

#### APRIL 2013 NEWSLETTER OFFICERS 2012-2013

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## SWCS STUDENT SCHOLARSHIP WINNERS - UNIVERSITY OF NEBRASKA FOUNDATION DECEMBER 2012

**David Lang**emeier - Treasurer

The Nebraska Chapter of the Soil and Water Conservation Society has a scholarship fund at the University of Nebraska Foundation. The earnings on this investment fund enabled us to award two \$750 scholarships in December 2012. The year 2012-2013 scholarship winners are Taylor Nissen and Austin Baldwin.

Taylor is a UNL senior majoring in Environmental Studies emphasizing Applied Climate Science with a minor in Geology. Taylor has worked as an intern land surveyor, been employed with Nebraska State Game and Parks and the Lower Platte North NRD, worked for Page's orchard and farm and has had several other jobs for businesses and farmers in the Valparaiso and Raymond areas. He is known for his management skills at Raymono's Pizza and currently is manager of Page's Country Side store. After graduating from UNL he hopes to work for an Environmental Science firm helping with environmental conservation and restoration. He states that "it is very important that environmental schooling is pursued along with environmentally enhancing careers."

Austin Baldwin is a UNL sophomore majoring in Environmental Restoration - Soil Science. He grew up on a farm/ranch near Creighton. He is a member of the UNL Soil Science team which will compete in the national competition this spring in Wisconsin. In the summer of 2010 he worked for NRCS as a student intern and currently works as a laboratory assistant for the NRCS National Soil Survey Center in Lincoln. Austin is active in the FFA, Alpha Gamma Rho and is a National Honor Society member. He states that "he has enjoyed learning the practical applications of how to help our environment."

The Nebraska SWCS chapter is pleased to announce these two scholarship winners. Please congratulate them when you see them and encourage them as they pursue careers in the natural resources field.

### NEBRASKA FOUNDATION ANNOUNCES 2013 SCHOLARHIP WINNERS

Paul D. Smith – Foundation Committee Chairman & Nebraska Foundation Treasurer

The Nebraska Soil and Water Foundation has announced the 2013 college scholarship winners according to President Kris Reed. Three scholarships have been awarded again this year. Applicants are students studying in natural resources conservation and related technical fields.

Amanda M. Hefner of Archer, a junior majoring in Environmental Studies at the University of Nebraska - Lincoln, won a 2013 Nebraska Soil and Water Foundation scholarship. Matt L. Zvolanek of Wymore, a student at the University of Nebraska - Lincoln majoring in Agronomy, also received a 2013 scholarship. Matt has worked for the USDA Natural Resources Conservation Service as a student during the summer.

Bailey McKay received the 2012 - 2013 Tina Carlson-Lorentzen Family Memorial Scholarship through the Nebraska Chapter Soil and Water Conservation Society. Ms. McKay is a senior at Chadron State College majoring in Rangeland Management with livestock option. She is the daughter of Steve and Tara McKay of Ericson, NE.

Members of the Nebraska SWCS make scholarship funds available. "The Foundation members in general are professionals working with land users to plan and apply conservation that will sustain or improve their land and water. We are glad that we can help the students," concluded Kris Reed Foundation President.



Scholarship winners Matt Zvolanek and Amanda Hefner with Paul Smith (center).



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Kris Reed with scholarship winners Amanda Hefner and Matt Zvolanek.



Chadron State College Professor Dr. Chuck Butterfield, Tina Carlson-Lorentzen Family Memorial Scholarship winner Bailey McKay and SWCS member Robin Foulk.

### SWCS NORTHERN PLAINS REGIONAL WORKSHOP

Anita Nein - SWCS Northern Plains Director Pictures by Brenda Ling, Wyoming NRCS Public Affairs Specialist

The 2013 SWCS Northern Plains Regional workshop was very unique and successful. Twenty-six participants attended the workshop in Casper, Wyoming. More than 39 participants viewed from other sites in the six states Northern Plains Region by video/teleconference. Twenty of those were from Montana. The NRCS Wyoming State Conservationist Astrid Martinez and NRCS Wyoming Acting State Soil Scientist James Bauchert gave us all a warm welcome. Jerry Schuman, SWCS Wyoming Chapter, served as facilitator for the day.

