INTRODUCING MIGHTY MINI MICROBE

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No Tillage November A Step In Right Direction

The “No Tillage November” campaign – that I’m hopeful most of you heard about – was by all accounts an overwhelming success. The campaign achieved its purpose by successfully spreading the word to Iowans about the benefits of keeping the stubble on harvested crop fields.

I want to thank Area 3 Agronomist Neil Sass for bringing this idea to my attention, and for our Public Affairs staff, led by Laura Crowell, for delivering this attention-getting online/social media campaign. Our national office even jumped on board to help states deliver this important message about the impacts of tillage.

Because of this campaign our staff conducted dozens of radio interviews, newspapers and ag publications across the state published articles about the negative impacts of tillage, and the Iowa NRCS Twitter account gained an unprecedented amount of attention this past month.

These types of campaigns are a great way to spark a conversation with our customers, to help them understand the benefits of keeping the soil undisturbed, as well as keeping a living root in the soil as long as possible with cover crops.

I truly believe that if we push conservation and agronomic practices that help improve soil health, it will go a long way in helping to treat our other resource concerns!

Lastly, please listen to our Regional Soil Health Specialist Doug Peterson from the Market to Market audio podcast, where Doug was interviewed about “No Tillage November.” [http://downloads.iptv.org/podcasts/MarketToMarket/MtoM/a-podcast/175mtom.mp3](http://downloads.iptv.org/podcasts/MarketToMarket/MtoM/a-podcast/175mtom.mp3).

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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.nrcs.usda.gov/wps/portal/nrcs/detailfull/ia/people/employees/?cid=nrcs142p2_008273](http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/ia/people/employees/?cid=nrcs142p2_008273).
SOIL HEALTH: AREA 4 STAFF TRAINING NEAR OAKLAND

Area 4 held Soil Health Training with Regional Soil Health Specialist Doug Peterson on Sept. 21-22 in Oakland. Staff received training on the soil health bucket and rainfall simulator.

RECALL: KIDDIE FIRE EXTINGUISHER

There is a safety recall on a fire extinguisher that could possibly be in your NRCS vehicles.

Name of product:
Kidde fire extinguishers with plastic handles

Hazard:
The fire extinguishers can become clogged or require excessive force to discharge and can fail to activate during a fire emergency. In addition, the nozzle can detach with enough force to pose an impact hazard.

Remedy:
Replace

Recall date:
November 2, 2017

Recall number:
18-022

Consumer Contact:
Kidde toll-free at 855-271-0773

*I always check with your Area Office before agreeing to a purchase.*
CIG SUCCESS: AGREEMENT LEADS TO PRESENTATION IN COLUMBIA

Submitted by Judy Martinson

The decline in Monarch populations in Iowa led to a 2015 Conservation Innovation Grant (CIG) being awarded to assess and provide recommendations on preferred seed mixtures to benefit Monarch butterflies. Students, working under Tammy Mildenstein, Assistant Professor of Biology at Cornell College in Mount Vernon, worked with local producers to repopulate four sites with prairie restoration plant materials, including milkweed. Monarchs are a critical species for the pollination of many agricultural plants.

Tammy’s initial project proposal documented tallgrass prairies as one of the rarest and most endangered ecosystems in the world. Approximately .1% of original prairie remains intact, and many of the historic wildlife of the prairies are now some of the most endangered in North America. Evidence suggests that Monarch populations, which winter in Mexico and return to the Midwest states each spring, are seeing smaller numbers return each year.

Tammy’s original theory was that Monarchs, who are dependent upon milkweed to lay their eggs, were seeing a decrease in numbers due to a decrease in habitat that supports the plant. However, that theory was not supported in her research results. She now believes that other limiting factors, such as predation, toxins, prairie patch size and threats at the overwintering sites and migration routes need to be considered.

Tammy recently presented a poster of her findings at the 28th International Congress for Conservation Biology in Cartagena, Columbia in July. The conference focused on Insights for Sustaining Life on Earth, as a topic to address the need for “conservation science to help create a better tomorrow for both biodiversity and people who depend upon it.”

In August, KCRG-TV ran a story on the project which can be viewed at http://www.kcrg.com/content/news/Cornell-students-research-decline-of-monarch-butterflies--442122303.html.
Title: Soil Conservationist, Nevada

College Education:
» Bachelor’s Degree: Animal Science, 2006, Iowa State University

NRCS Career
I started as a volunteer while in college, and then worked as a student trainee in Waukon and Nevada.

I have worked in the Allison, Boone, Toledo and Nevada field offices since starting full-time.

How Did You Become Interested in Conservation?
I became interested in working for NRCS when they helped my parents install manure storage structures. I grew up on a small central Iowa farm with row crops and a farrow-to-finish hog operation.

