

#### NOVEMBER 2017 NEWSLETTER OFFICERS 2017-2018

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#### **IN THIS ISSUE**

ANNUAL GOLF TOURNAMENT RESULT	$\Gamma S$ 1
2017 SWCS AWARDS	1-4
YOUR CHAPTER AND FOUNDATION UPDATES	4-5
2017 ANNUAL MEETING SUMMARY	5-6
INVASIVE GRASS AWARENESS	6-7



## DAVE LANGEMEIER MEMORIAL GOLF TOURNAMENT Corey Brubaker

The 21<sup>st</sup> Annual SWCS Golf Tournament was held on September 8, 2017 at the Highlands Golf Course in Lincoln, NE. The golf tournament was begun in 1997 by former Nebraska SWCS Chapter treasurer Dave Langemeier to raise money for scholarships for students pursuing degrees in natural resources related fields.

A total of 54 golfers registered for the event which raised \$2883.27 for the scholarship funds. Rich Torpin, Tyler Specht, Josh Bowers and John Mayberger made up the winning team. The low gross individual score went to Tom Malmstrom and the low net individual score went to Ryan Kroemer. The long putt contest resulted in a tie for first place between Neil Dominy, Doug Garrison, Chris Langemeier, Nick McCreedy and Gary Wells.

#### Raffle winners:

2 NE football tickets-Roland Langemeier

\$50 Highlands Gift Cert- Jeff Pankoke \$25 Visa gift card- Joe Calder \$25 Visa gift card- Don Preston \$25 Visa gift card-Jerry Karnatz \$25 Visa gift card-Mike Eisenbarth

\$50 Highlands Gift Cert- Tyler Specht



54 golfers participated in the 21<sup>st</sup> Annual SWCS Golf Tournament to help raise funds for student scholarships.



Thanks go out to all those who participated and contributed to the scholarship fund.

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SWCS NEWS - Page 1



NOVEMBER 2017 NEWSLETTER

#### 2017 NEBRASKA SWCS AWARDS Anita Nein

During the 2017 Nebraska SWCS Annual Meeting and Technical Workshop held in Beatrice six chapter awards were presented:

- Thomas Mountford Commendation Award
- Paul C Hay Honor Award
- Randy Prior Honor Award
- Richard Schotte Honor Award
- Lower Big Blue NRD Merit Award
- Jim Harder Staple Award

The commendation award is given to members of the Society for professional achievement and for service to the society at the state level. The honor award recognizes non-members for outstanding accomplishments compatible with the objectives of the society. The merit award recognizes a group for conservation work accomplished. The "staple award" is for longstanding, mainstay leadership and exceptional service contributing to the success of the Nebraska Chapter of SWCS.

Details about each award winner can be viewed on the Nebraska SWCS Chapter website (http://nebraskaswcs.org) under past events – information.

The Soil and Water Conservation Society is a private scientific and educational association dedicated to advancing the science and art of good land use and improvement of natural resources. The awards committee members are Anita Nein, Wally Valasek and Doug Garrison.

# STEVENSON RECOGNIZED AT THE 72<sup>nd</sup> ANNUAL INTERNATIONAL SWCS CONFERENCE Anita Nein

Nebraska Chapter member Claudia Stevenson was recognized for her contribution to the chapter and the SWCS mission at the 2017 SWCS International Conference held in Madison, Wisconsin July 2017. Claudia received the Commendation Award, which gives international recognition to society members for service to their chapter or council of chapters.

Amongst other accomplishments, Stevenson created a combined effort between Nebraska and Colorado NRCS and SWCS to form Farming Evolution. She has served as a co-chair for the past four years (2013-2016, planning started in mid-2012) for this annual workshop. As co-chair, the responsibility of securing speakers, event sit, agendas and caterers is a yearlong process. The keynote speaker for the 2018 event was lined up as of last September.

Averages of 200 people have attended for two days each February. Another 300-500 have listed on-line to the live radio broadcast by BARN Media. Participants have traveled from locations such as Canada and Missouri to represent eight states and two countries.

Speakers for Farming Evolution have included Ray Archuleta, Gabe Brown, Dr. Jill Clapperton and Odette Menard. The emphasis is Soil Health with discussions ranging from soil structure, earthworms, microscopes, and microorganisms, rainfall simulator and cover crop mixes.