This was the first time that a VTC was used to produce the workshop program. The topic of soil quality was produced by SWCS members in communication and collaboration with NRCS and ARS. A bouquet of multitalented people led by SWCS Wyoming Chapter President Cory Cole managed to get all the equipment at the right place at the right time. "Soil Health," a cross pollination of ideas coordinated by eight presenters dovetailed and presented their topics right from their home locations.

### **BASIC SOIL HEALTH** by Michael Collins and Joel Moffett

Mother Nature is not a nudist, she is an opportunist. She will try everything she can (even bindweed) to cover herself. Is soil in nature naked or covered? If you keep soil covered with growing plants and residues you will feed the microorganisms in the soil. In a handful of soil there are more little "critters" than people on the earth. Your knowledge of the biological processes can make soil function at high levels. Ecological drivers (water, nutrient, energy cycles) along with nature's rules of plant succession will enhance the soil. One should be aware of which cycle is the most limiting factor.

If there were no insurance or Farm Service Agency payments and oil was \$250/barrel what could a person do to maintain the resources, sustainability and profitability? How can producers continue to feed the world when natural resources used to make fertilizers become scarce or depleted? Producers need to change from a monoculture with 1000# in growing plants and residues to a natural community with 4000#. The result would be an increase in biological activity and increase in nutrient cycling.

How can we use soil and crop rotations to produce nutrients to feed cash crops? A majority of the time we need to continuously grow plants, increase diversity of living plants and increase dead organic matter to feed the microorganisms in the soil. These "critters" can then produce nutrients usable to the plants we want to grow.

#### SOIL BIOLOGY by Kristine Nichols

In the interchange of chemistry and biology, soil is the heart of the system. Every organism including the soil's microbiology has to have a home (habitat), be safe, get food and reproduce. How can the needs of these tiny microbes be met at the lowest cost? The "root" of the problem is the "root" of the solution.

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The rhizosphere is an area around the root of a plant. It is an area of diversity of organisms fed by living plants. The food web starts with living crops. The carbon in the soil goes into the root. It moves to become carbon above the soil in the crop. Carbon equals energy. The system will not function if plants are not growing.

As a manager of the soil system we take carbon energy from the soil to make nutrients to produce plants that grow animals above and below the soil surface. We can be habitat engineers who manage diversity of plants and residues, grazing animals and soil aggregation. These factors in turn affect soil structure, water and nutrient cycling.

A cropping system will affect the carbon sequestration ability. To reach out and capture carbon, we need to continuously grow plants producing food for biological activity. There is maximum biological activity in growing a multispecies of organisms. There is also an interplant transfer of phosphorus and nitrogen via mycorrhizal fungi on the roots of plants. Micorrhiza is a symbiotic association between fungi and plant roots and is unlike either fungi or roots alone. The fungi's hair-like filaments called hyphae extend the reach of plant roots to funnel more water and nutrients to the plant roots.

#### **CROP DIVERSITY** by Jon Stika

Think about what functions you want your soil to perform. How well is the soil you now have supplying nutrients back to the crop? We know how soils developed, and how to classify soils but we know almost nothing about how the soil works.

We know cycling of nutrients and photosynthesis is taking place. Carbon dioxide is taken out of the air in the presence of sunlight and with chlorophyll present the plant produces sugars and grows. Carbohydrate is often stored in the roots. When the plant is small, it uses very little water and nutrients, but as it grows more nitrogen in particular is needed. However, if we apply commercial nitrogen, it disrupts how the plant is intended to function. Jon's point was that we should reduce soil disturbance, end the practice of summer fallow, increase diversity of plants in the crop rotation, keep the living roots growing, preserve the food web and increase the infiltration rate. The organisms feed the plants; the plants feed the organisms.

In recent times, the mind-set has often been "if the crop needs nutrients go to town and get them. Apply them preplant or spoon feed them." Even though we may have

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studied how the breaking down of organic matter produces nutrients, as growers we have not relied that much on that process. Now with the rising cost of commercial fertilizers and reduced natural resources, we think about applying the techniques that produce fertilizers in the soil without having to buy them. Figure out how a farmer can keep plants growing in rotations that include cool season grasses, cool season broad leaves, warm season grasses and warm season broad leaves with a minimum of two years break between crop types.

