

Board of Directors

Dennis Hoyle,
Chairman

Levi Neuharth,
Vice Chair

Terry Ness,
Treasurer

Dan Forgey

Jason Kontz

Doug Sieck

Bryan Jorgensen

Shawn Freeland

Mike Beer

Coalition Staff

Cindy Zenk,
Coordinator

Sarah Fitzgerald,
Communications
Coordinator

SD SOIL HEALTH COALITION APPOINTS NEW BOARD MEMBERS

The South Dakota Soil Health Coalition (SDSHC) is pleased to announce the appointment of three new members to serve on the organizations governing board. Jason Kontz of Colman, SD, will fill the vacant seat of previous board member Al Miron. SDSHC by-laws adopted on June 2015 directed the board dynamics for a seven or nine member board of directors. A need was identified recently to expand the board from seven to nine members and action on this change was taken at the SDSHC Board of Directors Meeting January 29, 2018 by recommendation from the elected officials. Shawn Freeland of Caputa, SD and Mike Beer of Keldron, SD will fill two newly created seats on the board. Cindy Zenk, Coordinator stated “the added seats comprises the board of directors to encompass the state and diversity of the producers throughout South Dakota. I am extremely fortunate to work with an active dedicated board of directors focused on the coalition’s mission and vision.”

Profiles in Soil Health

Dennis Hoyle

In a cooperative effort with South Dakota’s Conservation Districts, South Dakota Soil Health Coalition and USDA Natural Resources Conservation Service, Profiles in Soil Health have been established to provide a producers experience on soil health practices. The South Dakota Voices for Soil Health are part of USDA NRCS’ [Earth Team volunteer](#) network. These people are stewards of their natural resources. As a Voice for Soil Health, they actively advocate for soil health.



Dennis Hoyle, one of twenty profiles completed might equate his experience to that of a third grader when it comes to soil composition, nutrients, and management, but he talks like a fired-up college professor with a new crop of eager students when he explains what goes on beneath the surface on his farm.

He talks about how his cover crops improve water infiltration. “It’s a way to pull carbon out of the air and put it into the ground, carbon and organic matter are basically the same thing, so if I can pull carbon out of the air and put in the ground, I’m making the soil healthier,” he says.

Read his complete [Profile](#) and others and check out the [video profiles](#).

Inside this issue:

<i>Midwest Cover Crop Council</i>	2
<i>Videos</i>	3
<i>Soil Health news</i>	3
<i>Events</i>	4-5
<i>Yield & tillage</i>	6

Access the MCCC website for a variety of useful cover crop information!



<http://mccc.msu.edu/>

South Dakota

Establishing cover crops in South Dakota semi-arid, frigid soils can be challenging. Viable options for timing include following wheat, in-season following the annual crops weed-free period, and in the fall following harvest.

Benefits from cover crops may include:

- 1) reduced wind and water erosion,
- 2) reduced nitrate leaching,
- 3) increased soil organic matter and water infiltration,
- 4) Improved nutrient recycling,
- 5) improved water quality,
- 6) improved soil health,
- 7) enhanced weed suppression,
- 8) remediation of saline and sodic soil problems, and
- 9) increased forage for livestock and wildlife.

Midwest Cover Crop Council's Cover Crop Decision Tool Soon To Include South Dakota!

About the Cover Crop Decision Tools

The Cover Crop Decision Tools are an initiative by the MCCC to consolidate cover crop information by state to help farmers make cover crop selections at the county level. Information for each state/province is developed by a team of cover crop experts including university researchers, Extension educators, NRCS personnel, agriculture department personnel, crop advisors, seed suppliers and farmers. The team reviewed and refined information from the [Sustainable Agriculture Research and Education \(SARE\) publication *Managing Cover Crops Profitably, 3rd edition*](#) to refine application within their state/province. The information and ratings contained in the Cover Crop Decision Tool is the team consensus based on literature, research results, on-farm experience and practical knowledge.

The popular pocket field guide is available as a mobile app for iPhone and Android. Access all the same great information available in our pocket guide, on your phone or tablet! Additional photos have added to the app, as well as links to other useful information. [Available on the App Store.](#) [Available on Google Play.](#) ...or search "cover crop"

The printed field guide will continue to be available through the [Purdue Extension Education Store.](#)

Work has begun to add South Dakota to the interactive interface of the Cover Crop Decision Tool. States currently integrated into the tool include: Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, Ontario, and Wisconsin. Although a completion date has not been distributed the Midwest Cover Crops Council already includes a wealth of useful information for all states within the Midwest.

Check back in the upcoming months for additional information!