Nebraska and Colorado SWCS members have participated in the event and the respective chapters have helped sponsor the event for the past four years. Over the past 30 years as an SWCS member, soil health and education have gone hand-in-hand in the discussions with landowners. The over-riding goal is to give landowners the education/information necessary to make informed decisions about their land. This has ranged from No-Till education on fields around the county to education in the elementary to high school classrooms. Introducing landowners to the world below the soil surface is an amazing experience.

Claudia also serves as the "At Large Director" on the SWCS Nebraska Chapter Board. Congratulations to Claudia!

### **72<sup>ND</sup> SWCS INTERNATIONAL CONFERENCE**Claudia Stevenson

Brian and I had an amazing visit to Madison, WI. What a city. In my experience Madison is a wonderful 78 degrees, light breeze and no humidity. I presume it is like this year around.

I attended the 72nd Soil and Water Conservation Society International Conference. The conference was held at the marvelous Monona Terrace. My conference on Soil and http://www.nebraskaswcs.org/



**NOVEMBER 2017 NEWSLETTER** 

Water health and conservation was incredible and I learned so much. I have all sorts of ideas to take back to my office. Met so many contacts! 516 people in attendance. I am so thankful that NRCS was able to send me. I was the only one from NRCS in Nebraska to attend.



Claudia Stevenson was awarded a Commendation Award for service to the Nebraska SWCS Chapter during the 72<sup>nd</sup> SWCS International Conference. The Commendation Award gives international recognition to society members for service to their chapter or council of chapters.



The Nebraska Chapter received the Outstanding Chapter Award during the 72<sup>nd</sup> SWCS International Conference.

2017— SWCS NEWS – Page 3



Monna Terrace, designed by Frank Lloyd Wright construction was completed in 1997. Mr. Wright designed this vision but never got to see it completed.



T-shirt sponsored by the Wisconsin SWCS Chapter used to raise funds for scholarships.



Claudia's obligatory photo with a cheese hat head.

http://www.nebraskaswcs.org/

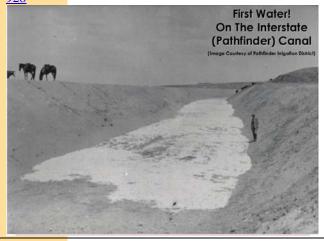


#### NOVEMBER 2017 NEWSLETTER

#### IN THE NEWS.....

Learn more about the history and background of irrigation dams, reservoirs and power generation along the North Platte River in Nebraska and Wyoming

https://www.slideshare.net/slideshow/embed\_code/40260 928



Cheatgrass problems? Learn about a UNL team going to battle in a challenge against cheatgrass <a href="https://extension.unl.edu/statewide/panhandle/cheatgrass-challenge/">https://extension.unl.edu/statewide/panhandle/cheatgrass-challenge/</a>

### SOIL & WATER CONSERVATION FOUNDATION Kris Reed

All Nebraska SWCS Chapter members are members of the Nebraska Soil & Water Conservation Foundation, and the Foundation Board of Directors would like to hear from you regarding ideas for educational or demonstration type projects. Look around your office or those you associate with to see if you know someone who would benefit from a grant or scholarship.

If you have not done so, please help promote these scholarship opportunities to students and colleges in your area. The Scholarship Committee will be reviewing student applications in December. See how our donations are working in the scholarship article in this issue, and consider a donation to help the next round of scholarship recipients.

As always, Foundation "tribute cards" can be used to make a donation to the Foundation by recognizing someone with a memorial or to recognize a memorable milestone in their career or family life. Please see the updated Foundation brochure at nebraskaswcs.org for more information.

2017-18 NSWC Foundation board members are:

President- Kris Reed
Vice President - Ed Harms
Secretary - Mike Kucera
Treasurer and Registered Agent - Craig Romary
Director - Dick Ehrman
Chapter President - Robin Foulk (non-voting member)

#### BECOME A CORPORATE MEMBER

Do you belong to a business or organization looking to support natural resources and SWCS? Check out the benefits of corporate SWCS membership at <a href="bit.ly/SWCScorp">bit.ly/SWCScorp</a>, including international exposure and identity at SWCS events, in publications and with social media.



