



NRCS Soil Health Update

December, 2017

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



USDA-NRCS – New educational effort features tiny superhero of the soil

She's a wee bit smaller than your typical superhero. But the creators of a new soil health-themed educational effort 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. [Read more](#). Meet the 3-D animated version of Mighty Mini Microbe in this [video](#) promo. (:15) View or [order](#) the coloring book.

Farm Forum – Ag secretary focuses on replenishing soil health during South Dakota visit

Replenishing and sustaining soil health is a priority of U.S. Secretary of Agriculture Sonny Perdue's and one of the issues he discussed while visiting Brown County Thursday afternoon... After looking over the complex Prairie Pothole Region north of town, Perdue and Matt Ochsner discussed the importance of soil health and ways to offer incentives to farmers to employ more sustainable land practices. [Read more](#). Also from *Farm Forum* – **Mentorships share value of cover crops in cattle operations.** [Read more](#).

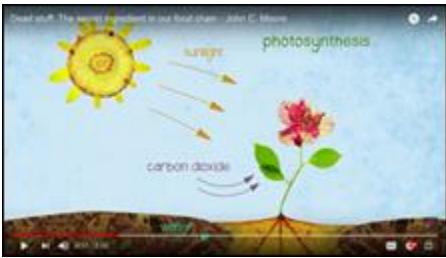
Corn & Soybean Digest – The truth about tillage

"Why do we plow? To make the land like a sponge," Lynn Boadwine remembers his dad and others telling him from the time he was a boy. Years later, the Baltic, South Dakota dairy farmer is seeing things differently. The results of a series of eye-opening, simple infiltration tests on his own land completed the turnaround in his thinking. [Read more](#) in this story by Lynn Betts. Also from *C&S Digest* – **Be a soil livestock producer.** [Read more](#).

Phys.Org – 'Dark matter' discoveries could shine light on new treatments for diseases

Soils from one of the highest, driest places on earth harbour microorganisms with the potential to treat HIV and tackle the world's antibiotic time bomb, research from Newcastle University, UK, has revealed. Analysis of soils from the Cerro Chajnantor mountain landscape of Chile within the Atacama Desert, one of only two coastal deserts in the world, has revealed a treasure trove of bacteria with the potential to fight disease. [Read more](#).





TedEd – Dead stuff: The secret ingredient in our food chain

When you picture the lowest levels of the food chain, you might imagine herbivores happily munching on lush, living green plants. But this idyllic image leaves out a huge (and slightly less appetizing) source of nourishment: dead stuff. John C. Moore details the "brown food chain," explaining how such unlikely delicacies as pond scum and animal poop contribute enormous amounts of energy to our ecosystems. [Watch](#) the video. (3:40)



Ag Daily – The more we understand soil, the more we succeed in ag

Jon Stika writes: For several decades producers had asked for higher yields; not higher profits or improved soil that would sustain their operations into the future. It is not surprising that after decades of asking for higher yields we find ourselves with degraded soil, slim profit margins, and yes, higher yields. While every producer is interested in producing a good crop each year, the conversation in agriculture is changing from the pursuit of high yields, to one of restoring the soil and profit margins. [Read more](#).



American News – Local farmer Wendy Baroli of GirlFarm reaps benefits of “No-Till November”

During a special month-long campaign called “No-Till November,” NRCS is encouraging Nevada farmers to “keep the stubble” on their harvested crop fields and improve soil health. Wendy Baroli, a fourth generation farmer, understands the importance of keeping the stubble on her GirlFarm, located on the Nevada/California border on the outskirts of Reno. Baroli—a former NRCS employee and proponent of soil health—knew that with a bit of experimentation with cover crops, she could turn around some of the fields she has that contain poorer clay soil. [Read more](#).



Brownfield Ag News – Iowa program offers crop insurance premium reduction for cover crop use

Iowa farmers who plant cover crops this fall may be eligible for a five dollar per acre premium reduction on their crop insurance in 2018. IDALS worked with the USDA’s Risk Management Agency (RMA), which oversees the federal crop insurance program, to establish a three-year demonstration project aimed at expanding the usage of cover crops in Iowa. [Read more](#).



EcoWatch – Soil management: Key to fighting climate change?

A paper published last week in the journal *Scientific Reports* estimates that by altering land use practices, the top layer of soil around the globe could increase the amount of carbon stored anywhere from 0.9 to 1.85 billion metric tons per year—an amount that equals the transportation sector's carbon emissions. "Analyses like this help us understand the importance of soil management for reaching climate goals. The question now is: how can we unlock this potential?" Deborah Bossio, one of the study's authors said in a statement. [Read more](#).