What is your favorite part about working for NRCS?
I enjoy helping farmers and getting out in the field.

Other Interests
My husband and I have three kids - Owen is 6, Brady is 3, and Gracie is 18 months. We have a 100-head cow-calf and row crop operation. I don’t have much free time now, but I like to run, water ski, and spend time with friends and family.
We are very excited to share with you some new outreach materials NRCS created in partnership with the Lexicon of Sustainability.

These short videos include an overview and other shorts that describe how NRCS can help organic producers with practices that support soil health, weed management, habitat and biodiversity, irrigation and water management, pasture management, and high tunnels.

This video series is available on YouTube.

**OUTDOOR CLASSROOM: MCCOY TALKS WATER QUALITY**

Submitted by Sean McCoy

For the past 5 years the Big Creek Watershed Project was invited to the Boone County Outdoor classroom. Over the span of 2 days in late September the coordinator, Sean McCoy, presented to 320 4th grade students from Boone, Madrid, Ogden, and United Community School districts.

The focus of the presentation was improving water quality and soil health within the watershed, located in the Des Moines Lobe, primarily the 47,665-acre Big Creek Lake Watershed, using BMPs.

McCoy used the rainfall simulator to help illustrate the three main problems in the watershed: bacteria, sedimentation, and nutrient loading to our water resources. For agricultural purposes water was rained upon a reduced till, no-till, and a warm season native season seeding example. The students learned quickly that more residue, less tillage and use of CRP were an advantage to infiltration and keeping soil and nutrients upon the upland.

McCoy also taught the students about urban runoff and the importance of protecting water quality within their own yards and towns. The children were very inquisitive and the information given to them spurred some very interesting questions!
NEW OUTREACH: COLORING BOOK FEATURES TINY SUPERHERO

She’s a wee bit smaller than your typical superhero.

But the creators of a new soil health-themed coloring book believe “Mighty Mini Microbe’s Tale” will encourage the next generation of real-life hero farmers, conservationists and scientists to further unlock the secrets in the soil.

The 24-page coloring book is produced by USDA’s Natural Resources Conservation Service and is part of its on-going “Unlock the Secrets in the Soil” soil health awareness and education campaign. It is illustrated by Cat Bailey, an NRCS public affairs specialist in Portland, Oregon.

“While the characters are fictional, there’s solid science behind the narrative,” said Ron Nichols, the book’s author and NRCS soil health campaign coordinator. “Many people don’t realize that the elegant symbiosis of life underground enables all life above ground,” he said. “Through this simple story we hope to encourage the next generation of farmers, scientists and consumers to learn more about what we can and should do to enable that subterranean life so we can rebuild and regenerate our soil to sustainably feed our growing population.”

Nichols said the story not only highlights the role of soil microbes in our lives, but also the role of “farmer heroes,” who farm in ways that protect and improve soil microbial habitat.

“Farmers who implement soil health management systems on their farms are the other heroes in the story,” he said. “By using no-till, cover crops and diverse species and rotations, these producers are increasing the health and diversity of soil microbiological communities. In turn, these microbes provide nutrients, protect plants from pests and disease and improve soil aggregation and function – all of which make farming operations more productive, profitable and more resilient to weather extremes.”

As part of its educational campaign, Nichols said, NRCS plans to release a series of animated “Mighty Mini Microbe” educational public service ads later this year, which are designed for children’s television programming.

“The more we discover about the wonderful life below ground, the more we realize how much more there is to discover about our living and life-giving soil,” Nichols said. “It’s an exciting frontier in science. Hopefully, this little coloring book will unlock the imaginations of our next generation of soil health explorers.”

The coloring book can be ordered or downloaded from the NRCS website at www.nrcs.usda.gov.
Iowa farmers were encouraged to “Keep the Stubble” during a month-long November campaign to reduce the amount of fall tillage across Iowa.

During the campaign called “No Tillage November”, NRCS and its partners encouraged Iowa farmers to “keep the stubble” on their harvested crop fields and improve soil health.

The project was mirrored after the national cancer awareness No Shave November campaign that encourages people not to shave during the entire month. The NRCS campaign encouraged farmers to keep tillage equipment in their machine sheds this fall and keep the crop stubble on their fields.

Improving soil health increases soil biological activity, which provides erosion control, nutrient benefits and can simulate tillage.

The campaign received an outpouring of support from farmers, conservation groups, ag businesses, and local, regional, and national media.

Iowa added 50 Twitter followers between Oct. 23 and Dec. 1 (double the monthly average increase). And during the campaign, Iowa’s average daily Twitter impression was 1,600 - a 500 percent increase! Impressions measure the total number of views of a conversation.

