



NRCS Soil Health Update

October, 2016

Sharing soil health marketing communications information and resources from USDA's Natural Resources Conservation Service, other partners and the media.

THE REPORTER



The Reporter – Governor Brown signs bill to help farmers adapt to climate change

Jerry Brown recently signed legislation establishing a \$7.5 million Healthy Soils Program to support agricultural practices that reduce greenhouse gas emissions and store carbon in soil, trees and plants. The bill, which funds the state's cap-and-trade program, includes the language of Wolk's Senate Bill 1350 to establish and fund the Healthy Soils Program. [Read more.](#)

Related: *Imperial Valley News – California Releases 'Vision for Healthy Soils Initiative'.* [Read more.](#)

No-Till Farmer – Caring for 'underground livestock' key to Colorado farmer's success

He's 28-years-old, doesn't own a single acre of land and farms using principles that are virtually unheard of in northeastern Colorado. So why are landlords entrusting John Heermann with 1,600 acres of their land? Despite the fact that his farming principles are unconventional for this part of the country, Heermann said landlords are increasingly realizing the value of improving the health of their soil. [Read more.](#)

Watch the interview with John Heermann in this [NRCS Profile in Soil Health](#) video. (7:13)



Union of Concerned Scientists – Soil carbon can't fix climate change by itself—but it needs to be part of the solution

A [rigorous study](#) just published in the prestigious journal *Science* argues that soil alone cannot be counted on to save us from climate change. Yet the stark analysis does not undermine the importance of better understanding, protecting, and building carbon in soils (“carbon farming”). In fact, the findings reinforce the need for soil carbon science and action to remain priorities, especially when it comes to agriculture. [Read more.](#)

Crop Protection News – Soil Health Partnership receives \$4 million boost

A farmer-led collaborative to support, enhance and accelerate the use of environmentally preferable agricultural practices received a boost with the establishment of the Midwest Row Crop Collaborative. The Soil Health Partnership (SHP) has joined industry-leading companies and environmental groups including Cargill, the Environmental Defense Fund, General Mills, Kellogg Company, Monsanto, PepsiCo, The Nature Conservancy, Walmart and the World Wildlife Fund. Their main goal is to reduce nutrient loss across the Upper Mississippi River by 45 percent by 2035. [Read more.](#)

NRCS-Oregon Soil Health Profile

Cover crops on dryland wheat?

Challenge accepted.

Noah Williams loves it when people tell him he can't do something. Like when people say there's no way he can make cover crops work in a dryland wheat cropping system. “It's my motivation to find a way to do it,” he says. “I like the challenge.” Noah is working with the USDA Natural Resources Conservation Service (NRCS) and the Wasco Soil and Water Conservation District (SWCD) to try some new, innovative approaches to build healthier soil on his farm. “I've been told that cover cropping can't work in our



area, but I believe it can—we just have to change our mindset," Noah says. [Read more.](#)

Farming UK – Kellogg's farming 'cookbook' reveals the ground-breaking benefits of cover cropping

In the study of 13 Kellogg's farmers by the National Institute of Agricultural Botany (NIAB), farmers who used cover crops saw yield responses up by 25 per cent and a 50 percent reduction in nitrogen leeching. The results of the study have been condensed into a 'Cover Crop Cook Book', which gives guidance on agronomy to farmers and offers a range of practical approaches to cover cropping. The book has been shared with 3,000 farmers and experts throughout the UK in the hope they'll take up cover cropping and share their knowledge to develop best practice. [Read more.](#)



NRCS video – Sowing the seeds of sustainability: Nebraska's soil health partnership

Farmers, conservationists and others interested in soil health are working to inform and support other producers across Nebraska through a budding soil health partnership. Aaron Hird, NRCS' soil health specialist in Nebraska, says the partnership helps everyone benefit from the experience and expertise of the group. "At this point in the youth of soil health we are having to learn this as we go. It's definitely a two-way street as we work through each individual process with each farmer. Each case is different and we learn so much every time we put this on the ground," Hird says. [Watch the video.](#) (9:00)

