



**NORTH DAKOTA CHAPTER
SOIL AND WATER CONSERVATION SOCIETY**

RESOURCES *for the* **FUTURE**

Volume 17 Number 1

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Chapter Officials:

Jennifer Hegge, **President**
Lena Bohm, **President-Elect**
Cal Thorson, **Past President**
Kristin Wild, **Secretary-Treasurer**
Richard Webb, **Director**
Mike Collins, **Director**
Myron Senechal, **Professional Erosion and
Sediment Control Liaison**

Committee Chairs:

Awards: Steve Schroeder, Bob Bird
Environmental Education: Pam Copenhaver
Foundation Representative: Ron Luethe
Fundraising: Mike Collins
Historian: Fred Aziz
Legislative:
Membership: Russ Jordre
Newsletter: Jill Howard
Nominations: Todd Solem
Publicity: Kristin Wild
Scholarship: Mark Anderson
Webmaster: Jon Stika

Welcome to our **NEW ND Chapter SWCS
MEMBERS!!**

The following 5 individuals have joined our ND
Membership:

**Cassie Joecks
Rani Pope
Dan Wingenbach
Roxanne Johnson
Jack Russell**

New Members, please be sure to visit our ND State
Chapter Website at <http://www.ndswcs.org/>

Send an e-mail or call a Committee Chair or Chapter
Council Representative to get involved with current
projects!

Mark Your Calendar

June 13, 2007 - Soil Summit –
Carrington Research Station, ND

July 21-25, 2007 - International
Conference, Conservation Challenges
in a Changing Landscape - Tampa
Bay, FL

Information Corner: By Jen Hegge, President

- ✓ New Northern Plains (Region 6) Director following the July International Convention will be Mary Miller (Colorado Chapter)
- ✓ The ND Chapter Board of Directors (Officers) and Committees hold a teleconference the first Wednesday of every month for 30-45 minutes. All members are encouraged and welcome to join us! Contact Jennifer Hegge for the Phone Number and Passcode information.
- ✓ 5 Members attended the Regional Technical Workshop in Red Lodge, MT. See Richard Webb's article!
- ✓ A Member Survey is coming your way! Be sure to take a few moments from your schedule to fill it out. This is one of the best ways our National SWCS Headquarters can find out what you want, what you think, and what you need from you membership to this society!
- ✓ A new book is now available from SWCS! Check out the National Website and Conservogram to find out how to get your own copy of, [Environmental Benefits of Conservation Cropland!](#)
- ✓ Be sure to read the, "Conservation Security Program (CSP) Program Assessment." An e-mail was sent to the general membership containing this report from the Soil and Water Conservation Society and Environmental Defense.
- ✓ Once again, a Joint Annual meeting with SWCS, SRM, and Professional Soil Classifiers of North Dakota and Soil Dakota is being planned for this October in Bismarck, ND.

Check out the ND website and watch your e-mail for details!

- ✓ Mark your calendars!!! Wednesday, June 13th 2007 is the date for the next Soil Summit. The committee has worked extraordinarily hard to provide our members with a summit packed with highly qualified speakers and technical information!

Thanks to all the Members, Committee Chairpersons, Committee Members, and Officers for all the hard work done day to day, month to month, and every year!!!

T-Shirts for Sale



SWCS Fundraising Chairperson Mike Collins was charged with coming up with ideas for the ND Chapter. With some brainstorming it has been decided to market t-shirt themes for the ND Chapter. With some creative artistic skills of Kristin Wild they have come up with a few examples. They are; "Soil, It's What Makes Dinner", "Clean Water, You Can't Live Three Days Without It", "Soil Profiles, Feeding the World One Profile at a Time" and "The SWCS Journal, the Award Winning Conservation Journal , Stay Connected". They will be going on sale soon for twenty dollars/shirt. If you would like to order, have any other clever ideas on t-shirt themes or any questions contact Mike Collins by emailing him at msdm@daktelwb.com. Please help promote and support the ND Chapter by buying one or more of these t-shirts.



Integrated Land Uses of the Dakotas

By Fred Aziz

This was the theme of the Joint meeting of the ND and SD Chapters of the Soil and Water Conservation Society and the Society for Range Management, The Professional Soil Scientist Association of SD, and the Professional Soil Classifiers Association of ND.