Cover crops and no-till are tools only, not the goals. The goals are good soil health by feeding the organisms both above and below the soil surface. Underneath the soil surface some groups of microbes can be as large as two cows. If they are not fed they eat their own house and habitat. An abandoned crop field will go back to prairie because the organisms feed the plants; the plants feed the organisms. By feeding the underground earth producers can mimic Mother Nature.

#### **COVER CROP CALCULATOR** by Michael Casper

Michael's presentation taught participants how to use an excel spread sheet to compare diverse plants in a cover crop mix of seeds to be planted. The calculator shows costs, budgets and reflected the goals of a grower. Michael brought our attention to various goals. They could be soil health, supplemental grazing, fertility and organic matter, creating lasting residues to feed the soil biology, nitrogen capture and nutrient cycling, weed suppression, reduction in disease cycles, erosion control or reduction in compaction.

He urged thought in the environmental factors and limitations that are at work. The considerations are rainfall and irrigation, evapotranspiration, length of growing season, soil type and condition, seeding method, previous crop, previous chemical treatments, the next crop and the carbon to nitrogen ratio.

The time frame of a cover crop is a factor. A grower must decide when the cover crop can be planted and when it will be terminated to fit with other crops. What does the budget permit? The cost can range from \$20 to \$40 per acre. Generally, the more legumes are added in the mix the higher the cost per acre.

**THE BIG PICTURE in SOIL HEALTH** by Brendon Rockey of Rockey Farms, a Potato Producer

Brendon agreed with Michael that a farmer must plan for the soil not just the plants he grows. Brendon believes a grower must bring the natural biology into balance.



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Healthy biology helps infiltration and water holding capacity. Healthy soil has aggregates and soil strength. Brendon added, "Strong soil structure can keep the sprinkler from getting stuck in low places." He plants radish, rapeseed and turnip in cover crop mixes to break up compaction and provide vertical tunnels for water infiltration via tap roots.

A gas exchange must take place in the soil so he uses plants to open the soil pores and build soil structure. In addition to potatoes, Brendon adds cover crops to feed the soil from living roots. The plant biology of cover crops and crop diversity makes nutrients available to the cash crop by way of carbon storage.

Brendon stated that he has reduced the amount of commercial fertilizer he adds because it can build a heavier salt load that damages the soil biology. In the past Brendon added 150-180# nitrogen to make up for nitrogen losses and still have some left over for the potato crop. He now adds 40# and grows the remaining amount needed by improving the soil biology. He has had a huge spike in earthworms and is supporting other microbes that support the earthworms.

With potatoes, Brendon grows buckwheat as a cover crop. Buckwheat can help make calcium and phosphorus available to other plants. Growing legumes such as peas, vetch, dry beans and pinto beans can transfer nitrogen during the growing season to help both the potato plant and the legume at the same time. Brendon also uses buckwheat because it flowers. Insects that are natural predators such as lady bugs are attracted to those flowers. They eat the insects such as aphids or potato beetles that can damage potatoes.

Brendon stated, "Don't try to eradicate pests by spraying. By trying to solve one problem you create two more."
He wants a good quality potato crop with fewer pests.
Some weeds can be controlled by beneficial fungal populations. Nematodes may be kept in check by other healthy organisms. We can use diversity of plants and animals to help a potato farmer raise a better crop.
Brendon uses the power of diversity and four different plant types such as cool and warm season grasses and broadleaves to produce better soil. His only tillage operations are to incorporate his green manure crops. His goals are increasing soil biology, soil carbon and soil structure.

WYOMING SOIL HEALTH TEAM DEMOS by James Bauchert, Cameron Clark and Dan Mattke

James, Cameron and Dan had set up several SWCS NEWS – Page 4

demonstrations to show water movement in soils, soil characteristics, filtration by disturbed and undisturbed soils, filtration through successive soil types and how undisturbed soils can reduce flooding and the amounts of sediments, nutrients and chemicals that end up in rivers, lakes and oceans.

All in all the workshop taught new concepts useful in conservation planning and farming and forced the participants to face thought provoking changes that may occur in mainstay businesses in rural communities.



Attendees of the 2013 SWCS Northern Plains Regional workshop held in Casper, Wyoming.



Soil health demos at the SWCS Northern Plains Regional workshop.