The Kent Island

Bay Times

Successful Farming



Bay Times & Record Observer – Record cover crop enrollment announced

The Maryland Department of Agriculture announced another record-breaking sign-up by farmers for the state's highly touted Cover Crop Program. During the program's three week sign-up period held earlier this summer, 1,853 farmers visited the state's network of local soil conservation district offices to apply for grants to plant 691,743 acres of protective cover crops on their fields this fall, according to a news release. [Read more.](#)

Successful Farming – Bio strip-till provides ideal growing conditions for corn

Bio strip-till gives newly planted corn a jump-start at Joe Breker's no-till farm near Havana, North Dakota. He plants the corn precisely into the rows where a cover crop of turnips, radishes, and flax grew the previous fall. "Because the radishes and turnips decompose so quickly over winter and early spring, they create a seedbed that's mellow, and they don't interfere with the planting process," he says. "I get good early-stand establishment and healthy corn." [Read more.](#)

NRCS-NE – Profile in Soil Health video

Nebraska farmer says soil health system delivers multiple benefits

In this three-minute Profile in Soil Health video, Kearney County farmer Bill Nielsen shares his experiences in incorporating cover crops and other soil health building practices into his operation. "We were seeing a lot of ponds in fields and the word was that cover crops and no till will help your infiltration and let the water land somewhere and soak in the same spot. It has worked. We don't have near the ponds we did, those places are finally growing a crop," Nielsen says. [Watch the video.](#) (3:10)



PBS NEWSHOUR – Column: When industrial-scale farming is the sustainable path

Justin Knopf farms 4,500 acres in central Kansas, producing wheat, soy, sorghum and alfalfa for national and global markets, using synthetic pesticides, fertilizer and GMOs. In some quarters, those facts would suffice to condemn him as a villain of “Big Ag.” But Justin is a conservation hero, showing the way to restore soils and biodiversity, protect clean water and the atmosphere and feed a growing global population without giving over still more of the planet to agriculture — which already covers half of Earth’s ice-free land, uses 70 percent of all fresh water and has greater impacts on biodiversity than any other human enterprise. [Read more.](#)



Ohio's Country Journal – Understanding soil biology offers a competitive advantage on the farm

“If Ford and GM are competing to make the best car for the least amount of money and one of them has a technological innovation that gives them an advantage, the other is scurrying rapidly to one-up them and get back on top,” said Dan DeSutter, who farms 5,000 acres near Attica, Ind. and recently spoke at the Ohio No-Till Summer Field Day. “In farming there is a blissful adherence to tradition to want to do things the way grandpa did it. There are good things that can come out of that but we need to understand science better as farmers.”

[Read more.](#) Watch the NRCS [interview with Dan DeSutter](#). (2:35)



Beef – More profit from fewer cows? Here's the secret

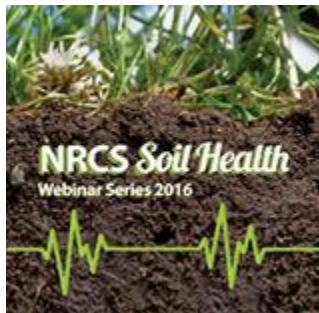
A real-ranch experiment in Texas is showing higher profit potential from better grazing management and reduced wintering costs, even with 40% fewer cows. On a ranch belonging to the USDA’s Agricultural Research Service

The Des Moines Register

near Riesel, Texas, a tiny town just southeast of Waco, scientists and range management specialists in late 2011 began a 10-year study of conventional, set-stock grazing management vs. controlled, planned grazing together with multi-species cover cropping. [Read more.](#)

The Des Moines Register – Getting Iowa farmers to see conservation a more than just a dirty word

Iowa Public Television host Mike Pearson asked farmer Kevin Jesse a question that could be critical to the state's efforts to improve its ailing water quality: What do you say to a farmer who tried cover crops but decided they didn't live up to the hype? Growing cover crops require a "huge learning curve," Jesse told Pearson, host of "Market to Market," and about 50 farmers and service providers during a forum last week in northwest Iowa. "We deal with all these fears in agriculture — all the what-ifs. ... We're working through those issues." [Read more.](#)



