wheat and soybeans on 850 acres of cropland no-till and minimum tillage operation.

They have been fortunate to be able to participate in some of the conservation programs to build 75,250 feet of terraces, one diversion and five basins, one of which is the largest constructed in Grundy County.

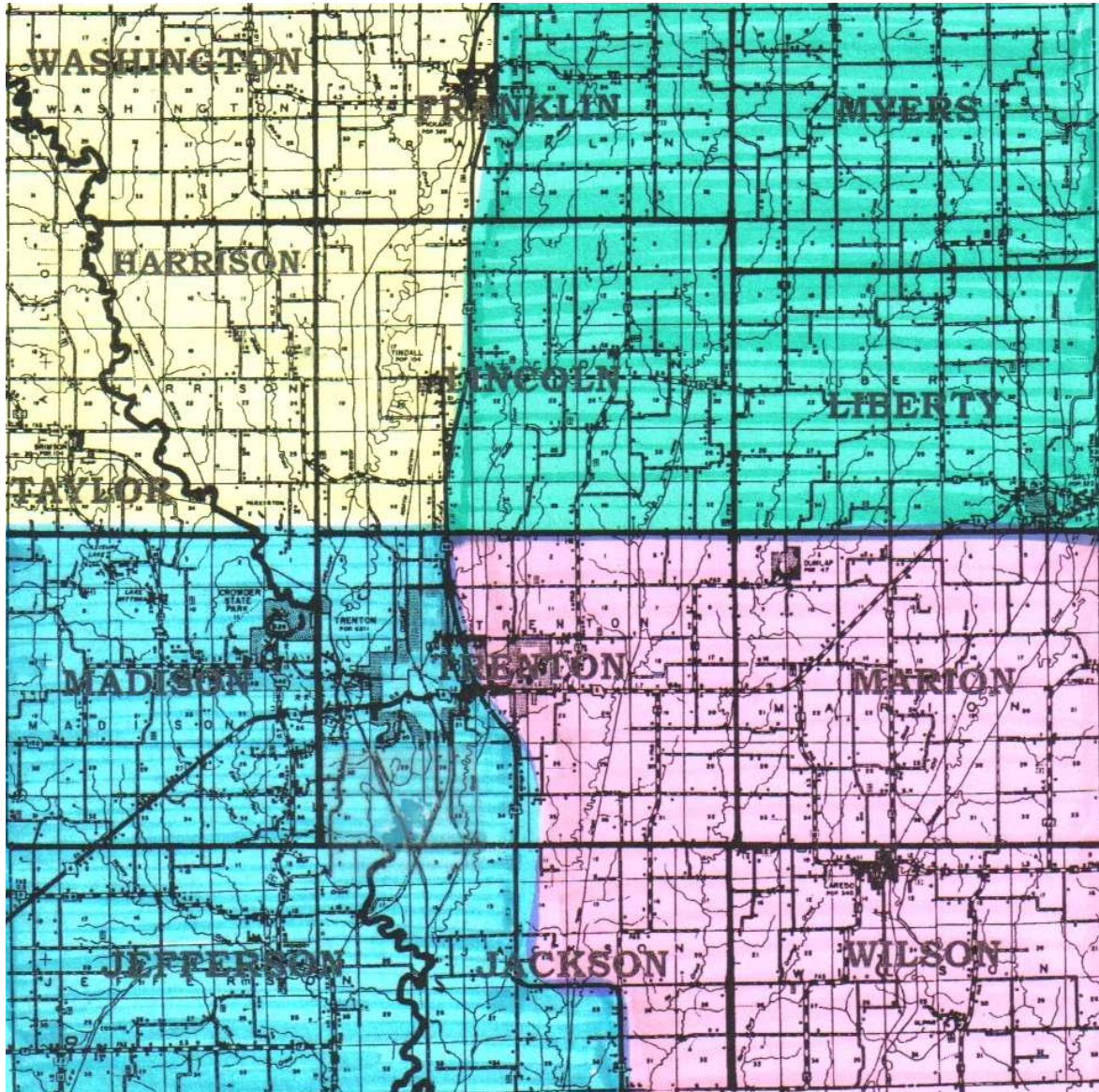
Board Election Results from page 1

Area I

Paul Johnson

Area II

Mike Trump



Area IV

John Rice

Area III

Kendall Foster

2009 Poster Contest from page 2

I would like to take this time to congratulate our County Winners for the 2008 Poster Contest. The theme was **Water is Life**.