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#### **APRIL 2013 NEWSLETTER**

#### MEMBER SPOTLIGHT – GARRISON FAMILY WINS NEBRASKA SUSTAINABLE AG SOCIETY 2012 BEGINNING FARMER AWARD Doug Garrison

Though I can't exactly remember who, someone encouraged me to join SWCS many years ago when first starting my work with the Soil Conservation Service. To get involved, I volunteered to work with the newsletter and enjoyed that opportunity for many years. Meeting people and traveling to annual meetings with my family have been the most rewarding memories so far. My boys favorite memory, mine also, is riding on picnic tables strapped down on flatbed trucks looking for buffalo in 2003 (pictures on page 3 of <a href="http://bit.ly/oct2003news">http://bit.ly/oct2003news</a>).

Working for a conservation agency was the closest thing I could find to my true interest, farming. In 1997, my wife Sheila and our two boys moved to an acreage with access to some pasture land. Sheila and I thought having some cows out grazing "the back 40" would be something we would enjoy but we just couldn't imagine it working out. In 2002 I attended a Nebraska Grazing Land conference and listened to some alternative grazing presentations and the wheels started turning. In 2006, past SWCS member Tina Carlson coordinated a great sustainable agriculture themed SWCS Annual Meeting at Sidney, Nebraska. At this meeting we met members from the Nebraska Sustainable Ag Society (NSAS)

(http://www.nebsusag.org/) and our vision to have cattle was becoming clearer.

Our family's part time work through the years in preparing the pasture came to a "start" for our cattle operation in July 2011 when 10 heifers and a bull arrived. Infrastructure includes electric fencing, a well, two tanks and a head gate. The fencer is powered by a 12 volt battery attached to a small solar panel. The well is powered by a large solar panel; we store water in two tire tanks rather than electricity in a battery. We are striving for a low input sustainable grass based herd.

During the growing season, cattle are provided enough pasture to meet their intake requirements for 1 to 3 day durations using portable electric fence. This allows us to maintain long rest periods before re-grazing. During the non growing season we feed hay on pasture areas that can use the extra organic matter (trampled hay and manure). One tank is used during the winter by covering the top, providing wind protection and use of an over flow tube.

February 2013 at the annual NSAS meeting we were surprised and honored to receive the 2012 Beginning SWCS NEWS – Page 5

Farmer Award. Goals, planning and networking with the right people through the years got us to this "beginning". We look forward to the years ahead in staying connected to the friends we have made and will make in SWCS and NSAS right here in the great state of Nebraska. Feel free to email us with any questions about our operation or to receive photos of our approaching calf crop. Doug, Sheila, Nathan and Jacob Garrison dougg@inetnebr.com.



Scott Willet, NSAS Board Member, with Doug and Sheila Garrison NSAS 2012 Beginning Farmer Award recipients.

#### 30<sup>TH</sup> ANNUAL NEBRASKA SWCS LEGISLATIVE BREAKFAST Sarah Gray

The Nebraska Chapter of the Soil and Water Conservation Society held the 30<sup>th</sup> Annual Legislative Breakfast February 8, 2013 in Lincoln. There were 27 people present at the breakfast representing the Nebraska Department of Natural Resources, Nebraska Department of Agriculture, Natural Resources Districts, Natural Resources Conservation Service, state senators, SWCS members and students.

Al Dutcher, Nebraska State Climatologist, was the guest speaker and presented an Impact Assessment of the 2012 Drought and an Analysis of Susceptible Sectors of the Economy if Drought Continues.

Among those in attendance at the breakfast were the 2012 -2013 Nebraska SWCS Foundation Student Scholarship winners Austin Baldwin and Amanda Hefner and former scholarship winner Kate Boone.

A special thanks to Kris Reed, Craig Romary and Dave Langemeier for the hard work and dedication that made the meeting a success.



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Amanda Hefner, NSWCF scholarship winner and Austin Baldwin, University of Nebraska Foundation scholarship winner were present for the 30<sup>th</sup> Annual Nebraska SWCS legislative breakfast.



The presentation on drought prompted many questions from the audience at the legislative breakfast.

## SEEKING VOLUNTEERS FOR SOIL AND WATER CONSERVATION SOCIETY INTERNATIONAL CONFERENCE



Help us to present critical conservation research and practical knowledge to an international audience. Topic areas are:

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- Adaptive Management of Conservation Efforts
- Agricultural and Conservation Economics
- Biodiversity Conservation and Management
- Conservation Policy and Program Design
- Conservation in Urban Settings
- Conservation Models, Tools, and Technologies
- Outreach, Education and Community Engagement
- Soil Resource Assessment and Management
- Water Resource Assessment and Management

Volunteers are needed to moderate sessions, set up and manage audio-visual equipment and assist with the silent auction. We expect a commitment of 6 hours of your time during the conference.

