St. Joseph County Soil & Water Conservation District

CONSERVATION KALEIDOSCOPE

Today's Visions for Tomorrow's Future

Jul/Aug/Sep 2007 | 5605 U.S. 31 South, Suite 4 *South Bend, IN* | Telephone (574) 291-7444 Ext.3 | Editor: Troy Manges
Volume 9, Issue 3 | Website: stjoseph.iaswcd.org | Fax (574) 291-0284 | Tonia Albright

Calendar of Events

July 4
Independence Day
Office Closed

July 16
SWCD Monthly Board Meeting
7:00 PM - Farm Bureau Mtg. Room

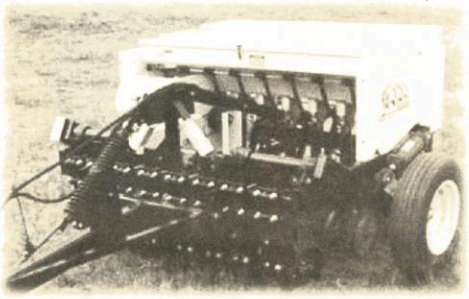
July 30
St. Joseph County 4-H Fair Begins

August 20
SWCD Monthly Board Meeting
7:00 PM - Farm Bureau Mtg. Room

September 3
Labor Day
Office Closed

September 17
SWCD Monthly Board Meeting
7:00 AM - Farm Bureau Mtg. Room

Plan Now For Your Fall Planting with the Truax Warm Season Grass Drill



The Warm Season Grass Drill, owned in partnership by the St. Joseph County SWCD and Elkhart County SWCD, is available for your fall planting needs.

If you're interested in using the drill this fall, please call the office and ask for Troy.

FORESTRY FIELD DAY

Watch for forthcoming information regarding the Forestry Field Day to be held this fall in St. Joseph County.

The Field Day is sponsored by the following agencies:

Elkhart County SWCD
Kosciusko County SWCD
St. Joseph County SWCD

What's Inside . . .

The Natural Educator 2
Woodland Times 3
Field Notes 4,5
Urban Meanderings 6,7

It Ain't Dirt;
It's SOIL!

I have been saying this to the young people of our county for 17 years now, so I guess it time to let the adults in on the secret.

SOIL is alive. The next time you are outdoors, reach down and pick up a little bit of soil and place it in the palm of your hand. Look carefully at your soil. Does it have different colors in it? What does it smell like? Do you see any kinds of life? No? Well, actually you are holding up to 6 million living organisms in your hand such as bacteria, protozoa, fungi and so much more. The soil is truly alive. Try this at different places today and you will begin to see how different soil can be.

In St. Joseph County, Indiana, we have over 100 different soil types, and over 7,000 different types world wide.

Dirt, that is just stuff that we clean up.

Soil, that is the skin of our planet. It is different, it is alive, and without it we do not exist. So please, never call it dirt again. That is just rude and disrespectful.

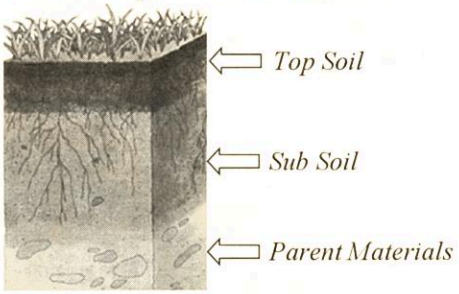
Some Soil Facts

The Soil Profile

Have you ever dug a hole and noticed that the soil changed colors and texture the deeper you dug. This is because there are three distinct layers of soil.

Parent Materials: The parent material is found from 30 inches up to 200 feet. This material was brought to us by the glaciers, and over time it was physically and chemically broken down (or should we say weathered) into smaller pieces called, sub soil.

Sub Soil: The sub soil is found between 10 inches and 30 inches. This layer continues to be broken down into smaller pieces and it begins to support plant life. Plants do an amazing thing and can produce their own food. When plants die, they are broken down and the nutrients are released into the soil, which creates the top layer called, top soil. The more plants, the more top soil, and the more top soil the more plants.



Top Soil: Around here the top soil averages about 10 inches deep. This is the layer that we need to protect. Without the top soil we can not grow the plants that we need for food.

