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Al Miron: Champion for Soil Health 1942-2017

It is with great sadness that we reflect on the passing of Al Miron, South Dakota Soil Health Coalition (SDSHC) Board Member and one of South Dakota's most influential soil health supporter and advocate. Al had been a member of the SDSHC board since its inception in 2015 and in this position, was extremely influential in increasing support for soil health practices throughout the state. Additionally, his hands-on experiences on his own farm and educational background made him uniquely qualified to mentor others and he pursued every opportunity to do so.



Continued on page 2

SD Soil Health Coalition Will Host, David Brandt, Allen Williams and Joe Breker At January Annual Meeting

Mark your calendars! The South Dakota Soil Health Coalition (SDSHC) will be hosting their annual meeting at the Lake Area Technical Institute, 1201 Arrow Ave. N.E., Watertown, January 17, 2018. Registration will begin at 9:00 a.m. with the speakers to begin at 9:30. Speakers for this year's event include David Brandt Ohio soil health pioneer, Allen Williams cover crop and livestock integration expert, and Joe Breker North Dakota soil health advocate.

This year's program will also include a meal, rainfall simulator, as well as a "Meet and Greet" with speakers and the SD Soil Health Coalition Board the evening before. A block of rooms has been reserved at the Ramkota and CCA credits are available for those who may be interested.

Those interested in attending are encouraged to RSVP for planning purposes, to Cindy Zenk SDSHC Coordinator, by calling (605) 280-4190, or by emailing sdsoilhealth@gmail.com. This event is free to all current SDSHC members. The cost for non-members is \$25, which includes a one-year membership to the South Dakota Soil Health Coalition. Please join us to see how we are working to fulfill our mission of improving soil health in South Dakota! Please see pages 4-5 for full speaker profiles.

Inside this issue:

Tribute To Al 2

David Brandt 4

Allen Williams 4

Joe Breker 5

Soil Health panel 3

Al-

Farming was a passion for Al and he began thinking about making it a part of his future as early as his high school years in Minnesota during the 1960's. He continued to pursue this passion while earning a bachelors in Dairy Science, as well as both masters and doctorate degrees in Ruminant Nutrition at The University of Minnesota. Al juggled classes and farming throughout his graduate and post graduate career renting land and even returning home to help manage the family farm when his father suffered a serious farming injury.



While working in the public sector and after retirement; Al continued to farm, and his operation most recently included 660 acres of completely no-till with a corn and soybean rotation and starting cover crop integration.

As a founding member of the South Dakota Soil Health Coalition Al helped create the first ever Soil Health Coalition in the nation and worked on projects such as Soil Health School, presenting at workshops, hosting tours at his farm, providing land for test plots, and mentoring to individuals all around the world . Al's [USDA NRCS Soil Health producer profile](#) verifies his love for soil health and willingness to assist anyone who would contact him.

Quotes From Al :

Miron said, "It's not uncommon for me to find six to 10 worms between two kernels of corn. And when you spade my soil in June, you'll find enough worms to go fishing. You don't normally think about going out to a farmer's field to look for worms. You find worms in a grove or a wet area. But with residue, you'll find worms in my fields even in the middle of summer." from Soil Health Producer profile

"The soil is not just a spot to anchor roots and provide mineral nutrients to a plant. There is interaction with biological health in the soil between the bacteria and fungi that provide nutrients to the plant. If we increase that bioactivity, we have potential for greater productivity," Miron explains.. from Eminent Farmer profile

Articles and videos of Al's farming practices include Merit or Myth series, "Truth about Tillage", 2016 SDSU Eminent Farmer, Cover Crops, SH Profile, and Soil Microbes . This widespread involvement made Al one of South Dakota's most influential soil health advocates, and he was always willing to champion the cause in whatever way necessary.



Al Miron Photos courtesy of USDA NRCS, SDSHC, Merit Myth, Joe Dickie, Miron family



The SDSHC will strive to honor Al Miron's memory and continue his vision through a continued commitment to promote soil health practices throughout the state of South Dakota and to anyone who contacts us! He is greatly missed.

Pictured below Al and Joan Miron with their grandsons—photo courtesy of Miron family



*"We need to realize that we need to have something that will sustain not only ourselves in the short term but our children, grandchildren, and our great grandchildren."
-Al Miron*



Soil Health Farmer Panel Creates Dynamic Discussion

By: Sarah Fitzgerald, SDSHC Communications Coordinator

The South Dakota Soil Health Coalition (SDSHC), a member driven organization whose mission is to promote soil health throughout the state of South Dakota, organized a farmer panel for this year's Ag Horizon's Tuesday afternoon breakout sessions. The roughly hour-long discussion was centered around "Managing Soils for Resiliency and Profit" and each member of the panel was given the chance to share their hands-on experiences and management strategies with those in attendance. "In these times of low commodity prices and extremely variable precipitation it is even more important that soil health and resiliency are topics being discussed" says Doug Sieck panel member and SDSHC Chairman.