Acknowledgements

This project has been funded by: a USDA Conservation Innovation Grant in partnership with the [Conservation Technology Information Center](#); the [Great Lakes Regional Water Program](#); [Michigan State University's Project GREEN](#); Michigan State University Extension/W.K. Kellogg Biological Station, Michigan State University; Purdue University; Ohio State University; University of Minnesota; Iowa State University; and the Ontario Ministry of Agriculture, Food and Rural Affairs. The MCCC would like to thank SARE and Andy Clark, SARE Outreach Communications Director and editor of *Managing Cover Crops profitably, 3rd edition* for the use of their materials. (Source: Midwest Cover Crops Council, <http://mccc.msu.edu/selector-tool/>)

Wheat Stem Maggot in Corn: Plan on Scouting Your Cover Crop Fields This Spring

Planting corn into Cereal Rye or “planting green” has been done successfully by producers around South Dakota and the neighboring states. Drilling cereal rye immediately after harvest of a soybean crop, then planting corn into the Rye the following spring. Cereal Rye has a very impressive root system that can add large amounts of soil carbon to the soil thus leading to an increase in organic matter. However, caution is needed to avoid yield loss to the corn crop. This concept is still being researched and yield loss has been experienced by some producers possibly due to Nitrogen tie-up or insect injury as such from wheat-stem maggot. There seems to be less concern with yield loss if planting Soybean into green Cereal Rye. Planning and research are needed before planting.



Credit cropwatch.unl.edu

in-

Links for information on cover crops
[Read the entire article from University Nebraska-Lincoln Crop watch.](#)

[A Strategy to Improve Soil Health in a Midwest Corn-Soybean Cropping System](#)

Profiles in Soil Health and Our Amazing Grasslands Videos

Profiles in Soil Health and Our Amazing Grasslands videos highlight producers throughout South Dakota sharing the message of their operations. Watch for them to be released all year!!

Videos can be accessed by clicking on the photo included here or by visiting <https://www.sdsoilhealthcoalition.org/videos/>.

Thank you to our partners for making the video and commercial projects possible.

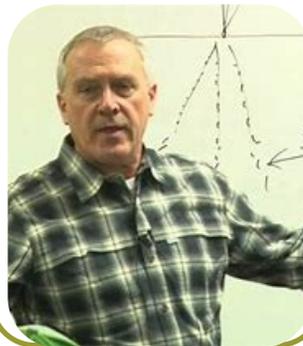
SD Cattleman Association’s Cow Calf Council, The Nature Conservancy, Pheasants Forever, American Bird Conservancy, World Wildlife Fund, Audubon Dakota, Ducks Unlimited, Partners for Fish and Wildlife, SD Game, Fish and Parks, SD Soil Health Coalition, SDSU Extension, USDA Natural Resources Conservation Service and SD Grassland Coalition.



Soil Health Events



June 12th —Jay Fuhrer & Ray Archuleta will share their Soil Health message in Moody County!
Check out all the upcoming events!! Mark your calendars!



Retired Soil Health Specialist Jeff Hemenway Presented With Inaugural Friend of Soil Health Award

South Dakota Soil Health Coalition (SDSHC) awarded its first ever South Dakota “Friend of Soil Health” award at their second Annual Meeting held January 17, 2018. The recipient was retired Soil Health Specialist Jeff Hemenway who was honored for his decades long work advocating for improvements in soil health and soil health management throughout South Dakota. As the key organizer of the SDSHC’s first Soil Health School he established a means for a holistic learning experience that has proven to make a real impact on all those who take part.



Hemenway’s soil health message has convinced countless producers of the need to change how we manage our greatest natural resource, the soil. The “Friend of Soil Health” award was designed to recognize those who have made a substantial impact in the areas of soil health education and advocacy. Hemenway’s over thirty plus years of experience with the USDA Natural Resources Conservation Service has made his work in this area meaningful beyond compare.

The Annual Meeting itself was held at Lake Area Technical Institute in Watertown and was extremely well attended with over 200 adult registrants and 250 student attendees. When asked about the meeting



location SDSHC Coordinator Cindy Zenk said “Working with Lake Area Technical Institute to host our annual meeting provided an opportunity for the agriculture students to attend and learn about soil health from nationally recognized speakers and our membership to see the amazing school here in Watertown.” Bryan Jorgensen board member and producer from Ideal, SD was extremely impressed with attendance saying “The turnout was way beyond my expectations and the level of enthusiasm in the crowd was awesome. We have momentum and we must stay the course.”

The events activities included: speakers Joe Breker of North Dakota and David Brandt of Central Ohio, presentations from local producers Bryan Jorgensen and Dan Forgey, as well as a rainfall simulator demonstration to end the day. Video of all presentations is available at <https://www.sdsoilhealthcoalition.org/videos/> January 22-23rd are the dates for 2019 SD Soil Health Coalition Annual Meeting.