How do we get over 100 different types of soil? Simply stated, from the size of the soil particle. Soil is basically made up of three different size particles:

- Clay: 0002 mm or smaller
- Silt: .002mm to .02 mm
- Sand: .02mm or larger

While you can have a pure sand, clay or silt soil, most of our soils are a combination of all three and are called loams:

- **Clay Loam** - Some sand, some silt and the majority is clay
- **Sandy Loam** - Some clay, some silt and the majority is sand

Each type of soil can be great for some things and not so great for other things.

Some examples would be:

1. **Clay soil** - not a great place for building basements or septic tanks.
2. **Sandy soil** - good for basements but still may not be the best place for a septic system.

The bottom line is that most of us never think about the soil, but we should. Without the soil, we do not exist. Maybe next time you are outside, do what I tell the kids to do, "give the soil a big hug and say thank you."

Come Join Us At The
St. Joseph County 4-H Fair
July 30th until August 4th

The St. Joseph County SWCD and many of our local environmental organizations will again be located in the Nature Center Building. The building is located in the back of the nature area.

Last year we held a free casting contest for the kids. The contest was a a hit with the kids and we have decided to once again hold the casting contest.

Check the fair schedule for dates and times. Prizes will be awarded to all participants.

WOODLAND TIMES

Forestry News Updates for St. Joseph County

21st Annual Tree Sales Program A Success!

The St. Joseph County Soil and Water Conservation District would like to thank everyone for their help and support for the 2006 – 2007 Tree Sales Program. The 21st Annual Tree Sales Program started in October, 2006, and ended April 14, 2007, at the St Joseph County 4-H Fairgrounds. We are proud to announce that this year we sold 23,925 trees. The Tree Sales Program has been very successful over the past twenty one years due to the outstanding conservation attitude of the community and the hard work of volunteers. Our thanks go out to Randy Matthys and Family, Master Gardeners from St. Joseph County, St. Joseph County Parks, Purdue Cooperative Extension Service, Ryder Truck Rental and Leasing, Indiana Department of Natural Resources, Natural Resources Conservation Service, St. Joseph County 4-H Fairgrounds, John Manuszak and the Mishawaka High School Waltonian Club, and John Glenn FFA.

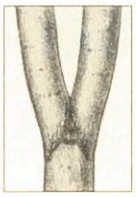
Customers purchasing trees at the Saturday sale.

A customer with their pre-ordered trees.

We would also like to remind everyone that we will be sending out the 2007 - 2008 Tree Sales Program Order Forms in October. If you would like to have your name added to the mailing list please give us a call at (574) 291-7444 ext. 3. The order form will be available online in October at our website at: (www.stjoseph.iaswcd.org). Click on the Tree Sales tab on the left and it will take you to the tree sales page where there will be a link to the order form.

Managing Tree Defects

•**Prevent Personal Injury and Property Damage:** Trees are key to the enjoyment of your backyard woods. Structurally defective trees, however, can fail and cause personal injury and property damage. A tree with structural defects that are likely to cause failure is considered a "high risk or hazardous tree" if it could strike a target. A target can be a vehicle, building, or a place where people gather such as a bench, picnic table, trail, or fire pit.



Weak branch union

A weak branch union caused this tree to split

To ensure your family and friends have a safe environment in which to enjoy the beauty and many benefits of your backyard woods, you can learn to recognize hazardous defects in trees and take corrective actions. At the same time you can increase wildlife habitat, aesthetic value, and recreational opportunities within your backyard woods.

•**Inspecting Trees:** Trees that are in high use areas and within striking distance of a target, should be inspected every year and after severe storms. This usually includes all trees within your immediate backyard, along trails, near picnic areas or firepits, or campsites within your backyard woods. These inspections will allow you to detect defects and correct them before they pose significant risks to personal safety and property. Tree inspections can be done at any time of year, with or without leaves present. Inspect trees carefully and systematically. Examine all parts of the tree, including the roots, root or trunk flare, main stem branches, and branch unions. Be sure to examine all sides of the tree. Use binoculars to see high branches. Consider the following tree factors: tree condition, tree species and tree age and size.

