

## Jennings County Soil & Water Conservation District

2600 N State Highway 7 North Vernon, Indiana 47265-7186

Phone: 812-346-3411 Extension 3

www.jenningsswcd.org Email: info@jenningsswcd.org

2nd Quarter Edition Newsletter June 2013



## 10th Annual Jennings County Antique Ag Show

Jennings County Soil & Water Conservation District will host the 10th Annual Show at the Jennings County Fair Sunday, July 14 to Saturday, July 20, 2013

## 

The tractor display will be located in a new spot at the Jennings County Fairgrounds. Our new space will be located just northeast of the Community Building and just northwest of the Extension Homemakers building next to the main gravel parking lot. Since this will be our first time in this location we ask that you follow the times listed below for check-in and check-out. Check-in time for the display will be on Sunday, July 14 from 2:00 4:00 pm and check-out time for the display will be on Sunday, July 21 beginning at 8:00 am.

The Tractor Parade will be held after the baby pageant on Wednesday, July 17 at approximately 7:45 pm. Please arrive by 7:30 pm to prepare for the parade.

Please contact the office to let us know if you plan to bring any antique ag equipment for the display so that we may plan our space accordingly.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TAR-GET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326 W, Whitten Building, 14th and Independence Avenue, SW, Washington DC 20250-9410 or call (202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

### Dig A Little, Learn A Lot!

Indianapolis, IN, May 9, 2013—As temperatures go UP and the weather begins to feel more Spring-like, it is the perfect time to focus your attention by looking DOWN at the ground. It's time to investigate your SOIL. The newest trend for production agriculture—and conservation farmers—is using cover crops. The new emphasis is to improve the health of their soil.

"It doesn't matter what kind of landowner you are, a small farmer, large farmer, organic grower or even homeowners and gardeners. You can easily examine your soils. Take a quick look and you can learn a lot," says Indiana's Soil Health Specialist Barry Fisher.

The Natural Resources Conservation Service (NRCS) is the federal agency created to protect our nation's natural resources. NRCS' recent push is to "Unlock the Secrets of the Soil." According to Acting State Conservationist Roger Kult, "We are blessed with productive soils in Indiana. NRCS' helps people sustain healthy soils and improve the health of soils that need help."

To investigate your soils level of health, you'll need a few simple tools:

A garden spade or shovel

Your nose

Your eyes

Your hands

**LOOK**—Look for plant residue on the soil surface and a living canopy or cover. The soil structure should look like chocolate cake with air holes permeating throughout. You should see organic matter and live roots that extend way down. And of course, you should see earthworms—our wonderful soil engineers! **SMELL**—Healthy soil should have the aroma of *geosmin*, which is a byproduct of soil microbes called *actinomycetes*. Geosmin has a sweet, earthy aroma like nothing else.

**TOUCH**--Soil should be loose and crumble easily. In healthy soil, roots can grow straight and deep, allowing plants to reach nutrients and water they need to produce the food we love to eat.

Why should we care about soil health? Fisher explains that healthy soil is important for agriculture and our state's ability to feed the nation, but it actually has a direct impact on many larger issues that affect life as we know it.

Soil health can improve and regulate water, sustain plant and animal life, filter potential pollutants, cycle nutrients, and support building and structures. Healthy soils hold more water, which can reduce flooding and help with drought. Healthy soils also resist runoff and erosion; they suppress weeds and pests naturally, and sustain our precious natural resources. Simply put, healthy soils are productive soils and they are important to every one of us. So get out in the field,, grab a spade and dig a little. You can learn a lot! Visit <a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/soils/health/</a>.

