

Iowa Current Developments

March 2013



United States Department of Agriculture
Natural Resources Conservation Service

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MARCH IS
WOMEN'S
HISTORY
MONTH!

A Message from the: **State Conservationist**

Meeting the Conservation Challenge



What does it take to be a successful conservation farmer in today's world? Well, let me see: you need to be a scientist, a business manager, an innovator, an educator, and an observer.

I cannot emphasize how much I admire these folks; they truly are the heartbeat of rural America. As I interact with our Iowa conservation leaders I continue to learn the many opportunities to sustain agriculture with conservation practices.

Bob Lynch, of Humboldt County, and Mark Thompson, of Webster County, are longtime strip-till and no-till farmers who share common successes when they talk about their operations. They talk about building the organic matter in their soils, increasing soil infiltration and water holding capacity, reducing unnecessary fuel and fertilizer input costs by reducing tillage operations and placing fertilizer where it is readily accessible to the plant and not susceptible to runoff.

They report increased yields while cutting input costs by as much as 60% ... guess the "proof is in the pudding."

Kelly Tobin, well respected conservation commissioner and no-till farmer, is incorporating diverse cover crops into his operation. Kelly says no-till and cover crops actually go hand in hand as good tools to help producers achieve their conservation and production goals; increasing yields even during drought years. He also sees opportunities for cover crops as forage for livestock. As in all agricultural systems, Kelly emphasizes that the key to success is good management.

Across the state, producers are filling conference and meeting rooms, interested in soil health and cover crops. As one young farm couple stated ... "it just makes sense."

One thing is for certain, there will be challenges ahead as we develop seeding strategies and diverse cover crop mixes that will successfully fit the needs of our Iowa agriculture. But as we all know... an innovative farmer will not think twice about modifying a piece of machinery to get it done. I feel that our Iowa conservation leaders are more than ready to meet the "Conservation Challenge"... are you?

Iowa Current Developments

Current Developments is a product of the USDA's Natural Resources Conservation Service in Des Moines, Iowa, published bimonthly by the Iowa NRCS Public Affairs Staff in cooperation with NRCS and partner agency employees from across the state.

Current Developments Stories and Photos

Please submit your Current Developments story ideas and photos to State Public Affairs Specialist Laura Crowell at laura.crowell@ia.usda.gov.

Past issues can be found at www.ia.nrcs.usda.gov.



@IowaNRCS



United States Department of Agriculture
Natural Resources Conservation Service

Helping People Help the Land
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Santa's Helpers: Winneshiek Service Center



The Winneshiek County USDA Service Center 'adopted' 2 families who were identified as needing assistance during the Christmas season. Staff donated various toys and clothing items that helped make their Christmas a little Merrier! Five kids ranging in age from 18 months old to 16 years old had several gifts to unwrap Christmas morning! (not all staff present for picture)

Current Developments: IS HOT!

We are excited to offer some new features in this issue of Current Developments. Website links are "live" and should link you directly to the referenced website. Live links look like [this](#).

And we've included an embedded video on page 6. Click on the photo to play the video. We plan to continue providing you these conveniences, so look for more videos in upcoming issues of Current Developments.

Feds Feeds Families: Pizza for the Tipton Field Office



The Tipton Service Center employees of NRCS, FSA and RD earned an all-office pizza party by donating the most food per capita during the Feds Feeds Families Food Drive. The pizza was provided by FSA State Executive Director John Whitacker, RD State Director Bill Menner and NRCS State Conservationist Jay Mar. As a group, the Tipton FO employees donated the most per capita: 412 pounds of food per person in the office. The Algona office (featured in the November issue of Current Developments) donated the most food with 8,656 pounds.

Soil Wealth: Why North America Feeds the World

By David Montgomery, University of Washington | *Corn and Soybean Digest*

The following excerpt is from an article published in the November 2012 issue of *Corn and Soybean Digest*. Article suggested by District Conservationist LuAnn Rolling.

