

NRCS Soil Health Update April, 2018

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



United States Department of Agriculture – The Dollars and Cents of Soil Health: A Farmer's Perspective

Can conservation practices such as no-till and cover crops actually improve crop yields and lead to strong, stable profit margins for American farmers? Russell Hedrick — a corn, soybeans and specialty grains producer in North Carolina — says yes.

Hedrick was the dryland division state winner in the 2016 North Carolina Corn Yield Contest. <u>Learn</u> <u>about the economics of his operation and how he</u> produces stable yields year after year.



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Indiana Prairie Farmer – Get soils back in shape for planting

Salute Soil Health: Here's a look at how winter may have affected your fields, and what you can do about it — now and in the future. Read more.

Iowa Learning Lab – Farmer Profile: Ben and Andy Johnson

On no-till: "The easiest place for somebody to start is no-tilling their beans. They don't really seem to respond to tillage and it's such a labor and money eater. That's the biggest reason we switched. The most precious resource on my farm is time." — Ben Johnson, Iowa Farmer Learn more.





Soil gets tired. After years of supporting a rotating cast of crops, the soil's nutrient supply is often exhausted. The tilling, turning, and planting also degrade the organic matter in the soil and its ability to stay hydrated.

"All that moving and disturbing of the soil really beats it up," says Eugenia M. Pena-Yewtukhiw, a plant and soil scientist at the University of West Virginia. "So it's helpful to let it rest, let it wait. The question is, how long?" Read more.



Morning Ag Clips – Value of grazing cattle on cover crops

A three-year on-farm research project by Practical Farmers of Iowa is putting a price tag on the forage produced by cover crops. Two years of data from an on-going study show that the practice of grazing cover crops, combined with cost-share funding, provides positive returns within the same year cover crops are planted.

This finding is significant because some of the benefits of cover crops may take a few years to manifest – and the costs can be hard for farmers to justify in the short-term, when profit margins are shrinking. Read more.



Farm Forum – Soil health: The foundation of life Walking through the fields he has spent more than 40 years caring for, Dan Forgey says it's not the crop he's walking through that captures his attention these days, but the soil he is walking on.

"Today, I pay attention to what is growing under my feet instead of just paying attention to what is growing above the soil's surface. In fact, I spend more time thinking about what is going on below." Read more.

Wallaces Farmer.

Wallaces Farmer – Figuring cost vs. return for cover crops

Each month in Wallaces Farmer magazine, the Timely Tips panel answers questions sent by readers.

One question this month: What is the return on investment for a farmer who plants cover crops? Learn more.



United States Department of Agriculture – Managing for Soil Health across 20,000 Acres

During National Ag Week, we paused to celebrate the many farmers, ranchers and foresters working hard to grow the food, fuel and fiber that sustain each and every one of us.

Mark Anson is one such farmer. Meet Anson, and learn how he's used soil health practices such as no-till and cover crops to revitalize his family's 20,000 acre corn and soybeans operation in Monroe City, Indiana. Read more.



Indiana Prairie Farmer – 10 reasons to use cover crops on your farm

Derek Schmitt and Tony Bailey visit lots of operations where farmers grow cover crops every year. Yet they also drive by many fields still in conventional tillage. Especially after a tough winter like this one, both believe many of these fields would benefit from cover crops planted this fall.

From Schmitt and Bailey, <u>here are 10 reasons for</u> planting cover crops after the 2018 harvest.



AgWeb – Plan now to terminate cover crops

Cover crops provide a variety of benefits, but if you don't terminate them well they can limit your cash crop's success. Because there is more than one way to get the job done, be sure to consider your options. The three methods used for termination are herbicide, tillage or rolling/crimping, according to lowa State University. However, the NRCS is asking farmers to rethink using tillage as a termination method, says Barb Stewart, ISU agronomist with NRCS. Read more.