NRCS Soil Health webinar series

Oct. 11, 2016 2:00 pm US/Eastern: Soil Health in high tunnel production

Participants in this webinar will learn what is currently understood about how high tunnel production affects soil quality and health, including critical plant nutrient availability, salinity, and organic matter management, microbial functioning, and also about soil-health oriented high tunnel management strategies. [Click here](#) to learn more about the webinar and to sign in. **Note:** No advance registration is required and space is not limited, but participants should sign in 15 minutes early. This webinar offers CEUs and will be recorded for future viewing. It is presented by the [USDA NRCS Soil Health Division](#). Contact [Holli Kuykendall, Ph.D.](#), National Technology Specialist, for more information.



AGWEEK

High Country News

PHYS.org – First-of-kind study suggests cover crop mixtures increase agroecosystem services

Planting a multi-species mixture of cover crops — rather than a cover crop monoculture — between cash crops, provides increased agroecosystem services, or multifunctionality, according to researchers in Penn State's College of Agricultural Sciences. That was the conclusion drawn from a two-year study of 18 cover crop treatments, ranging in diversity from one to eight plant species.

[Read more.](#)

AgWeek – Soil management may help stabilize maize yield in the face of climate change

How will we feed our growing population in the face of an increasingly extreme climate? Many experts suggest the answer lies in breeding novel crop varieties that can withstand the increases in drought, heat, and extreme rainfall events predicted in the not-too-distant future. But breeding is only part of the equation, according to new research from the University of Illinois and several collaborating institutions across the Midwest. [Read more.](#)

High Country News – Is there a way to revive drought-stricken soil?

Brendon Rockey ran his fingers through crumbly soil on a warm August morning, kneeling in the same dirt his father and grandfather farmed before him.

“Radish,” said Rockey, 39, pulling out a purplish bulb. “Field peas. Collards.” The mostly edible medley growing underfoot — 16 different vegetables, legumes and grasses in all — will never make it to market for this Colorado farmer. Instead, Rockey will leave these crops to decompose in the earth, their remains creating a nutrient-rich soil he hopes will grow better potatoes next year, all while using about two-thirds less water than a typical potato crop. [Read more.](#)



USDA-NRCS – The making of ‘The Hope in Healthy Soil’ video series

In this new video, NRCS Earth Team volunteer film editors and animators describe their experiences and contributions in the making of a seven-part video series titled “The Hope in Healthy Soil.” The series was produced by USDA’s Natural Resources Conservation Service and explores how and why an increasing number of farmers throughout the country are creating a new hope in healthy soil by regenerating our nation’s living and life-giving soil. [Watch](#) the “Making of ‘The Hope in Healthy Soil.’” (3:30)



Corn & Soybean Digest – 10 Steps to farm soil like a crop

When farmers and landowners think as much about their soil as they do their corn yields, the short- and long-term benefits are huge. I asked three respected upper Midwest soil authorities for their top 10 thoughts on farming soil as a crop. All three thrive on the importance of good soil science that drives their tireless efforts to help farmers reduce/eliminate tillage and keep the soil biology well fed with cover crops in fall and spring. [Read more.](#)

No-Till Farmer – Better soils with the no-till system

Productive agriculture depends on healthy soil. Soil guarantees that nutrients are made available in sufficient amounts during a plant’s life cycle and it holds water that is then available to plants. It also provides many critical ecosystem functions that are necessary for life. In this free publication from Penn State University, you’ll learn how you can protect this valuable resource through no-till. [Read more.](#) [Download the free report](#) by Sjoerd W. Duiker and Joel C. Myers.