#### Contacts:

Roger Kult, Acting State Conservationist (317) 295-5801 (roger.kult@in.usda.gov)

Barry Fisher, State Soil Health Specialist (317) 295-5850 (barry.fisher@in.usda.gov)

Rebecca Fletcher, State Public Affairs Specialist, (317) 295-5825 (rebecca.fletcher@in.usda.gov)

# An Up Close and Personal Look at Soil Health

Six farmers had the opportunity to evaluate the impacts of their conservation efforts recently. On April 8, soil core samples were pulled from farmers' fields in an effort to show the improvements that are being made to the soil by the use of no-till and cover crops. Jenny Vogel, District Conservationist and Dena Marshall, Soil Scientist, both with the Natural Resources Conservation Service (NRCS) and Bob Steiner, Executive Director of the Jennings County Soil & Water Conservation District (SWCD) met with the farmers in their fields and pulled the samples. Cores were pulled and discussion was held in the fields of Gasper Farms, C & D Farms, GT Vogel Farms and Larry Maschino Farms. The results were astounding!

In a field that had been no-tilled for 10 years and planted to cover crops for 3 years, the sample had live roots over 3 feet deep. Other fields that had been no-tilled and planted to cover crops had roots over 4 feet deep. "In drought years, rooting depth is critical. We have to get the roots down to the available water." Vogel stated. In the cores that were pulled there was evidence of roots that followed channels created by old roots, earthworms and even a crawdad tunnel. "Roots are lazy", Marshall said, "They only go as far as they have to for water".

Several of the samples had microorganisms that are critical in improving soil health. Tom Gasper saw in the sample from his field Mycorrhizae, which help extend the reach of roots for nutrients. The sample pulled from Gilbert & Tony Vogel's field had a nematode in it. Nematodes feed on plant roots and other material in the soil. The species of this particular nematode wasn't identified, but not all nematodes are bad. In fact, most are actually beneficial.

In the samples, the soil stability was also demonstrated and discussed. The soils that have been no-tilled and were protected with cover crops were crumbly and easier to break apart than soils that have been conventionally tilled with no cover crops. The roots from the crops not only create channels for water to move through the soil, they improve the structure of the soil allowing it to hold the right amount of water. The soil was not too wet and not too dry. Some of the fields received a quarter of an inch of rain the night before. There wasn't a concern about getting the probe truck stuck as it drove out into the fields to pull the samples, nor were the cores overly saturated.

The concept of planting cover crops isn't anything new. During one of the visits Gilbert Vogel said "I remember Dad planting clover every year and then we would plow it under in the spring." Marshall added "Yes and now we understand the science behind it and how it works." The group agreed that their decision to use no-till when planting their crops in the spring and planting cover crops in the fall is the best practice they can use to improve their soil health. It was proven that day right there in their own fields.



Gilbert Vogel examining roots and root channels from a cereal rye cover crop at Larry Maschino's.



Tillage radishes that over wintered.

Tillage radish remains in Larry Maschino's field.







These two photos show root channels from crimson clover and oats cover crop.





Dave Vogel and Dena Marshall examining the soil core pulled in his field with a crimson clover and oats cover crop.



Roots and root channels from a cereal rye cover crop.



Gilbert Vogel and Dena Marshall examining the soil core pulled in his field with a barley cover crop.



Larry Maschino holding the remains of a tillage radish that he used as a cover crop on his field.



## YOUR JENNINGS COUNTY CONSERVATION TEAM

### **SWCD Staff**

Robert Steiner, Executive Director Kelly Kent, Administrative Assistant Denise Dailey, Rule 5 Consultant NRCS STAFF

Jenny Vogel, District Conservationist

SWCD Supervisors

Brad Ponsler, Chairman
Dan Megel, Vice-Chairman
Jerry St. John
Nathan Burbrink
Matt Branham
Associate Supervisor

Don Biehle Rob McGriff Brian Belding Calendar of Events
May 28, 2013 SWCD Board Meeting
7pm @ USDA Service Center

June 25, 2013 SWCD Board Meeting 7pm @ USDA Service Center

July 14—20, 2013 Jennings County Fair

Check out our website for added events

Jennings County Soil and Water
Conservation District
Office Hours
Monday—Friday
8:00 am until 4:00 pm
Phone (812) 346-3411 ext 3
Fax (812) 346-4237
Website www.jenningsswcd.org
Email info@jenningsswcd.org