•**Defects to Look For:** High risk defects are visible signs that a tree is failing. Look for these seven main types of tree defects: dead wood, cracks, weak branch unions, decay, cankers, root problems, and poor tree form. Remember: a tree with defects is not hazardous unless some portion of it is within striking distance of a target.

•**Corrective Actions:** Corrective actions begin with a thorough evaluation. If a high risk situation exists, there are four recommended options for correcting the problem: move the target, prune the tree, convert the tree to a wildlife tree, or remove the tree.

Evaluating and treating high risk trees can be a complicated process, requiring a certain level of knowledge and expertise. A professional forester or arborist should undertake many of the suggested corrective actions. When in doubt about how much risk a defective tree poses, or how to best treat it, consult a professional forester or arborist.

(The above information was taken from the Backyard Woods bring your vision to life: Identify and Manage Hazardous Defects in Your Tree. Assembled by the USDA Forest Service, National Association of Conservation Districts and the National Arbor Day Foundation.)

A cracked and weakened tree due to winds from a storm.

Tree Canker

FARM BILL PROPOSAL HITS THE MARK

2007 Farm Bill

INDIANAPOLIS, April 3, 2007 - In August, 2005, USDA held a Farm Bill listening session at the Indiana State Fairgrounds on Farmers' Day. Evidently, USDA officials were listening to what Indiana farmers had to say.

Last month when USDA Secretary Mike Johanns released his proposal for the 2007 Farm Bill, he hit the mark for most of the comments that farmers made at the listening session. "We reviewed the proposal," says Jane Hardisty, State Conservationist for USDA's Natural Resources Conservation Service. "Indiana farmers asked for several specific things that came through in the proposal, including more resources for beginning or socially disadvantaged farmers, help for fruit and vegetable growers, and initiatives to promote bio-energy production from the farm."

"One of the other areas farmers focused on specifically was the Conservation Title," says Hardisty. "Over and over we heard support voiced for current conservation programs, and the financial support for conservation that has come through the 2002 Farm Bill. These were requests to simplify conservation programs, which is addressed in USDA's 2007 proposal. There was strong support for the new Conservation Security Program, and requests to expand and fully fund it. The proposal recommends moving that direction. Support for a fully funded Conservation Technical Assistance Program was the most common thread in the Conservation Title. There was no specific line item for that in the proposal, but it will likely be an issue in budget considerations in the coming weeks and months."

The U.S. Senate and the House of Representatives have both reacted positively to the administration's proposal and the agriculture committees are working on their versions of the Farm Bill now. This USDA proposal is setting the tone for their discussions, and it is likely that key changes farmers asked for will be written into the Farm Bill, which is due later this year.

INFORMATION FOR SMALL SCALE FARMERS ON WEB

INDIANAPOLIS, November 14, 2006 - The Natural Resources Conservation Service (NRCS) has developed online assistance for Indiana farmers. On the NRCS Indiana web site at; http://www.in.nrcs.usda.gov, just click on "Information for Farmers and Ranchers." This will take farmers to a page of resources to view and print.

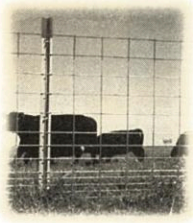
New to the page is a link to information sheets for small scale farmers. These tools emphasize low cost, simple and practical conservation practices for any size farm. They consider the technology and planning methods of small operations.

Stream Crossing

The "small scale solutions for your farm" fact sheets that are already online include:

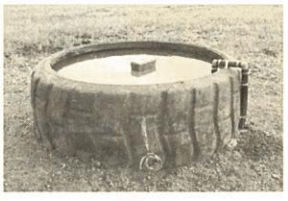
- Fence
- Manage your Pasture
- Rotations for Livestock
- Rotations for Soil Fertility
- Soil Testing
- Spring Development
- Stream Crossing
- Water Facility

Watch for more fact sheets that are being developed now and will be posted soon.



Fencing for Livestock

Watering Facility



Spring Development

NEW NRCS SOIL CONSERVATIONIST

Hello. My name is Rafael Vega, and I am the NRCS Soil Conservationist for St. Joseph County. Last summer I was here as a student trainee with NRCS, and am returning as a full time NRCS employee. I officially began my NRCS career this past March.