Corn & Soybean Digest – Soil life matters

Kurt Lawton writes: This is about paying attention. And about brutality. To your soils. And your landowners' soils. Tillage kills. Perhaps a harsh headline to some. While soil life is not viewed by many people as even closely relatable to human lives, I use the analogy to grab attention, and make a point. Civilizations have been lost due to soil degradation. If you don't believe me, read "Dirt: The Erosion of Civilizations" by David Montgomery. I've been accused before of being anti-tillage. I'm not. I'm pro science, and pro ROI. [Read more.](#)



Soil Health Institute – Website offers easy access to upcoming soil health events, field days

The Soil Health Institute's Communication & Education Action Team recently created a searchable and interactive map-based [calendar](#) of soil health events at the county, state and national and international level. The Institute's Action Team invites all members of the soil health community to submit any conference or field day that is currently unlisted using the [link](#) at the bottom of the website.



Phys.Org – Cover crops provide bed and breakfast layover for migrating birds

After harvesting a corn or soybean crop, farmers may plant a cover crop for a variety of reasons—to reduce soil erosion and nutrient runoff, increase organic matter in the soil, and improve water quality. Now there's another reason. University of Illinois research shows that migratory birds prefer to rest and refuel in fields with cover crops. [Read more.](#)



High Plains Journal – Conference to offer holistic management track

Managing the complexity of a farm operation is a necessary tool for success, which is why the premier soil health organization is offering a full track on the subject at an upcoming winter conference. Holistic management is one of the focus points of the 2018 Winter Conference, hosted by No-till on the Plains and set for Jan. 30 to 31 at the Hyatt Regency, Wichita, Kansas. It is among other key topics on the agenda, which caters to growers who seek more knowledge on soil health. [Read more.](#)



Iowa Learning Farms – Time for your soil health check up!

As we round the corner from one crop year to the next, it's a good opportunity to conduct a "check-up" of soil health. The [Iowa Soil Health Assessment Card](#) is a helpful tool for assessing soil health. Use the card, and a spade, to check on some key soil health indicators this fall. [Read more.](#)



Wallace's Farmer – Top ag teacher learning to farm with cover crops

Iowa's 2017 Ag Education Teacher of the Year is practicing what he teaches while farming his 122 cropland acres in Story County, near Nevada. Kevin Cooper has no-tilled his corn and soybeans for about a decade, and this year added cover crops by seeding 30 acres of

oats into soybeans in August. [Read more](#). Also from *Wallaces Farmer* – **Got it covered?** [Read more](#).



iGrow (SDSU) – Cover Crops & Livestock Integration: An opportunity for profit on S.D. farms

“How can I use cover crops and see an immediate return on my investment?” Recent research from separate departments at South Dakota State University are pointing towards one answer, livestock integration. [Read more](#).

NRCS Soil Health webinar series – Dec. 12, 2017 2:00 pm US/Eastern.

Life Underground: Partnering with soil microbial communities on the farm

This webinar will focus on the challenges and benefits of managing soil biology rather than relying only on chemically based systems, along with the key roles that soil microbes play in agroecosystems. [Learn more](#). **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.



Boulder Weekly – Ollin Farms' Mark Guttridge: Boulder County ag can save the planet

Food impacts everyone, and it impacts every issue from immigration to climate change to livable wages and more. And, it all starts on the farm. Mark Guttridge of Ollin Farms knows this. If you're not tuned in, his fast and twangy manner of speaking obscures the hard science of biodynamic agriculture that he effortlessly reels off; the astute observations and opinions on local farming regulations; and the mindfulness of sustainable agriculture's intimate connection to nature. [Read more](#).

Fibre2Fashion (EU) – Wrangler partners with Texas Alliance for sustainability

Wrangler and The Texas Alliance for Water Conservation (TAWC) have partnered to promote best-in-class techniques and technologies for efficient water use among cotton growers. "Through a focus on soil health, Wrangler's US cotton programme is aligned with our mission, and working with the well-known brand will add credibility and awareness to our work," said TAWC project director, Rick Kellison. [Read more](#).



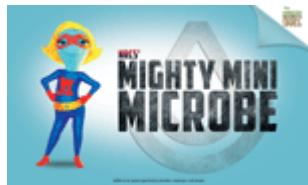


ABC Radio (AU) – Soil health, biodiversity and water access are now a vital part of the pending process by banks to farmers

The Manager of Natural Value at one of the big four banks says things like soil health and access to water are now taken into account in agribusiness lending. James Bentley was one of the keynote speakers at the Private Land Conservation Conference held recently in Hobart and detailed the bank's role in lending. [Listen.](#) (6:05)

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.

**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.*



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[Watch](#) the "Mighty Mini Microbe" trailer.