4th Grade - Daryian Otto

5th Grade - Sheridan Jamvold

6th Grade - Madison Trump

The Conservation Poster Contest is designed to encourage young minds to take part in soil and

water conservation. Conservation themes, materials and presentations help our youth create conservation savvy to protect the environment and save land from soil loss and water contamination.

“When the land does well for its owner, and the owner does well by his land - when both end up better by reason of their partnership - then we have conservation.” - Aldo Leopold

Cost-Share Report for Year 2009

By HeatherK

Fiscal Year 2009 is coming to a close. We still have cost share monies available to landowners. Currently we have \$66,163.15 unobligated funds.

The FY2009 Cost-Share Report as of 3/26/09

REGULAR COST-SHARE ALLOCATIONS/PRACTICES		
PRACTICE TYPE	# OF PRACTICES	\$'S OBLIGATED TO DATE
VEGETATIVE COVER	2	\$ 12,357.20
TERRACE SYSTEMS	8	\$ 100,598.70
GRAZING SYSTEMS	0	\$ -
PONDS	5	\$ 42,559.94
BASINS	6	\$ 21,046.21
SOD WATERWAYS	3	\$ 9,836.40
USE EXCLUSION	0	\$ -
STREAM PROTECTION	0	\$ -
TOTAL \$'S OBLIGATED TO DATE		\$ 186,398.45
Report Obligated		\$ 186,398.45
MoSWIMS Allocation		\$ 252,561.60
Unobligated Funds		\$ 66,163.15

2009 Stewardship Week

By *Marggie Scott*

Soil Stewardship Week 2009 is April 26th to May 3rd

It is the first act of service that God directed of Adam in Genesis 2:15, "The Lord God took the man and put him in the Garden of Eden to work it and take care of it."

The Stewardship concept involves personal and social responsibility, including a duty to learn about and improve natural resources as we use them wisely, leaving a rich legacy for future generations. It is the individual's responsibility to manage his life and property with proper regard to the rights of others. Stewardship is essentially a synonym for conservation. Stewardship Week helps remind all of us of the power of each person to conserve natural resources and improve the world. When people work together with their local conservation district, that power grows and grows. As these good deeds multiply across the nation's network of conservation districts, the results are spectacular. Fertile soil and clean water provide us with our daily sustenance and effective conservation practices have helped provide us a rich standard of living. Our security depends upon healthy soil and clean water. Stewardship calls for each person to help conserve these precious resources.

"When the land does well for its owner, and the owner does well by his land - when both end up better by reason of their partnership - then we have conservation. - Aldo Leopold.

Soil Series by Encarta.msn.com

Composition of Soils

Soils comprise a mixture of inorganic and organic components: minerals, air, water, and plant and animal material. Mineral and organic particles generally compose roughly 50 percent of a soil's volume. The other 50 percent consists of pores—open areas of various shapes and sizes. Networks of pores hold water within the soil and also provide a means of water transport. Oxygen and other gases move through pore spaces in soil. Pores also serve as passageways for small animals and provide room for the growth of plant roots.

Inorganic Material

The mineral component of soil is made up of an arrangement of particles that are less than 2.0 mm (0.08in) in diameter. Soil scientists divide soil particles, also known as soil separates, into three main size groups: sand, silt, and clay. According to the classification scheme used by the [United States Department of Agriculture](http://www.nrcs.usda.gov/technical/soils/USDA_NRCS_Soil_Taxonomy.pdf) (USDA), the size designations are: sand, 0.05 to 2.00 mm (0.002 to 0.08 in); silt 0.002 to 0.05 mm (0.00008 to 0.002 in); and clay, less than 0.002 mm (0.00008 in). Depending upon the rock materials from which they were derived, these assorted mineral particles ultimately release the chemicals on which plants depend for

survival, such as potassium, calcium, magnesium, phosphorus, sulfur, iron, and manganese.

Organic Material

Organic materials constitute another essential component of soils. Some of this material comes from the residue of plants—for example, the remains of plant roots deep within the soil, or materials that fall on the ground, such as leaves on a forest floor. These materials become part of a cycle of decomposition and decay, a cycle that provides important nutrients to the soil. In general, soil fertility depends on a high content of organic materials.