In return, you receive reduced-cost registration: \$237.50 for the 2-day conference (Savings of \$147.50 off the member fee!) or \$120 for a single day. Commit early, and get "first dibs" to work the session of your choice.

Please send an email to: <a href="wendy.rash@ca.usda.gov">wendy.rash@ca.usda.gov</a> with "SWCS conference volunteer" in the subject line to sign up. Please include your contact information.

Thank you for your commitment to conservation!

#### HOLDREGE STATE SOIL DEDICATION

On May 14, 2013 there will be a dedication ceremony for the official marker for the State Soil at the Nebraska Prairie Museum north of Holdrege. The event will start at noon with a BBQ on site, with the ceremony at 1:00 pm and tours of the museum following. Expected are several state and local dignitaries at this celebration of a valuable state resource. Plans are in the works for a 10 X 15 foot space exhibit for the inside of the museum later this year.

#### GREEN TIP – SIMMER OR NUKE? From Wildcat Hills Chapter – Audubon Society Ed Harms

Is it more efficient to re-heat on the stove or in the microwave? According to the EPA, a microwave is much http://incolor.inetnebr.com/dougg/swcs



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more efficient because it takes 80% less energy to warm up relatively small amounts. The microwave needs a lot of electricity, but it is short bursts of power. At the present utility rates, heating a quart of soup on the stove costs approximately three times as much as heating it in the microwave.

Cooking accounts for only 3% of total U.S. greenhouse-gas emissions from residences, but with electrical rates rising soon, every little bit we can cut matters. FYI: Per capita, Americans now use six times as much electricity and twice as much natural gas as they did in 1950.

#### PASSING OF DON R. HOPPES



Don R. Hoppes, age 83, of Roca, passed away peacefully at home Oct. 7, 2012. Don was an active member of Roca Methodist Church and his community. He retired from USDA Soil Conservation Service after 40 years. He was a member of Soil Conservation Society of America, U.S. Coast Guard Auxiliary for 46 years, Hickman Rural Fire Department board member for 20 years, Reform Party of Nebraska chairman, American Legion Post 48 for 60 years, VFW and served in the U.S. Army. He told visitors to come with a smile and leave with a smile.

Survived by wife, Jeanette, of Fergus Falls, Minn.; son, Tom (Merry) Hoppes, grandchild, Amber Hoppes.

Daughter, Christine (Dan) Wiltshire, grandchildren

Steven (Jessi) Wiltshire, Richard (Allie) Wiltshire, Tina

Sharp. Daughter, Mary (Steve) Cecava, grandchildren,

Andrew, Emily, Ethan, Caleb Cecava. Six great

grandchildren, all of Lincoln. Brother, Ron (Marilyn)

Hoppes of Davis, Calif. Step-son, Ronald (Julie) Thom,

grandchildren, Jared Thom, Erik (Stephanie, fiance)

Thom, Jessica (Louis) Karsnia, Nicole (Jesse) Berringer. Step-daughter, Renda (Richard) Rappa, grandchildren, Joseph, Sofia, Hunter Rappa. Three great grandchildren, all of Minnesota. Preceded by step-son, Rusty Thom.

Services were held December 11, 2012 at the Roca United Methodist Church.

### 2013 ANNUAL MEETING SILENT AUCTION Darwin Hinrichs – Past President

It is time once again to ask for your help in soliciting items for our annual silent auction to be held during our state SWCS meeting. This year the annual meeting will be held in Lincoln and ideas for the silent auction would be: crafts, wines, wine baskets, books, pictures and gift certificates. The money raised with this event is used to help fund the five scholarships given out each year by Nebraska SWCS.

Your help with the silent auction would be greatly appreciated. Please let Darwin know what you are bringing or if you need help getting items to the meeting in June. For any questions contact Darwin at 308-334-5292 ext.3 or Darwin.hinrichs@ne.usda.gov.



Nebraska SWCS member Ed Harms received this Christmas card in 2012 from Doug Carlson husband of the late Tina Carlson. Tina was an active member of SWCS and the Tina Carlson - Lorentzen Family Memorial Scholarship is awarded annually in her memory. Note the native plant heart garden that can be seen in the photograph of the Carlson farm.