NOVEMBER 2017 NEWSLETTER

### 2017 ANNUAL MEETING – BEATRICE, NE Darwin Hinrichs

The Nebraska SWCS Chapter Annual meeting was held June 22 – 23, 2017 in Beatrice, Nebraska. The meeting presentations included:

#### FIELD TO MARKET

Randy Prior and Rick Koelsch provided a demonstration of the Field to Market field tool which is used to define, measure and advance the sustainability of food, fiber and fuel production. The presentation included an example of the field calculator. There was good discussion from the audience on what happens if the producer changes one of the seven field evaluators on his field or fields. A goal of this program is to show sustainable outcomes for agriculture as a way to unite the supply chain. More information can be found at <a href="https://fieldtomarket.org/">https://fieldtomarket.org/</a>.

#### **RESOURC**E STEWARDSHIP EVALUATION TOOL

A presentation on the Resource Stewardship Evaluation Tool (RSET) was provided by Shanda Spurgeon and Stephanie McLain. This tool highlighted the importance of keeping communication between producers and NRCS. RSET uses thresholds based on local conservation criteria. The producer is evaluated on how he meets these criteria and where he could show improvement. Shanda outlined the benefits of this program including: better communication and more effective field time, maximize conservation investments, encourage conservation improvements.

Stephanie showed the need for more global sharing of data. She used an example of a Thayer County producer to show how his operation currently stacks up and the changes that could be implemented to meet future expectations. She showed the areas of his inventory like aquatic habitat, terrestrial habitat, crop rotations, irrigation management, conservation practices and nutrient/pest management.

The future goals of the tool include expanding partnership opportunities, incorporate all land uses, expansion/improvement of conservation planning and helping others become more aware of environmental issues.

#### DON'T DISC IT – FIX IT

Ephemeral gully erosion control was discussed to expand awareness and provide potential solutions. To help with SWCS NEWS – Page 5

identifying gully erosion as well as conservation solutions to address the resource concern Doug Garrison, Dave Bedlan and Steve Grube showed a LIDAR map tool produced by Jim Reedy. This map gives a quick look at the area and what it will take to control erosion at any particular site. It is a very good prediction tool. NRCS State Conservationist, Craig Derickson, indicates if your cropland is determined to be highly erodible they will need to consider installing additional conservation practices to better control ephemeral gully erosion. He also stressed the importance for farmers to meet these erosion control requirements by December 31, 2019 to remain eligible for Farm Bill programs. These include farm loans, conservation program benefits and Federal Crop Insurance premium subsidies.

#### DEQ PRESENTATION

Laura Johnson from the Nebraska Department of Environmental Quality gave a presentation on water problems in Nebraska. She stated that 93% of Nebraska residents use groundwater for their own uses. She indicated EPA funds can now be used for groundwater problems and not just for surface water problems. Our state needs to identify problem sites for potential future action. The posters on groundwater protection that Laura had on display at the meeting are available for viewing on Nebraska SWCS' Facebook (bit.ly/NWHPNfacts3).

#### RARE EARTH SALTS

Joe Brewer has a new company just north of Beatrice working on the extraction of rare earth metals. There are fifteen metals in the world with this classification. China controls/produces 97-98% of these metals. Joe has developed an environmentally friendly procedure to separate these metals from the mass they come in. His procedure also uses 40% less energy than China's and hopes to eventually get 50% of China's business. These metals are used in light bulbs, cell phones, radar equipment and even nuclear uses. Mine tailings are one of the main sources for these metals but come all lumped together. There are very few companies working on the separation of these metals. There are two in the U.S. and 13 others in the world but China owns most of them. Joe is proud to have his company up and running with no Federal help.

#### DUONIX BIODIESEL PLANT TOUR

The meeting also included a tour of the Duonix biodiesel plant on the north side of Beatrice. This plant is the first in Nebraska for producing a very high grade diesel fuel. They combine methanol and corn oil to produce this fuel

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#### **NOVEMBER 2017 NEWSLETTER**

with their main market being to California. While there the group saw trucks coming in to unload from a large geographical area. Most of the corn oil comes from Nebraska, Iowa and Kansas.

This was another successful annual meeting. Thank you to those that organized and attended the meeting.

#### MEDUSAHEAD – INVASIVE GRASS AWARENESS Gary Stone

Early Detection and Rapid Response (EDRR) is a concept to identify potential invasive species prior to or just as the establishment of the invasive is taking place. An integrated pest management plan can be developed to manage, contain and eradicate the invasive species before it can spread further. This will avoid costly, long-term control efforts.