Even a small area of soil holds a universe of living things, ranging in size from the fairly large to the microscopic: earthworms, mites, millipedes, centipedes, grubs, termites, lice, springtails, and more. And even a gram of soil might contain as many as a billion microbes—bacteria and fungi too small to be seen with the naked eye. All these living things form a complex chain: Larger creatures eat organic debris and excrete waste into the soil, predators consume living prey, and microbes feed on the bodies of dead animals. Bacteria and fungi, in particular, digest the complex organic compounds that make up living

matter and reduce them to simpler compounds that plants can use for food. A typical example of bacterial action is the formation of [ammonia](#) from animal and vegetable proteins. Other bacteria oxidize the ammonia to form nitrogen compounds called nitrites, and still other bacteria act on the nitrites to form nitrates, another type of nitrogen compound that can be used by plants. Some types of bacteria are able to fix, or extract nitrogen directly from the air and make it available in the soil.

Ultimately, the decay of plant and animal material results in the formation of a dark-colored organic matter known as [humus](#). Humus, unlike plant residues, is generally resistant to further decomposition.

Water

Soil scientists also characterize soils according to how effectively they retain and transport water. Once water enters the soil from [rain](#) or [irrigation](#), gravity comes into play, causing water to trickle downward. Water is also taken up in great quantities by the roots of plants. Plants use anywhere from 200 to 1,000 kg (440 to 2,200 lb) of water in the formation of 1 kg (2.2 lb) of dry matter.

Soils differ in their capacity to retain moisture against the pull exerted by gravity and by plant roots. Coarse soils, such as those consisting of mostly of sand, tend to hold less water than do soils with finer textures, such as those with a greater proportion of clays.

Water also moves through soil pores independently of gravity. This movement can occur via [capillary action](#), in which water molecules move because they are more attracted to the pore walls than to one another. Such movement tends to occur from wetter to drier areas of the soil. The movement from soil to plant roots can also depend on how tightly water molecules are bound to soil particles. The attraction of water molecules to each other is an example of [cohesion](#). The attraction of water molecules to other materials, such as soil or plant roots, is a type of [adhesion](#). These effects, which determine the so-called matric potential

of the soil, depend largely on the size and arrangement of the soil particles. Another factor that can affect water movement is referred to as the osmotic potential. The osmotic potential hinges on the amount of dissolved salts in the soil. Soils high in soluble salt tend to reduce uptake of water by plant roots and seeds. The sum of the matric and osmotic potentials is called the total water potential.

In soil, water carries out the essential function of bringing mineral nutrients to plants. But the balance between water and air in the soil can be delicate. An overabundance of water will saturate the soil and fill pore spaces needed for the transport of oxygen. The resulting oxygen deficiency can kill plants. Fertile soils permit an exchange between plants and the atmosphere, as oxygen diffuses into the soil and is used by roots for respiration. In turn, the resulting carbon dioxide diffuses through pore spaces and returns to the atmosphere. This exchange is most efficient in soils with a high degree of porosity. For farmers, gardeners, landscapers, and others with a professional interest in soil health, the process of aeration—making holes in the soil surface to permit the exchange of air—is a crucial activity. The burrowing of earthworms and other soil inhabitants provides a natural and beneficial form of aeration.

Next Newsletter the Soil Series

continues with
Soil Formation
Parent Material
Climate
Living Organisms
Topography
Time
Horizons

Kid's Corner – Fun Food Facts

Why do fresh apples float? Fresh apples float because 25% (or $\frac{1}{4}$) of their volume is air.

Did you know there are over 40,000 varieties of rice grown worldwide? Rice has been produced in the United States for more than 300 years. The major rice-producing states are Arkansas, California, Louisiana, Texas, Mississippi, and Missouri. In the winter the flooded rice fields provide safe places for migrating birds, ducks and other animals.

Not all carrots are orange? The first carrots originated some 5,000 years ago and were white, purple, red, yellow, green and black. The orange carrots we find in the supermarket come from a variety bred in the 1700's by the Dutch. **And did you also know** that three carrots give you enough energy to walk three miles...if cows eat too many carrots their milk tastes bitter.... all brides should be given carrots because it supposedly brings luck in the kitchen.

This excerpt was found at http://content.fsa.usda.gov/fsakids/food_facts.htm

Kid's Corner – Recipe

Unicorn Calzones

- 1 - 8 count can of croissant rolls
- 4 Tbsp butter - softened
- 16 - pieces of lunchmeat of your choice
- 2 - string cheese sticks

Separate the croissant rolls and lightly flour each side. Spread $\frac{1}{2}$ teaspoon of butter on each croissant. Top with 2 pieces of lunchmeat. Separate the string cheese into 4 pieces from each stick. Put 1 piece of string cheese at the long side of the dough and roll up. Top with a sprinkle of poppy seeds. Place on a cookie sheet 2 inches apart and bake for 11-15 minutes at 375° until golden brown. These are perfect for a snack with friends at a sleepover!