Soil Health Partnership – Soil Health Field Days Yield Great Turnout in Midwest

After 40 events in eight states, the [Soil Health Partnership](#) field days are coming to an end for this growing season. Hosted mostly by farmers enrolled in the program, and often cooperating with local groups, these field days have spread the word about cover crops, reduced tillage and advanced nutrient management to more than 1,500 attendees this year. “Next year, we hope to add even more field days, while still keeping them informative and relevant for every level of interest,” said SHP Director Nick Goeser. [Read more.](#)



Public News Service – Cover crops as forage: Good for soil and bottom line?

The use of cover crops as fodder for livestock is picking up steam in parts of Iowa, and a new project aims to quantify the possible dollar return. Mark Schleisman, who farms about 4,500 acres in Calhoun and Carroll counties, is taking part in the research. He began using cover crops to protect the soil, but said now it's also an important practice for his cattle. [Read more.](#)

Cotton Farming – Growers pair conservation tillage with winter cover crops to reduce soil erosion and improve water infiltration

With conservation deep seeded in his roots, Walter Lentz is a firm believer in cover crops and reduced tillage to help minimize erosion and keep the soil on his fields. “Cover crops are somewhat of a necessity, but hey, it’s also the right thing to do,” says Lentz, who farms sloping and rolling fields, many of which have highly erodible soils, near Sumner, Ga. “It’s a constant fight to keep this part of the world from flowing into the Withlacoochee River. [Read more.](#)



Brownfield Ag News – Building soil health takes time

Sustainable ag educator Dean Baas with Michigan State University tells Brownfield most recent production gains have been connected to genetics and while yields have been increasing, soil health has been on the decline. "If we're not careful, eventually the improvements that we see in the above ground plants, our soils will not be able to sustain further improvement — eventually it could limit your production." [Listen](#) to the report. (7:18)



Wisconsin Farmer – Timing, species choices key to cover crop success

Dane County Extension Service crops and soils agent Heidi Johnson is confident that her recommendations on the rankings for choices of cover crops will turn out to be the best choices in most situations. That's because the recommendations are based on controlled research findings with cover crops with proven success in many counties around the state in recent years, Johnson assured attendees at the Fond du Lac County annual agronomy field day held on Montsma Farms. [Read more](#).



Lancaster Farming – Seed Mixture

Tested for Better Bay Coverage

Just outside the Lancaster County town of Ephrata, Pennsylvania, is a 100-acre dairy farm operated by the Bryan Zeiset family. The farm borders Cocalico Creek and like most farmers, Zeiset is aware that the delicate balance of applied nitrogen vs. environmental concerns is under the microscope of various agencies and public opinion. But Zeiset is taking a proactive approach to his nitrogen management by strategically using a mix of cover crops as a multipurpose tool to curb soil erosion, provide forage for his livestock and maximize the value of nutrients cycling in his fields. [Read more](#).

Alberta Farmer

EXPRESS

Times Recorder – Cover crops mean planting season far from over

Lisa Crock writes: As we move into mid-September, most of us have seen the end of this year's garden harvest. While you may still have a few gourds or tomatoes yet to pick, for the most part, the growing season is over. Or is it? While we may be done with the garden for the season, the microscopic organisms living in your garden are not going anywhere. They need to eat to survive the winter. What can you do to ward off their possible starvation? Plant cover crops.

[Read more.](#)

Alberta Farmer (CA) – Cocktail cover crops: This ain't your grandad's grazing system

Nearly 150 people — some from as far away as Manitoba — converged on a farm near Hardisty recently to learn more about cover crop cocktail mixes. But tour organizer Graeme Finn noticed something a little different about the crowd at the event in late August — it was mainly young farmers. "Young people can't afford to buy land these days, so they're looking at how they can make their land work harder for what they're doing," said Finn, a grazier from Crossfield who also works with Union Forage. [Read more.](#)

Additional soil health marketing communications materials from the soil health communications team are in development, so stay tuned for further updates. As always, please feel free to contact me at any time if you need additional information or would like to offer contributions to the Update. If you'd like to subscribe or unsubscribe to NRCS' Soil Health Update, contact ron.nichols@wdc.usda.gov. Thanks for all you do on behalf of conservation and American agriculture.

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