This past December, I completed the Masters program and earned my Masters Degree in Environmental Science: Water Resources and Unit Operations from the Interamerican University of Puerto Rico. My thesis research project was approved which consisted of conducting a vegetation index to study the behavior of the electromagnetic energy in the mangroves of Laguna Joyuda, Cabo Rojo Puerto Rico. I have also assisted with other researches in coastal mapping, tropical crops management and the study of nutrients in tropical river basins.

I was born in Puerto Rico, which is in the Caribbean Sea, but I already feel like an adopted Hoosier. When I arrived in Indiana for the first time in 2004, I really loved the opportunity I was given to see the farming operations in this state. I am interested in intensive grazing operations and organic farming. I am also interested in the biological and ecological relationships between conservative farming and wildlife habitat creation.

One reason I applied for this job was because of the opportunity to assist landowners with something I strongly believe in and enjoy promoting, which is the belief in conserving our natural resources for future generations.

As we say in my home town in Puerto Rico: "estoy a sus ordenes," which translates in English to, "I'm at your service, thank you for receiving me and I look forward to meeting you all.

DID YOU MISS THE SPRING SEEDING DATES?

If you missed the Spring Seeding dates for the Cool Season Grasses and Legumes, there is another opportunity available in late summer. There is still time for seeding a grassed waterway, filter strips, firebreaks, or pasture/hay planting yet this year. If you needed to plant Warm Season Grasses and Forbs, you will need to wait until next spring. Below is a table that lists the seeding dates in Indiana. These dates are based on NRCS Standards and Specifications. Many years of research and field studies have been conducted to which dates work best for the different seed mixes.

Species/Mix	Indiana Seeding Dates
Cool Season Grasses	3/1 - 5/15 or 8/1 – 9/15
Legumes	3/1 – 5/15 or 8/1 – 9/15
Warm Season Grasses	4/1 – 6/15
Forbs	4/1 – 6/15

Seeding Dates:

If you are enrolled in any of the USDA programs as CRP, EQIP, WRP, or WHIP, you will need to plant your seed mixes within the required seeding dates. Planting within this date range allows for the provision of the cost share available through each of the programs. If you seed outside of the seeding dates and the stand does not meet the required 70% cover, you will be required to re-seed during the appropriate dates at your own expense. If you have any questions regarding seeding dates feel free to contact our office at:

(574) 291-7444 ext. 3.

No-Till Warm Season Grass Drill Available

Are you planning on planting some warm season grasses (WSG) for wildlife habitat or interseeding a pasture or hay field next year? The St. Joseph County SWCD has a No-Till Warm Season Grass Drill (WSG) available for use. If you plant a wildlife habitat, there is a $25 user fee. If you plant hay or pasture, there is a $50 user fee, plus for every acre above 5 acres you plant there is a $5/ acre fee.

The drill has a 6 foot planting width and 3 seed boxes for planting a variety of seed. The front box is used to plant small seeds such as wildflowers, clovers and alfalfa. The middle box is used to plant WSG or prairie grasses such as Little Bluestem and Indiangrass. The back box is used to plant cool season grasses such as Orchardgrass, Timothy and Ryegrass or food plot seed such as Sunflowers and Sorghum.

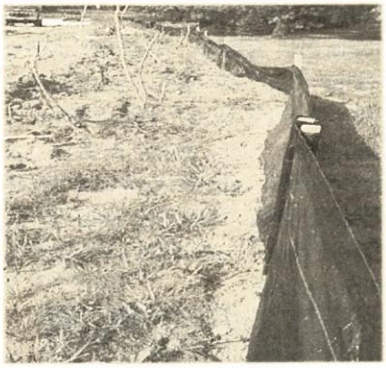
You will need a tractor that has a minimum horsepower rating of 50 to pull the drill. The tractor also needs to have a place to hook up 2 hydraulic hoses to raise and lower the drill.

If you are interested in scheduling the WSG drill to use this fall or next spring, or have other questions, please give us a call.