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## NRCS NEWS UPDATE Craig Derickson – Nebraska NRCS State Conservationist

NRCS is having a very busy and very productive year in spite of all the budget woes that Federal agencies are facing. NRCS Nebraska is proud to have a long standing tradition of accomplishing great amounts of conservation practice installation through the assistance of our local NRD's and other partners. In 2012, NRCS reported the construction of more than 2.5 million feet of terraces and more 2.6 million feet of livestock pipeline being installed. With the dry weather in 2012 NRCS was able to work nearly year round and made significant progress in wetland restoration under the Wetland Reserve Program and with other construction activities including some watershed rehabilitation projects.

NRCS is once again working with Nebraska DEQ on the Water Quality Initiative and working to improve water quality in four impaired watersheds in eastern Nebraska. Landowners in these selected watersheds have until May 3, 2013, to sign up for technical and financial assistance to install conservation practices to help control erosion and improve water quality.

One of the more satisfying activities with NRCS these days is a re-born interest in promoting the benefits of soil health and soil quality. NRCS has a new slogan called "Unlock the Secrets in the Soil." This new campaign is aimed at emphasizing the fact the soil is a living and lifegiving substance, without which we would perish. NRCS communication efforts will highlight that as world population and food production demands rise, keeping our soil healthy and productive is of paramount importance. So much so that we believe improving the health of our Nation's soil is one of the most important endeavors of our time.

NRCS and other state partners plan to join together in 2013 and beyond to focus more attention on soil health and work to educate our customers and the public about the positive impact healthy soils can have on productivity and conservation. NRCS and the conservation partners believe that by practicing good soil health activities our producers can help our Nation's farmers and ranchers feed the world more profitably and sustainably – now and for generations to come.

### NEBRASKA CHAPTER SWCS BOARD OF DIRECTORS

Northeast - Scott Bohaty
Sandhills - Mike Murphy
Lincoln - Corey Brubaker
Blue Nemaha - Wally Valasek
Panhandle - Ed Harms
South Central - Darwin Hinrichs
Student - Mark Kuzila
At Large - Claudia Stevenson

### NEBRASKA CHAPTER SWCS COMMITTEE CHAIRS

Awards - Anita Nein
Scholarship - Paul Smith
Membership - Robin Foulk
Elections - Paul Zillig
Nominations - Wally Valasek
History - Paul Smith
Environmental Ed. (Student Chapter) - Mark Kuzila
Student Chapter Liaison - Craig Romary
Bylaws - Vacant
Newsletter - Sarah Gray
Website - Doug Garrison



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### **CLIMATE, WATER & SOIL HEALTH**

# Nebraska Chapter of the Soil & Water Conservation Society Annual Meeting $\label{eq:June 13-15} June~13-15,~2013$

### Hardin Hall - 3310 Holdrege Street - Lincoln, NE 68583

Thursday Jun	e 13 <sup>th</sup> , 2013		
12:00 – 1:00	Registration and Check-in	10:45 – 11:30	Soils & Soil Health an Introduction
1:00 – 1:15	Welcome and Introductions		Dr. Corey Brubaker, State Agronomist
1:15 – 2:00	The Dust Bowl – Video Presentation	11 20 12 20	Nebraska NRCS
2:00 – 2:45	Drought Update Mark Svoboda, Climatologist National Drought Mitigation Center	11:30 – 12:30	The Climate, Water, Soil Health Connection Dr. Jerry Hatfield, ARS National Lab for Ag and the
2:45 – 3:00	Break		Environment
3:00 – 3:45	Climate Change – Long Term Trends TBA	12:30 – 1:30	Lunch
	IDA	1:30 – 2:00	Travel to Roger's Memorial Farm
3:45 – 4:30	Impact of Climate Change on Agro- Ecosystems Dr. Ken Hubbard, Climatologist University of Nebraska - Lincoln	2:00 – 2:30	Overview of No-till & Cover Crop Research Paul Jasa, Extension Engineer University of Nebraska - Lincoln
Friday June 14 <sup>th</sup> , 2013		2:30 – 3:30	Rainfall Simulator Demonstration Dan Gillespie, Nebraska NRCS
7:30 – 8:00	Registration and Check-in		
8:00 – 8:15 8:15 – 9:00	Welcome & Introductions  Drought & Groundwater – Update on Groundwater Resources in Nebraska	3:30 – 4:30	Soil Quality Bucket Demonstration Mike Kucera, NRCS Agronomist National Soil Survey Center
	Aaron Young University of Nebraska - Lincoln	Saturday June	15 <sup>th</sup> 2012
	2		
9:00 – 945	Irrigation Water Management – NRCS Programs & Requirements Jake Robison, Nebraska NRCS	8:00 – 10:00	NSWC Foundation Meeting and Breakfast
9:45 – 10:30	Irrigation Water Management – Research and Extension Programs	10:00 – 12:00	Nebraska Soil and Water Conservation Society Chapter Meeting
10:30 – 10:45	Dr. Suat Irmak University of Nebraska – Lincoln Break		