North America is blessed with a disproportionate share of the world's best agricultural soil. It is no coincidence that the U.S. is one of the few countries that's a net

exporter of food – North America has 17% of the world's arable land, but less than 7% of the world's population. As the human population approaches 10 billion people later this century, productive farmland will become an increasingly strategic resource as the amount per capita declines by as much as half.

Researching my book, *Dirt: The*

Erosion of Civilizations, opened my eyes to how much humanity takes soil for granted – and how much trouble that has gotten society after society into in the past. A scant 3% of the world's total surface area has soil suitable for intensive cultivation.

And yet, how much do most of us know about where soil comes from? Our most essential and undervalued resource, soil is where the living world of biology meets the dead world of geology.

The world's best agricultural soils are those that developed along with the native forests (ultisols and alfisols) and grasslands (mollicols) that long covered continents in the temperate regions. In these locations the addition of organic matter from leaf fall in forests or root growth in grasslands built up fertile soils with high agricultural capacity. And the best of these soils for agriculture are those developed on deposits of loess, windblown silt such as that covering much of the American Midwest.

Central North America, eastern Europe, northern China and the Argentine Pampas are the backbone of the world's agricultural production. In all of these areas, loess from a few feet to hundreds of feet thick blankets continental bedrock. With a high proportion of finely ground, fresh mineral grains, soils developed on loess are renowned for their fertility.

Continued at:

<http://cornandsoybeandigest.com/issues/soil-wealth-why-north-america-feeds-world>

NRCS Helps: National Soil Project

Soil scientists in MLRA 11-ATL Soil Survey Office in Atlantic collected soil samples for a nationwide soil-monitoring network coordinated through USDA National Resource Inventory staff at Iowa State University, Colorado State University, and the Kellogg Soil Survey Laboratory. The network will track long-term changes in soil properties and give scientists an opportunity to analyze trends, as well as build on

current land use inventories. Upon completion, the data will enhance estimations of soil carbon, bulk density, pH, CEC, and Nitrogen. These properties are important in understanding the effects of land use on soil health. Each sampling site consists of three permanently marked locations to allow scientists to re-sample every 5 to 10 years over a 100-year time span.



John Hammerly grips a soil sampling tube to be cleaned in a harvested cornfield in Carroll County.



Talking Soil Health

Soil health is a growing topic of interest for farmers all over the country. NRCS is helping lead the way through its “Unlock the Secrets in the Soil” campaign. The following list of soil health key points was developed as part of that campaign:

What’s critical about soil health now?

1. World population is projected to increase from 7 billion in 2013 to more than 9 billion in 2050. To sustain this level of growth, food production will need to rise by 70 percent.
2. Between 1982–2007, 14 million acres of prime farmland in the U.S. were lost to development.
3. Improving soil health is key to long-term, sustainable agricultural production.

Soil health matters because:

1. Healthy soils are high-performing, productive soils.
2. Healthy soils reduce production costs—and improve profits.
3. Healthy soils protect natural resources on and off the farm.
4. Franklin Roosevelt’s statement, “The nation that destroys its soil destroys itself,” is as true today as it was 75 years ago.
5. Healthy soils can reduce nutrient loading and sediment runoff, increase efficiencies, and sustain wildlife habitat.

What are the benefits of healthy soil?

1. Healthy soil holds more water (by binding it to organic matter), and loses less water to runoff and evaporation.
2. Organic matter builds as tillage declines and plants and residue cover the soil. Organic matter holds 18-20 times its weight in water and recycles nutrients for plants to use.

3. One percent of organic matter in the top six inches of soil would hold approximately 27,000 gallons of water per acre!
4. Most farmers can increase their soil organic matter in three to 10 years if they are motivated about adopting conservation practices to achieve this goal.

How to begin your path to Healthy Soils:

1. Keep it covered.
2. Do not disturb.
3. Use cover crops and rotation to feed your soil.
4. Develop a soil health management plan with the help of NRCS.

Follow four basic soil health principles to improve soil health and sustainability:

1. Use plant diversity to increase diversity in the soil.
2. Manage soils more by disturbing them less.
3. Keep plants growing throughout the year to feed the soil.
4. Keep the soil covered as much as possible.

What is a Soil Health Management Plan?