Corn + Soybean Digest - Soil Health Partnership Builds One of Largest U.S. Databases of Soil Health Sample Info from Working Farms

The seeds of good data have been planted—and the Soil Health Partnership is eager to harvest early results.

The organization's team is currently preparing for another round of robust soil sampling, a critical part of identifying, testing and measuring farm management practices that improve sustainability through soil health. An initiative of the National Corn Growers Association, the program's goal is to quantify the benefits of these practices—like growing cover crops in the off-season and reducing tillage—from an economic standpoint, showing farmers how healthy soil benefits their bottom line. Read more.



United States Department of Agriculture, Natural Resources Conservation Service – South Dakota Soil Story: Brian and Jamie Johnson, Frankfort, SD Brian and Jamie Johnson of Frankfort, SD, share the benefits of soil health for not only their land, but also their economics and future generations as well. Watch here.



No-Till Farmer – [Podcast] Using Regenerative Agriculture to Revive Your No-Till System

In this episode of the *No-Till Farmer* podcast series we hear from Gabe Brown, a veteran no-tiller and the owner of Brown's Ranch in Bismarck, N.D. Gabe shares his no-till journey, where he developed a management system that positively impacted soil biology and allowed nature to help his farm thrive. Listen here.



South Dakota State University Extension – Project to Study Soil Health Economics in South Dakota Soils experts with South Dakota State University

and Extension want to collaborate with producers interested in finding out how their adoption of soil health practices have altered soil properties and economic profit over time when compared to adjacent land where those practices are not

adopted. The NRCS and the U.S. Geological Survey fund the project that aims to identify short-term and long-term impacts of these soil conservation practices on soil health and economic returns.

Read more.



No-Till Farmer – Soil Health's Role in Mitigating Natural Disaster Effects

While the readers of No-Till Farmer are already striving to improve soil health, the NCRS encourages all farmers to adopt conservation practices like no-till, crop rotations and cover crops to achieve these goals. But beyond farmers, it will take everyone's participation to make a difference. Soil health management principles can apply in nearly all human-managed landscapes when properly adapted. Read more.



AgWeek – How can Twitter help you learn about soil health?

As we get into #plant18 season, NDSU Extension Soil Health Specialist Abbey Wick know there are going to be photos taken by farmers #plantinggreen or seeding a #covercrop on #saline areas. She really want to see what you are doing and trying. Read Abbey's tips for learning and talking about soil health on Twitter.



High Plains/Midwest Ag Journal – New cotton videos detail benefits of cover crops

Cotton Incorporated, in conjunction with the University of Tennessee, has created a series of videos to explain the benefits of cover crops to the cotton growing community. These videos also give cotton producers suggestions on how to successfully integrate cover crops into their operation. Watch here.



United States Department of Agriculture – Cover Crops and Dryland Wheat? Challenge Accepted.

It's commonly assumed that cover crops won't work with dryland wheat in The Dalles, Oregon. To Noah Williams, this feels like a challenge. Travel to The Dalles to meet Williams and learn how he's using data and experimentation to manage cover crops and build soil health across his operation. Read more.





Forbes – DNA testing, biocarbon and custom microbes: How these startups are improving soil health

There's increased pressure being placed on farmers to improve crop yields in order to feed a booming global population. But increasing those yields has become harder in the past few decades, which have seen increasing degradation of the health of an essential component of agriculture: the soil itself. That declining health is in large part due to a loss of organic matter in the soil decomposing plants, microbes, and other essential parts of the ecosystem. Read more.

Indiana Prairie Farmer – Run equipment on same route to reduce compaction

Is it better to drive a different way with the combine and planter with every pass or take the same route each time? Based on what experts say, whether it be with a grain cart, semi or tractor, you should stay in the same tracks every time to reduce soil compaction issues. Read more.

Additional soil health marketing communications materials from the soil health communications team are in development, so stay tuned for further updates.

*The views and opinions expressed in the aforementioned articles or videos are those of the individuals featured therein and do not necessarily represent the official policy or position of any agency of the U.S. Government.