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### 2013 Nebraska Chapter SWCS Annual Meeting - June 13, 14, & 15 2013

Meeting Registration (includes meeting presentations and	
	Adult \$30.00 X =
Chapter Banquet (Thursday evening, June 13)	Adult \$12.30 X =
· · · · · · · · · · · · · · · · · · ·	eighborhood, but there is no guarantee what you may find)
	ning, June 15; includes coffee, juice, bagels, muffins and donuts)\$5.00 X =
	Total Amount Submitted \$
	u are interested; tee times will be reserved based on interest)yes? Count =
Please submit registration by June 3, 2013.	ase make checks payable to Nebraska Chapter SWCS.
Name	Send Registration to:
	Send Registration to: David Langemeier
Name	Send Registration to:
NameAddress	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505
NameAddress	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary:
NameAddress	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov
NameAddress	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary:
Name Address Phone	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov
Name Address Phone A block of rooms has been reserved under SWCS at:	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov
Name Address Phone A block of rooms has been reserved under SWCS at: Holiday Inn Express	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov
Name Address Phone A block of rooms has been reserved under SWCS at:	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov
Name Address  Phone  A block of rooms has been reserved under SWCS at: Holiday Inn Express 3939 N. 26 <sup>th</sup> Street	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov
Name Address  Phone  A block of rooms has been reserved under SWCS at: Holiday Inn Express 3939 N. 26 <sup>th</sup> Street Lincoln, NE 68521 402-477-1100 \$77 with Government ID	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov
Name Address  Phone  A block of rooms has been reserved under SWCS at: Holiday Inn Express 3939 N. 26 <sup>th</sup> Street Lincoln, NE 68521 402-477-1100	Send Registration to: David Langemeier 700 North 81 Lincoln, NE 68505  For questions call or email Craig Romary: 402-471-6883, craig.romary@nebraska.gov

UNL East Campus Interactive Map - <a href="http://maps.unl.edu/">http://maps.unl.edu/</a>

at www.unl.edu.



Nebraska SWCS Chapter 830 N 5<sup>th</sup> Street Seward, NE 68434

#### NEBRASKA SOIL AND WATER CONSERVATION FOUNDATION BOARD OF DIRECTORS BALLOT

<u>BALLOT</u> – Nebraska Soil and Water Conservation Foundation Board of Director, 5-year term

Ballot must be received by June 10, 2013.

	VOTE FOR ONE
	Dick Ehrman, Lincoln, NE - is currently a Water Resources Specialist at the Lower Platte South NRD, and has worked throughout Nebraska for over 25 years with the Nebraska Association of Resources Districts, Department of Environmental Quality and Central Platte NRD. He is a licensed Professional Geologist, an adjunct faculty member at Doane College and has been an SWCS member since 2009.
	Edwin Harms, Bridgeport, NE - born and raised in the Holdrege area, he is a retired Resource Conservationist from NRCS. Edwin served as a conservationist since 1969 in Alma, Chappell, Lincoln, Wahoo, Columbus, Bridgeport, Harrisburg and Oshkosh offices of SCS/NRCS. Currently serves as the Panhandle Director SWCS, has been an SWCS member since 1969 and served as SWCS president in 1982.
	(Write in name)
******	*************************
Return Ballot by n	n <mark>a</mark> il or email to:
Kris Reed	

All Nebraska SWCS members are eligible to vote.

Pleasant Dale, NE 68423-9000 Keystone 1447@windstream.net