1. It’s a road map to soil health.
2. It outlines a system of practices needed to enhance crop production and soil function, and improve or sustain water quality, air quality, energy efficiency and wildlife habitat.
3. Some of the recommended conservation practices include: Conservation Crop Rotation, Cover Crops, No Till, Mulching, Nutrient Management, and Pest Management.
4. It provides environmental, economic, health, and societal benefits.
5. It saves energy by using less fuel for tillage, and maximizes nutrient cycling.
6. It saves water and increases drought tolerance by increasing infiltration and water holding capacity as soil organic matter increases.
7. It reduces disease and pest problems.
8. It improves income sustainability for farms and ranches.
9. It improves plant health.

HR Corner

86.6% of Iowa NRCS FERS employees contribute to the Thrift Savings Plan (TSP). That means 13.4% of employees are letting **FREE MONEY** go up in flames.

The agency contributes an amount equal to 1% of the basic pay each pay period to FERS employees' TSP accounts. You can maximize the agency's match if you contribute 5% of your basic pay each pay period.

Even small contributions add up. If you decided to contribute just the amount of a daily cup of coffee— around \$35 each pay period – and your agency matched it dollar-for-dollar, you'd be saving \$70 each pay period. In 30 years (assuming a 7% annual rate of return compounded monthly), you'd have \$186,108. That's a pretty impressive nest egg for such a small sacrifice.

Don't let this valuable benefit slip through your fingers – sign up to contribute to the TSP through the NFC's personal page at www.nfc.usda.gov. Start saving today!

Cover Crops: New Online Tool

A new online tool is available to help farmers select the right cover crop for their operations.

The Cover Crop Decision Tool was developed by the Midwest Cover Crops Council to help farmers select cover crop species based on their main crops, available planting windows and what they needed from the cover crop such as stopping erosion, livestock forage or to control weeds. Last year, for example, farmers throughout the Midwest were urged to plant fall cover crops as a way to keep nitrogen in the soil that was not used by crops during the drought-stressed growing season.

The tool is specific to region, soil drainage class and includes information about a variety of cover crop species: non-legumes such as oats, buckwheat, barley, triticale and winter wheat; brassicas such as radish, oilseed and turnip; legumes including alfalfa, red clover and cowpeas; and five mixes. The tool suggests cover crop species and potential planting date windows that usually provide good establishment and growth, based on 30-year average frost dates in the user's county.

To find the Cover Crop Decision Tool, go to www.mccc.msu.edu/selectorINTRO.html

Check This Out: 60-second soil lessons

There are six one-minute videos on our [national website](#) page that highlight the benefits and qualities of good soil health.

This video highlights the value of keeping soil covered. Click on the photo to play the video.

Look for additional videos in future issues of Current Developments!



Save the Date: Cover Crop Field Days Coming Up Across the State

Farmers will showcase their experiences with cover crops this spring at nine field days across Iowa. Practical Farmers of Iowa, Iowa Learning Farms, County Soil and Water Conservation District (SWCD) Commissioners and Eastern Iowa Hay Producers Association are sponsoring the spring field days that focus on the use and management of cover crops.

Each cover crop field day will include topics such as: no-tillage/strip-tillage systems, rotational grazing or grazing cover crops for livestock feed, soil and nutrient management benefits of cover crops and spring management for cover crops.

All field days are free, open to the public and include lunch. For more information, contact Aaron Andrews at 515-294-4922 or Sarah Carlson at 515-232-5661.

Field Day Schedule

March 15, 9:30 am-2:30 pm:
Northwest Iowa No-Till Conference, Merville Area Community Center, 815 Main St., Merville

March 19, 10:00 am-12:30 pm:
Dustin Kaestner Farm, 7381 16th Ave., Luzerne

March 21, 10:00 am-2:00 pm:
Buzzy's Pizza, 414 Main St., Welton, with field tour at Neal Engle farm (25439 Highway 64, Maquoketa)

March 22, 10:00 am-12:30 pm:
Black Hawk Marsh State Game Management Area, 3575 Quincy Ave., field tour at Russ Schelle farm (10326 Granite Ave., Breda) lunch at the Breda park shelter