The break out session included an interactive discussion covering a variety of soil health concepts such as: crop rotational diversity, soil assessment and monitoring, water infiltration dynamics, as well as ways to incorporate cover crops and livestock to produce soil health benefits. Those in attendance were able to direct the discussion to topics specifically applicable to their operations and identify common challenges and successes association with different soil health practices. The conversation was so lively at this year's panel that several members of the audience began to help answer questions drawing from their own on-farm experiences.

Members of the panel included SDSHC board members Dennis Hoyle, Levi Neuharth, Terry Ness, and Doug Sieck as well as Soil Health School graduates Don Nickelson and Trevor Zantow. The Soil Health School is a yearly educational event hosted by the SDSHC which includes both classroom style presentations as well as hands-on experiences in the field. During the school participants receive valuable soil health training from both local area producers and technical experts from across the state and region. The 2018 school will be held September 5-7 near Hartford SD. Additional information can be found at sdsoilhealth-coalition.org or by contacting Cindy Zenk at 280-4190.



Left to Right: Dennis Hoyle, Don Nickelson, Trevor Zantow, Levi Neuharth, Terry Ness, Doug Sieck Anthony Bly moderator

"Helping Your Soil and Crop Weather the Weather"

Dan Coffin was one of six keynote speakers at this year's Ag Horizons Conference held December 5-6. Coffin's session on "Helping Your Soil and Crop Weather the Weather" was especially well received with many agricultural producers having experienced extreme drought conditions this last growing season throughout the state of South Dakota.

When asked about this session and its message Coffin expressed that it is extremely important for producers to identify the specific soil health and other crop related goals that they are trying to achieve. Only then can they identify how factors such as soil moisture, excessive drainage, and evaporation can affect these goals. To improve soil health in general he said he would make the following recommendations to a producer. Firstly, it is crucial to identify what the problem or deficiency really is in an operation and then come up with ways in which things can be done differently to eliminate these deficiencies. Secondly, Coffin expressed that it is important to recognize that fertilizer is not food for plants but rather a supplement and that inputs such as manure and other products containing amino acids should be utilized to feed plants. Lastly, he mentioned that tools such as precision technology, foliar feeding crops, as well as monitoring and analyzing the results of soil tests can be used to increase soil health.

Coffin's agricultural experiences growing up in east central Indiana, educational background in agronomy, diverse work experience across the country, as well as his current business has given him a unique understanding of the interaction between plants and soils. He stresses that recognizing that interactions between plant physiology and soils are never a "one-way street" is the key to understanding how soils function. Healthy plants cannot function without the help of healthy soils and healthy soils are not possible without the presence of plants.



Annual Meeting Speaker Profiles



“How To Utilize Diverse Cover Crop Mixes and Reduce Inputs”

David Brandt farms 900 acres in Fairfield County Ohio, on which he raises corn, beans, wheat and a variety of cover crop species. Brandt is considered a soil health pioneer due to his extremely early adoption of no-till which he began utilizing on his farm in 1971. Over the last 45 years he has seen many benefits including reduced soil erosion as well as input and equipment costs.

Brandt strongly believes that the soil health practice that has had the biggest positive impact on his operation has been cover crops which he has been using since 1978. He specifically finds the use of diverse mixes of cover crops to be extremely beneficial from a soil health standpoint. Brandt currently seeds cover crop mixes which include 8-10 varieties and whose benefits include the cycling of nutrients to the surface for use by crops, increased water holding capacity, increased organic matter, fixation of additional nitrogen for subsequent cash crops as well as significantly reduced soil erosion.

The use of both cover crop and no-till have helped to reduce Brandt’s soil erosion levels to less than 100 pounds/acre. He will be speaking at the 2018 South Dakota Soil Health Coalition Annual Meeting on “How to Utilize Diverse Cover Crop Mixes and Reduce Inputs”. Please join us January 17, 2018 to hear David Brandt, over 45 year no-tiller and cover crop expert speak about his experiences!



“The Three Principles of Adaptive Management”

Allen Williams is a sixth-generation farmer whose family has been farming in South Carolina since 1840. While growing up he assisted with raising cattle, hogs, chickens, and sheep, as well as the management of both row crops and orchards. Williams describes his family as “direct marketers” because they operated a General Store where goods and products from the farm were marketed and sold. After attending Clemson University for both a Bachelors and Master’s Degree in Animal Science with a minor in Poultry Science he attended Louisiana State University and earned a PHD in Animal Genetics and Physiology.

Following these educational accomplishments Williams spent 15 years working in academia both teaching and performing research. In 2000 he left academia and returned to farming and ranching opening his own livestock management and consulting business. His business’s concentrations include: pastured protein, soil health, adaptive management and regenerative agriculture. Through this work he has had the opportunity to work with both ranchers and row crop producers in the United States, Canada, Mexico, and South America.