For more information about soil health and the No Tillage November campaign, please go to www.ia.nrcs.usda.gov.
OVERSEAS SPEACH:
ADKINS TALKS SOIL HEALTH TO WORLDWIDE AUDIENCE

Marty Adkins, Assistant State Conservationist for Partnerships, recently had the opportunity to present information on soil health to an international audience. He spoke to a gathering of industry leaders at the 6th International Conference on Lignocellulosic Ethanol in Brussels, Belgium.

Marty was invited to speak at this conference by the Directorate General for Energy of the European Commission. His presentation focused on opportunities for government and industry to work together for sustainable feedstock supply chains for advanced biofuels.

The conference, held Sept. 27-28, 2017, gathered about 200 participants from 36 countries from around the world. Speakers included government policy experts, scientists, engineers, financiers and others.

At the conference, Marty presented information on a joint project of the NRCS with DuPont that provides for soil health protection in association with corn stover-based cellulosic ethanol production. He provided basic information about NRCS, then discussed the principles of, and practices that support, soil health. Finally, he shared information about how the joint NRCS-DuPont project supports both renewable energy and soil health goals. Marty had many opportunities to reinforce these messages during informal discussions at the conference.

Marty reported that many of those he chatted with following his presentation were not familiar with the concept of soil health. “My presentation was early in the conference, and it was great to hear questions related to natural resource protection come up regularly after that”, he said.

Marty also met with Brussels-based DuPont staff, representatives of the EU’s Directorates for Agriculture and Energy, and USDA staff based at the American Embassy. The trip benefited NRCS as it raised NRCS’s profile with a large international audience, and helped extend NRCS technical influence. The trip benefited the European Commission and other participating countries by exposing them to soil health principles and highlighting potential public-private partnerships for renewable energy and soil sustainability. Finally, he felt that he benefited personally by meeting people from many cultures and disciplines that share common interests and core values.
ETHICS IN BRIEF:

A Refresher on Ethics Rules and Social Media:
Use of Your Government Job Title

Social Media has made it easier than ever to inadvertently violate Ethics rules. A frequently asked question is: When can I use my official title on my personal Social Media account?

Generally, Ethics rules prohibit you from using your official title or position for your own personal gain. You also cannot use your title or position to create an appearance that the government sanctions or endorses your private activities.

The good news is that you will not create the appearance of government sanction by merely identifying your official title or position in an area of a personal Social Media account designated for biographical information. But, don’t use your official title or position in the signature block of an e-mail, if your message is not for official use.

Here’s a quick checklist for whether using your official title or position on Social Media might violate the Ethics rules. Always be sure to contact the Office of Ethics if you have a question whether a specific situation would lead a reasonable person to assume the government had sanctioned your private Social Media communication.

Relevant factors include:
» Whether your personal post states that you are acting on behalf of the government;
» Whether you refer to your government position as support for your statements;
» Whether you prominently feature the agency’s name, seal, or uniform on your Social Media account or in connection with specific social media posts;
» Whether you refer to your government employment, title, or position in areas other than those designated for biographical information; or
» Whether you hold a highly visible position or are authorized to speak for the government as part of your official duties. If so, a disclaimer may be appropriate.

Questions: Office of Ethics (202) 720-2251 or Stuart.Bender@oe.usda.gov
IOWA WOMEN IN AG CONFERENCE: NRCS COLLABORATES WITH PHEASANTS FOREVER

Submitted by Judy Martinson

On Aug. 1, three Iowa Farm Bill Biologists and the Illinois Outreach Coordinator provided information about conservation and habitat at the 11th Annual Women in Agriculture Conference in Ankeny. The conference, hosted by the Iowa Women in Agriculture organization, is intended to expand the knowledge and economic potential of women and their capacity to network with one another. More than 160 women attended the conference.

The focus of the this year’s event was the challenges encountered as agricultural leaders navigate through decision-making in today’s economic climate.

Featured speakers presented information about the unique roles and opportunities currently available to women in agriculture. Other topics featured at the conference included international trade, food and agriculture issues, grain markets, business management strategies for agriculture, grazing cover crops and connecting across generations.

Pheasants Forever has partnered with NRCS many times over the years, and is currently providing NRCS with Farm Bill Biologists who work in several NRCS offices throughout Iowa. Kelsey Fleming, a Pheasants Forever Farm Bill Biologist stationed in NE Iowa, said the vast majority of the attendees visited the NRCS booth at some point throughout the day.

Fleming, Erica Yost, Allie Rath, and Katie Kauzlarich of Illinois shared their knowledge on such topics as native plantings, CRP, cover crops, pollinators, soil health, no-till, cost-share programs for wildlife habitat, soil testing and how to talk to a renter about no-till and cover crops.
### Changes In Iowa NRCS Personnel

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### Changes In IDALS-DSCWQ Personnel

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