March 26, 10:00 am-12:30 pm:
Mike Sporrer Farm, Dedham

March 28, 10:00 am-12:30 pm:
Kent Swanson Farm, 2670 K Ave., Red Oak

April 1, 10:00 am-1:00 pm:
Dordt College Research Farm, 3598 U.S. Highway 75, Sioux Center

April 4, 11:00 am-2:00 pm:
Johnson's Restaurant, 916 1/2 High St. NE, Elkader, field tour at Gary Kregel Farm

May 22, 1:00 pm-3:30 pm:
Dan Specht Farm, 12794 Pleasant Ridge Road, Monona

Exploring Soil Health: At I'll Make Me a World Celebration



(Left Photo) Black Emphasis Program Manager Ericka Boyland talks soil infiltration with two celebration attendees. (Right photo) Kids and adults learned why healthy soils are so important for preventing flooding and protecting water quality at the I'll Make Me a World celebration on Jan. 26 in Des Moines.

Changes In: NRCS Personnel

In order of Effective Date

Name	Title	Nature of Action	Effective Date	Location
Patricia Folsom	HR Specialist	Retirement	11/30/2012	Des Moines
Steven Lewis	Resource Conservationist	Promotion	12/2/2012	Chariton
Amanda McNeese	Soil Conservationist	Conv to Career Cond Appt.	12/16/2012	Greenfield
Roy Campbell	Resource Conservationist	Retirement	12/29/2012	Des Moines
Gary Applegate	Resource Conservationist	Reassignment	12/30/2012	Grundy Center
Ruth Ehley	Soil Conservationist	Reassignment	12/30/2012	Rockwell City
Chris Hogge	Soil Conservationist	Reassignment	12/30/2012	Cherokee
Jamie McIntosh	Engineering Technician	Retirement	1/3/2013	Area 4 Eng Office
Spencer Herbert	Soil Conservationist	Resignation	1/4/2013	Storm Lake
John Selenske	Contracting Officer	Reassignment	1/13/2013	Des Moines
Jaia Fischer	Management Analyst	Rehire	1/13/2013	Des Moines
Michael Mahoney	Soil Conservation Technician	Career Cond Appt.	1/13/2013	Estherville
Monica McGrew	Soil Conservationist	Career Cond Appt.	1/13/2013	Leon
Julie McMichael	Resource Soil Scientist	Resignation	1/25/2013	Chariton
Stephen Moore	Soil Conservation Technician	Promotion	1/27/2013	Keosauqua
Tim Mensing	Ag Engineer	Reassignment	1/27/2013	Creston
Randal Welshhons	Soil Conservation Technician	Retirement	1/31/2013	Knoxville
Robert Hall	Soil Conservation Technician	Retirement	2/28/2013	Centerville

Changes In: DSC Personnel

In order of Effective Date

Name	Title	Nature of Action	Effective Date	Location
Mike Freiburger	Environmental Specialist	Retirement	12/31/2012	Delaware SWCD

District Office Address Changes:

O'Brien SWCD
315 S Rerick Ave
Primghar, IA 51245
(No longer using the PO Box)

Winnebago SWCD
163 1st Ave
Thompson, IA 50478
(No longer using the PO Box)

Iowa ELDP Students: **Happy Graduation!**



Assistant State Conservationists for Field Operations Jamie Carpenter (pictured left) and Matt Dreschel (right) receive their "diplomas" after completing the two-year Emerging Leaders Development Program (ELDP). The program consisted of a one-week mentoring module facilitated by NRCS, 12 bi-monthly modules, and a team project. The program combines leadership and management training and assessments with activities that expose participants to national issues. The modules introduce participants to management and leadership theories, techniques and concepts applicable to supervision and management in the public sector. Also pictured, from left to right... Acting Associate Chief for Conservation Leonard Jordan; Acting Associate Deputy Chief of Management Gayle Norman Berry; Dr. Ali Eskandarian, Dean of the George Washington University College of Professional Studies; and Mr. James L. Robinson, Executive Director of George Washington University Center for Excellence in Public Leadership (GW-CEPL).