Williams will be speaking at the 2018 South Dakota Soil Health Coalition on the “Three Principles of Adaptive Management”. Please join us on January 17, to hear Allen Williams speak about his extensive experience with adaptive management techniques including livestock integration and grazing of cover

“2017 Update: What I Have Learned On My Farm”

Joe Breker and his wife Patty farm 2500 acres in Sargent County, North Dakota on which they raise corn, soybeans, cereal grains, as well as an ever-changing variety of specialty crops. An example of the types of specialty crops they have grown in the past include fava beans and radishes which were grown to produce cover crop seed for sale. All cash crops are grown in conjunction with several soil health practices of which the most important are no-till/reduced-till and cover crops. Breker strongly believes these two soil health practices have made the most impact on his farm.

The Breker Farm was the recipient of the 2015 National Nutrient Management Award which is presented annually at the National No-Till Conference. They were recognized for nutrient management practices such as composting manure before application as well as for reducing fertilizer inputs throughout their operation. Breker attributes their ability to reduce fertilizer applications to increased soil health. At the 2018 South Dakota Soil Health Coalition Annual Meeting, Breker will be presenting a “2017 Update: What I Have Learned on My Farm”. During this session he will discuss soil health practices used throughout his operation this last year, their effects, and things he has learned moving forward. Please join us January 17, 2018 to hear Joe Breker, over 35 year no-tiller and soil health advocate, speak about his experiences!



Upcoming Soil Health Events

January 16th
Ranchers Workshop-Mission

January 16th
David Brandt-Edmunds County

January 17th
ANNUAL MEETING - Watertown

January 19th
David Brandt—Branding Iron Belle Fourche

January 22nd
Grazing Workshop Rutland, ND

January 23rd
SD No till Assoc.— Wall

January 24th
Ag Fest—Pierre

January 26-27th
Northern Plains Sustainable Conference Aberdeen

February 1st
Soil Health—Howard Farm Show

February 6th
Producer workshop Gettysburg

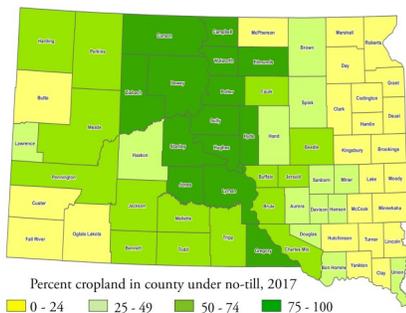
February 15th
No-Till Association—Mitchell

February 21st
Soil Health—Eden

No till No.1 in 2017



No-Till Strong in Central South Dakota in 2017



Graphics provided by USDA NRCS.

[Highlights : 2017 Cropping System Inventory available](#)

Bringing 2018 in Healthy

What are your New Year's Resolutions?

Soil armor—or keep it covered—provides numerous benefits for cropland, rangeland, pastures and more. Look down what percentage of your soil is protected by residue? Erosion needs to be controlled before you can start building soil health.

Minimize soil disturbance—No disturbance—good start to rebuilding soil aggregates, pore spaces, soil biology, and organic matter. Essential step for long term soil productivity.

Diversity—Crop rotations should mimic our original plant diversity landscape. Diverse crop rotations provide more biodiversity, benefitting the soil food web; which improves rainfall infiltration and nutrient cycling while reducing disease and pests.

Continual Live plant/root— Keep something growing as long as possible. Cover crops can be added as an annual, biennials or perennials Start small scale to find the best fit for your operation.

Livestock Integration—Fall/winter grazing high residue crops to low carbon organic material balances the carbon/nitrogen ration and prepares for no-till seeding.



South Dakota Soil Health Coalition

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SOIL HEALTH BUCKETS

SD Soil Health Coalition provides educational soil health buckets and lessons to vocational agriculture classrooms, soil science classrooms and additional youth groups. In order to continue to purchase the required items to complete the 14 lesson plans; SDSHC reached out to supporters to contribute to this effort. \$21,969 has been raised in 2017, to purchase the tools for the classrooms. Each bucket complete with all necessary items has a price tag of nearly \$500. SDSHC recognizes the current contributors, and persist to provide each classroom the bucket, lesson plans, and follow up to educate our youth about soil health!



Left: Nate Franzen presents Cindy Zenk check for soil health bucket.

Right: Bucket and included items for each bucket.



THANK YOU !

Farm Credit Services of America
Pierre Branch Jeff Hauck

First Dakota National Bank

Nate Franzen President, Agri Business
Division Yankton Branch

Dacotah Bank Aberdeen Branch
Trevor Samson

Ducks Unlimited, Inc. Brookings
Steve Donovan, Manager Con Programs

Interested in contributing contact
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