USDA
Launches New
Farmers.gov
Website



www.Farmers.gov



Upcoming Soil Health Events



Soil Health School

September 5-7, 2018

The South Dakota Soil Health Coalition is excited to announce the South Dakota Soil Health School which will be held September 5-7, 2018 in Hartford, SD. Field demonstrations will be held at the farm of Kurt and Kathy Stiefvater.

The Soil Health School is designed for agricultural producers as well as anyone with an interest in learning how to manage soils for resiliency and profit.

The agenda features classroom style presentations from producers and technical experts from across the state and region, as well as hands-on experiences in the field. Area producers will share their challenges and successes with various methods for improving soil health.

Space is limited. Early registration is encouraged to participate. First session starts at 8:00 AM Wednesday. Final session will end at 1:00 PM Friday. Sign up today!!

Topics Included In The School

Agenda Include:

-  Adaptive Management
-  Soil Properties
-  Agronomics
-  No-Till Planting
-  Crop Rotational Diversity
-  Cover Crops
-  Inventory of Farm Resources
-  Soil Assessment and Monitoring
-  Managing Soil Salinity
-  Water Infiltration and Dynamics
-  Planning Your Own Place
-  Soil Biology
-  Fencing and Watering Systems
-  Forage Allocation
-  Implementing Grazing Practices

Jay Fuhrer, ND Soil Health Specialist and Brian Hoffman, Leola digging up the tightey whities at the 2017 Soil Health School. Tightey Whities were buried for three weeks in a cover crop field which had been no till for 7 years.



Calendar Of Events:

April 30th-May 1st

South Dakota Envirothon Competition, Sioux Falls

June 5th-7th

SD Professional and Youth Range Camp, Sturgis

June 12

Jay Fuhrer and Ray Archuleta—Moody County

Ray Archuleta—Spink County

June 13

Ray Archuleta Pierre and Winner

June 20th-22nd

Grassfed Exchange Conference, Rapid City

June 26-27—Rangeland Days & Soils Days Redfield

June 26—Murdo Soil Health Field Day

June 28-29—Bus Tour Gabe Brown and Jeremy Wilson's

July 15th

SD Grassland Management School, Watertown

September 5th-7th

SD Soil Health School, Hartford

September 17-19

SDACD Convention
Jon Stika

January 22-23

Annual Meeting
Brookings—SDSU



South Dakota
**Soil Health
 Coalition**

116 N Euclid Avenue
 Pierre, SD 57501

Phone: 605-280-4190
Email: cindy.soilhealth@sdconservation.net
Website: sdsoilhealthcoalition.org

Big Yields and Tillage Debate

The discussion of grain yields and different tillage practices needs to start in producers' fields. Grain yield comparisons and results from un-biased research are very important for making agronomic decisions that include tillage; however, producers need to put these practices to work in everyday situations across large acres to consider a practice worthy in modern agriculture. Today, many producers are concerned with soil health. Experts in soil health have identified that it should first start with one big change, i.e. very reduced tillage or better yet, ceasing tillage, ultimately no-till. No-till is used on 45% of South Dakota croplands (The 2017 South Dakota Cropping Systems Inventory, USDA-NRCS/SD). The eastern 25% of South Dakota has not fully adopted no-till (less than 25% of the area under no-till), despite growers in these areas that have demonstrated its success.

The 2017 corn and soybean yield contest results show that no-till and conservation farming practices do bring successes. In 2017, both the corn and soybean yield contests offered specific categories based on tillage practices. In the Soybean contest sponsored by the South Dakota Soybean Association and the South Dakota Soybean Research and Promotion Council, overall average no-till soybean yield was only 1.93 bushels less than the tilled category (Table 1). The tilled entries gave more yield in the maturity group 0 and I categories while the no-till entries had more yield in the maturity group II and III. In the 2017 corn yield contest sponsored by SDCORN and the National Corn Growers Association, the overall average for the no-till category was 8.9 bushels greater than the tilled category (Table 2).

The demographics for the yield contest winners were very interesting. All but two no-till entries for both corn and soybeans were from the eastern 25% of South Dakota, which has the lowest rate of no-till adoption (Figure 1). The last year's yield contest winners showed strong evidence that when managed properly, no-till and conservation cropping systems are very successful in the eastern regions of South Dakota. **Anthony Bly, Sara Berg and David Karki**

Table 1. Average yield of top three winners from each maturity group (non-irrigated) in 2017 South Dakota Soybean Yield contest.

Tillage	Soybean Maturity Group				Overall
	0	I	II	III	Average
	----- bu/a -----				
Tilled	75.21	77.28	74.62	69.30	74.10
No-Till	70.60	71.80	74.82	71.45	72.17

Table 2. Average yield of top three winners from each tillage group (non-irrigated) from the 2017 South Dakota Corn Yield contest.

Tillage Method	Overall Average
	---- bu/a ----
Tilled	266.5
No-till/Strip Till	275.4