Ventenata and Medusahead are two invasive grasses that have been identified in parts of Wyoming. Both of these invasive grasses are slowly spreading east. While neither of these grasses have been identified in Nebraska, we need to be aware of what these grasses look like, how they spread and be ready to deal with them should they show up in our state. If they become established in the Pine Ridge area or the Sandhills, they could be devastating to the ecology and range production.

#### Medusahead

a.k.a. – Medusahead Wildrye, Medusahead rye, rough Medusahead

Scientific name: Taeniatherum caput-medusae (L.)

Nevski

Family: Poaceae / Gramineae

Origin: Eurasia and the Mediterranean area. First reported in North America in the 1880s. Medusahead occupies over 2.3 million acres in 17 western states.

Medusahead is an exotic, invasive, self-pollinated winter annual grass. It germinates in the fall, overwinters as a seedling, and can have multiple flushes. It is typically 0.15-0.5 m (6 – 20 inches) tall with distinct bristly seed heads. Multiple stems can emerge from the base of the SWCS NEWS – Page 6

plant, each producing a single seed head. Each seed head may contain 20 or more seeds. Awns protrude upward and outward, with a twisting appearance. Seed heads are similar in appearance to Bottlebrush Squirreltail (*Elymus elymoides*) and Foxtail Barley (*Hordeum jubatum*), but the Medusahead seed heads do not disarticulate / fall apart. Foliage is bright green and upright. Seed longevity is two to three years. Medusahead matures two to four weeks later than most annual grasses. Medusahead has been shown to displace cheatgrass.

Medusahead produces a lot of thatch which has a high silica content and is slow to decay. The thatch is also highly flammable. While the thatch acts a barrier to other plant species germination and establishment, Medusahead seedlings thrive in this environment. Long-distance Medusahead seed can be attributed to wind, water, animals and human activities. The Medusahead seed awns have small barbs which help the seed adhere to clothing and hair of animals or other plant parts that may move with the wind.

The high silica content in Medusahead makes it a less desirable forage. It can be grazed early, prior to seed head formation – timing is important. The seed heads contain stiff glumes that can cause damage to the eyes and mouths of grazing animals and pets. Proper grazing management practices and maintaining a diverse rangeland plant community are very important in the prevention of establishment of Medusahead.

Burning can reduce the thatch layer and seed levels, but can also reduce the number of desirable plants and seed. Hand pulling and removal in small sites can be effective. Rotary mowing Medusahead in the early flowering stage before viable seed can be produced can reduce seed production. Revegetation must be carefully considered due to timing and precipitation events needed for germination of the desirable species.

Chemical applications can be effective, but costly. A number of herbicides are labeled for Medusahead management. Glyphosate, Imazapic, Aminopyralid (certain states), and other products are labeled. Be sure to

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**NOVEMBER 2017 NEWSLETTER** 

read, understand and follow all label directions. Timing of application of the products can be critical for proper control expectations. Follow-up treatments may be required. The site / crop to be treated must be on the label.

An integrated management approach is required for control of Medusahead. Prevention is the best means to achieve this goal. Utilizing more than one management option will have a greater effect than using a single option. Combining different grazing strategies, implementing prescribed burns, timely mowing's and chemical applications will be required. Monitoring and follow-up treatments are required to keep the Medusahead in check and eliminated.

#### Gary Stone

Nebraska Extension Educator

Invasive & Resistant Pest Issue Team

2 Photos & credits below

#### References

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NRCS Plant Guide, "Taeniatherum caput-medusae (L.)
Nevski"

NRCS Plant Profile, "Taeniatherum caput-medusae (L.)

Orloff, N. & Mangold, J. "Watch Out for Medusahead", Montana State University, EB0218, 2015 MSU

+ Other



Medusahead seed head, *Taeniatherum caput-medusae* (L.) Nevski Photo credit: Steve Dewey, Utah State University,

Bugwood.org



Medusahead plant, *Taeniatherum caput-medusae* (L.) Nevski

Photo credit: Steve Dewey, Utah State University, Bugwood.org



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#### 2017 SWCS Award Winners L to R and T to B:

- Dave Clabaugh, Lower Big Blue NRD Merit Award
- Randy Prior Honor Award
- Paul C Hay Honor Award
- Jim Harder Staple Award
- Richard Schotte Honor Award