The meeting was held at the Ramada Inn in Aberdeen, SD on October 4-6, 2006. There were 12 members from the ND SWCS chapter and 96 persons overall in attendance at the meeting.

On Thursday we listened to sessions on “Composting for Erosion Control”, “Integration of Prescribed Fire, Patch-burn Grazing”, and “Grassbanking into Traditional Grazing Systems” in the morning.

In the afternoon we listened to sessions on “Carbon Sequestration/ Soil Carbon/ Soil Quality“, “Switchgrass as a Renewable Energy Source”, “Capture More Raindrops Where They Fall” and “Resource Mgmt. on the Vollmer Angus Ranch” Throughout the day each of the Associations presented Highlights of their Activities. We each broke out for our business meetings in the afternoon.

In the evening was the Awards Banquet honoring each organizations Scholarship winners and Award Winners followed by an Auction. Lots of items were auctioned off and all had a fun time.

Friday we went on tours of The Nature Conservancy and a soils presentation by PSSASD followed by the Heartland Grain Fuels Ethanol Plant.

The whole meeting presented excellent opportunities to learn and network.

2006 AWARDS COMMITTEE REPORT

Mr. Robert Bird, Co-chair

Dr. Stephan A. Schroeder, Co-chair

Several national awards were presented to Chapter members at the 2006 annual national meeting held in Keystone, CO. Based upon the nominations submitted by the North Dakota Chapter, the National Headquarters presented a **Fellow Award** to Jon Stika, an **Honor Award** to Andy Mork, and a **Commendation Award** to

Jill Howard. In addition, Blake VanderVorst was named as the recipient of the **Harold and Kay Excellence in Conservation Award**.

The following four state Chapter awards were presented at the annual Chapter Awards presentation and meeting in Aberdeen, SD on October 5, 2006:

Ms. Jackie Henderson, Soil Scientist at the Bureau of Reclamation, was awarded the **Professional Award** for her work in training many of North Dakota’s young people through her innovative field seminars. Also, Jackie has also been instrumental in using GIS first at the Bismarck office of NRCS and now the Bureau of Reclamation where she is currently employed. She has been a past officer for the North Dakota Chapter in addition to being a long-time Chapter member.

Dr. John Berdahl, retired ARS scientist, was awarded the **Service Award** for his more than 30 years of effort and work on the development of many wheatgrass and other grass varieties currently used in the state of North Dakota. He has been named as a Fellow of both the American Society of Agronomy and the Crop Science Society of America and has been a long time supporter of the activities of the North Dakota Chapter of SWCS.

The Falkirk Mining Company, a subsidiary of the North American Coal Corporation, was awarded the **Business Stewardship Award** for its help in the development and maintenance over many years of the Underwood golf course. The original golf course was mined through and Falkirk helped to rebuild the course on reclaimed mine land and has supplied the golf course with a steady supply of good quality water for irrigation for many years.

A new chapter award called the **Chapter Horizon Award** has been authorized to recognize members with 10 years or less membership in the North Dakota Chapter who have shown steady progression in their chosen profession and have also taken an active role in Chapter activities either as an officer or on a committee. Complete eligibility criteria are still being developed. **Ms. Jennifer Hegge**, NRCS District Conservationist in Cavalier, ND, is the inaugural **Chapter Horizon Award** winner for her participation as chairperson or very active committee member of 9 or more committees, having served as the official delegate to two International Conventions, and served as a Director, President-Elect, and now President of the North Dakota Chapter in five years of membership in the North Dakota Chapter.

The Awards Committee is currently preparing several national award nominations for consideration in 2007. Information on the state and national awards is maintained on the Chapter website. The Committee accepts nominations for national and chapter awards from members and the Board of Directors.

2007 NDSWCS Technical Workshop January 17-18th

The 2007 North Dakota SWCS Technical Workshop was held in Minot on January 17 and 18. The meeting covered a variety of topics including:

- ◆ Soil Salinity
- ◆ Wind Energy
- ◆ Biodiesel
- ◆ Market Based Conservation
- ◆ Career Paths
- ◆ Carbon Credits

The attendance was excellent and we had many great comments and suggestions for future workshops. Thank you to all the speakers, committee members, and attendees for an excellent workshop!