SILT FENCING: THE GOOD, THE BAD, & THE UGLY

During the past four months of my employment with the St. Joseph County SWCD, I have discovered that the most popular sediment control device on active sites in St. Joseph County is silt fence (a.k.a. sediment fence, filter fabric, geotextile fabric, etc.). I understand the appeal of silt fence, as it is affordable and quick to install. But even with such great popularity among contractors and developers, silt fencing is also probably the least understood and most often improperly installed device on construction sites. Many times, improper installation results in failure of the device, which has given the product a bad reputation. Let's set the record straight about silt fencing – a very effective sediment barrier when properly placed and installed.

The Function of Silt Fence



Contrary to popular belief, silt fence is not intended to filter sediment from storm water by capturing particles as water passes through the material. Instead, silt fencing works by slowing storm water, causing it to pool, which forces sediment to drop out of suspension before water is slowly released through the material. Silt fence is most effective in sheet flow areas, and while silt fencing has been observed to withstand concentrated flow, it can just as easily fail under concentrated flow conditions. As most site inspectors would agree, the risk of failure in concentrated flow areas is not worth taking.

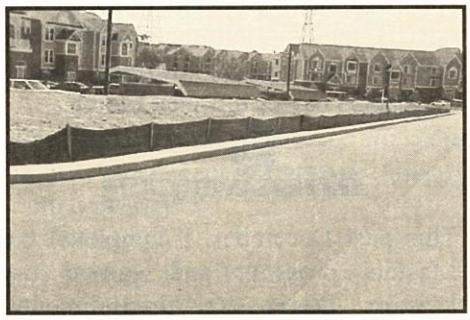
Silt fencing in this concentrated flow area (not recommended) is forcing water to pond, causing sediment to settle out. The force of the flow has eroded under the silt fence, however.

Understanding the function and limitations of silt fence is key to understanding the appropriate placement and installation of the device.

Placement & Installation

Because silt fence causes water to pool behind it, logic suggests that silt fence should be placed at the bottom of a slope so as to achieve the greatest pooling potential. According to specifications provided in the *Indiana Handbook for Erosion Control in Developing Areas*, circa 1993 (Yes, we are still anxiously awaiting the completion of the new Storm Water Quality Manual from IDEM), silt fence should be placed approximately ten feet from the toe of a given slope to allow a "broad, shallow sediment pool." We realize that on most construction sites, curbs and other paved surfaces make it impossible to place the silt fence this far down from the toe of the slope. In these environments, placing the silt fence just behind the curb, or as far down slope as possible, will provide an adequate area for storm water to pool.

However, if silt fencing cannot be placed directly behind the curb – whether due to utilities that are too close to the curb and risk being damaged by trenching activities, or simply because a trencher cannot be run this close to the curb and nobody is available to hand-dig the trenches - it may be necessary to pursue another type of sediment barrier or erosion control measure.

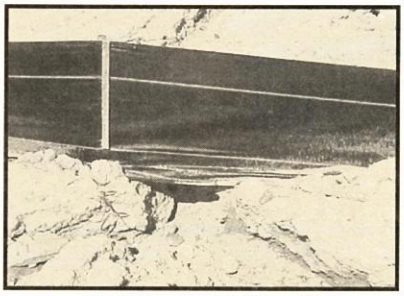


Silt fence is placed just behind the curb to keep sediment from washing onto road surfaces.

In order to ensure that silt fencing effectively slows water, it needs to be installed so that storm water is unable to bypass the barrier. Thus, it is recommended that silt fencing be installed on the contour of the land, with its ends hooked or curved upslope. These hooks, called J-hooks, trap ponding water, disallowing it to flow around the ends of the fence. Failure to properly trap sheet flow limits the ability of silt fencing to control loose sediment. In the same way, inadequate trenching and backfilling can create the same ineffectiveness.

Silt fencing must be properly trenched into the soil in order to prevent water from flowing under the fence. As a general rule of thumb, silt fencing should be buried in a trench of at least 8 to 12 inches in depth. The trench should be backfilled such that the soil around the base of the silt fence is

compacted. This way, storm water flow is unable to "dig" under the fence.



The force of storm water is able to erode under a silt fence if the trench is not deep enough, or if soil is not compacted around the fence.