Submitted by RyLee Stover - Age 10



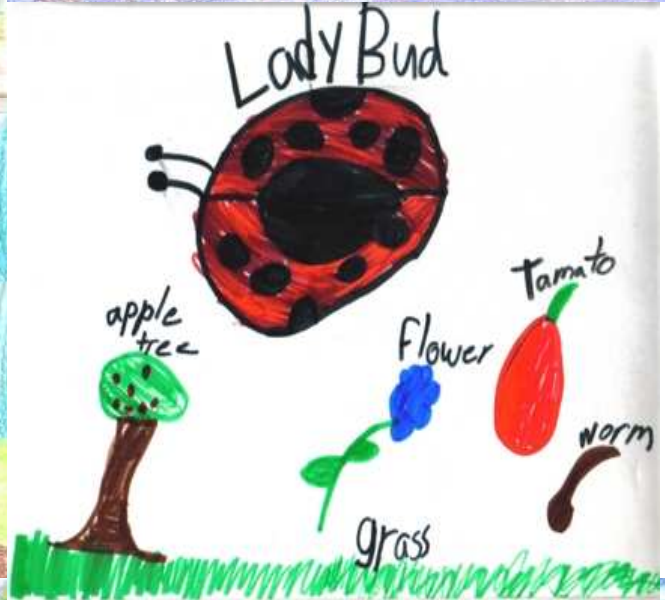
Share your recipes!

e-mail recipes to
Heather.Keith@swcd.mo.gov
please include your name!

Grundy County SWCD 6th Annual Customer Appreciation Day Pics



Area 2nd Grade Students design placemats for SWCD
6th Annual Customer Appreciation Day



Equipment Inventory Update

By Kevin Stover

Spring is upon us and The Grundy County SWCD has added an important tool to our rental equipment fleet. We are proud to announce that we now have for rent a 110 horsepower Front Wheel Assist tractor to help with your conservation and agricultural needs. Our *new* John Deere 7230 tractor is equipped with either 540 or 1000 rpm power take off and triple hydraulics to tackle almost any need that our other rental machinery or your job might entail. Rent on the tractor is \$20.00 per hour with a \$100/day minimum plus deposit.

Don't forget we also have a Great Plains 12' No-Till Drill, Vermeer Big Bale Mulcher, Rhino 15' Rotor Cutter, Toreq 6 yard Scraper, 24' Krause Cultipacker, 24' Ogden Pasture Harrow, Plot Master Planter, Root Plow, and a Bush Hog 80" Rotary Tiller for rent to assist you. Additionally The Grundy County SWCD has Controlled Burn Equipment, Survey Equipment, and an electric seeder for rent. Come by our office and reserve the equipment that fits your needs today.

Mission Statement

The purpose of the Grundy County Soil and Water Conservation District (SWCD) is to construct and carry out a complete soil and water conservation program on all lands within Grundy County, Missouri. The district supervisors will work with all individuals, organizations and agencies interested in saving, maintaining and improving soil and water resources within the district.

2009 Upcoming Events

Holiday Closings

May 2009
 25th - Memorial Day




SWCD Board Meetings

April 20th - 9:00 am
 May 18th - 9:00 am
 June 15th - 9:00 am

Board Meetings are held at the
 USDA Service Center
 3415 Oklahoma Avenue

All meetings are open to the public with the exception of executive sessions. If you wish to be on the agenda please notify the District prior to the meeting.

Happy Holidays to you from the Staff!


Grundy County SWCD
 3415 Oklahoma Avenue
 Trenton, MO 64683
 660-359-2006 x3

Fax:
 660-359-3249

E-mail:
<mailto:Heather.Keith@swcd.mo.gov>

If you would like to be removed from our mailing list please mail this page to:

**Grundy Co. SWCD
Attn: Heather
3415 Oklahoma Ave
Trenton, Mo 64683
660-359-2006 x3**

Or e-mail heather.keith@swcd.mo.gov

<input type="checkbox"/>	Please remove from mailing list
<input type="checkbox"/>	E-mail Newsletter:

Grundy County SWCD
3415 Oklahoma Avenue
Trenton, Mo 64683