Posts on which the silt fabric is fastened should be staked into the ground at a depth no less than 12 inches. Spacing of the silt fence posts is also a great influence on the effectiveness of the silt fence, as they provide support against the force of water flow. Posts should be spaced a maximum of 8 feet apart. In areas receiving high flow velocity, the spacing of the posts should be decreased accordingly, in order to provide the extra support. Finally, silt fence should be positioned so that the flow of water pushes the fabric onto the posts; or, alternatively, the force of water should never threaten to tear the fabric off of its support posts.

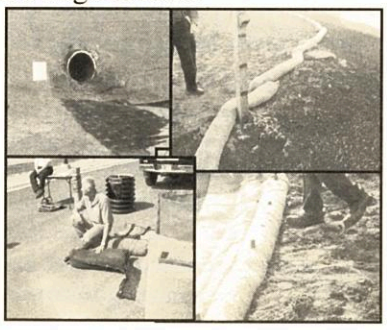
Final Thoughts

If you are considering silt fencing on a construction site, remember that there are several items of consideration. Keep in mind that there are other options available to keep sediment in check on a construction site if proper installation of silt fence cannot be achieved. Other types of perimeter protection include straw wattles, filter strips, and straw bales, just to name a few. Proper erosion control practices can eliminate the need for sediment control devices all together. Whatever options you choose, make sure that some effort is put forth to research the selected erosion and sediment control measure so that it is properly installed and working effectively.

MS4 EDUCATION: BMP WORKSHOP AT TOSCANA PARK

Tour guides for the Toscana Park field day get acquainted with guests who await the start of the workshop.

On Thursday, May 10, the St. Joseph County Soil & Water Conservation District, in conjunction with St. Joseph County, the City of South Bend, the City of Mishawaka, the Town of Roseland, the Town of Osceola, Ivy Tech Community College, Bethel College, the Michiana Area Council of Governments, and the St. Joseph County River Basin Commission hosted our first hands-on, outdoor erosion and sediment control product demonstration workshop. With a total of 78 attendees and warm, sunny skies, it is no surprise that the event was a huge success.



Scour Stop, Filter Soxx, straw wattles, and Dandy Bags were a few items discussed at our Spring 2007 BMP workshop.

The workshop at Toscana Park showcased different methods of perimeter protection, inlet protection, bank stabilization, construction entrance materials, and an outlet protection alternative. Representatives from four different product vendors, including Hoham, Smith & Co., MulchPlus, Drainage Solutions, and D2 Land & Water Resource, were present for the field day, offering product information and installation guidelines for each of the products showcased.

Representatives from IDEM, Child's Play Organic lawns and Advanced Drainage Systems provide information to guests on Rules 5 & 13, soil properties and drainage products.

In addition, representatives from Child's Play Organic Lawns, Advanced Drainage Systems, and IDEM were present to discuss the importance of soil chemistry to vegetation establishment, types of drainage networks and storm drain materials, and also compliance with Rules 5 and 13 on construction sites.

Many thanks go out to each of the persons involved in making the day such a wonderful experience! We look forward to planning and hosting similar events in the future, so please keep your eyes and ears open for registration information.

St. Joseph County Soil and Water
Conservation District
5605 U.S. 31 South, Suite 4
South Bend, IN 46614

St. Joseph County Soil And Water

Supervisors:
John Dooms, Chairman
Paul Williams III, V-Chairman
Dave Craft, Member
Jan Ivkovich, Member
Carole Riewe, Member

Associate Supervisors:
Jerry Dominiack
John Kulwicki
Melvin Kulwicki
Jim LaFree
Charles Lehman
Joe Long
Randy Matthys
Eugene Myers
Richard Schmidt
Dale Stoner

MISSION

To provide guidance and education to the youth and adults of St. Joseph County and to administer programs to preserve, protect and improve soil, water, air, plant, and animal resources for future generations.

Honorary Members:
Bernard Byrd
Al Gostola
Jerry Knepp
Keith Lineback
William Millar

Office Staff:
Debbie Knepp, NRCS
Rafael Vega, NRCS
Tonia Albright, SWCD
Jenny Davis, SWCD
Rick Glassman, SWCD
Troy Manges, SWCD

Farm Service Agency Staff:
Mike Hoskins, CED
Helene Cannoot
Dee Fox
Cindy Philhower
Denise Trimboli