North Dakota Chapter members attending the 2007 Technical Workshop in Minot

Northern Plains Technical Meeting

by Richard Webb; Council Representative

The Northern Plains Technical Meeting was held March 9-10 in Red Lodge, Montana and was hosted by the Montana Chapter of SWCS. Activities started the evening of March 8th, with early arrivers viewing a slide show and presentation on the history of Red Lodge and the surrounding area. Lena Bohm, Pam

Copenhaver, Jen Hegge, Richard Webb, and Kristin Wild attended on behalf of the North Dakota Chapter.

Friday morning started with welcome, introductions with technical sessions filling the remainder of the morning schedule. The sessions included:

Noel Keogh from the Beartooth Stock Association spoke on a cooperative, market-based project in southeast Montana where local sponsors contribute money to help build new barns as part of ag waste management projects. This added incentive has increased willingness of producers to move their feedlots out of the creek bottom.

Dr. Jim Bauder presented on Coal Bed Methane (CBM), providing a general understanding of the process and the environmental concerns related to it, as well as showing a video regarding the socio-economic concerns of the CBM industry.

Ron Follett facilitated discussion on Carbon Sequestration and Biofuels. One discussion point was the impact of the ethanol industry on livestock feed prices, soil organic matter, and corn production. Additional discussion focused around carbon sequestration; both principles of carbon storage and how long can soil continue to add new carbon before it levels off and is merely sustaining its existing level.

Will Alexander and Warren Kellogg discussed the Yellowstone River Cumulative Effects Study; which is a cooperative effort to assess the response of the Yellowstone River to different management techniques and practices. The study will also develop a list of voluntary BMPs to address water quality and quantity concerns of the watershed.

Friday afternoon the group took a short bus ride out the Bridger Plant Materials Center. At the PMC we toured the seed cleaning operation, trial plots, greenhouses, and watched a presentation on the plant material releases from the center.

A social reception and working dinner Friday night consisted of National and Regional Leadership updates and the video "Path to Eden". The video provides basic information on resource stewardship and advice to non-traditional landowners on how to be good neighbors on the Montana open range.

Saturday consisted of Chapter reports from all six states and professional/chapter development presentations. Brad Webb from the Institute for

Conservation Leadership discussed methods for improving volunteer organizations and how to get members active within your Chapter. The Montana Chapter presented information on how to direct marketing efforts using proper audiences and promotional techniques. The day ended with some roundtable discussion and an 8-hour trek back to Bismarck.

Conservation Tip Raising Soil pH *By Mike Collins*

Pulverized limestone is the most common material used to raise soil pH. Limestone consists either of calcium carbonate (calcitic limestone) or calcium/magnesium carbonate (dolomitic limestone). On soils low in magnesium, dolomitic limestone is the preferred form. Lime recommendations for raising soil pH are given in terms of pulverized limestone (**Table 1**), but other liming sources can be used.

Apply lime only if a need is indicated by the results of soil testing and the requirements of the plants being grown. Over liming can reduce nutrient availability, especially of micronutrients like iron, manganese, and zinc. Iron deficiency (chlorosis) of pin oak, for example, is common when soil pH is greater than 7.0.

Mineral Soils

Lime recommendations for mineral soils are based on a soil pH measurement and determination of the SMP (Shoemaker, McLean, Pratt procedure) buffer index, this SMP will need to be determined. The soil pH value reported in a soil test indicates whether lime is needed, but cannot be used to determine how much lime is needed. The amount of lime to apply depends upon reserve soil acidity, which is measured by the SMP buffer test and reported as the SMP buffer index. The lower the buffer index, the larger is the quantity of lime required to raise soil pH to the desired level.

Table 1. Lime recommendations for mineral soils to increase soil pH to 6.5

SMP Buffer Index	Incorporated before planting		Topdressed on establishing plantings	
	Amount of pulverized limestone to apply*			
	lb./1000 sq. ft.	lb./100 sq. ft.	lb./1000 sq. ft.	lb./100 sq. ft.
Above 6.6	140	14	35	3.5
6.6	180	18	40	4.0
6.5	200	20	45	4.5
Below 6.5	220	22	50	5.0

*Multiply by 44 to convert the rates in lb./1000 sq. ft. to lb./acre.

Alternative 1 – No amendment plant more acid tolerant plants, grasses are more tolerant to lower pH than legumes. Plant Switch grass, Reed Canary grass, Birdsfoot Trefoil and Red Clover; this mix will help tolerate the more acid soil. This mix will be coarser and the cuttings will have to be timed correctly to keep the palatability high.

Alternative 2 – Raise the pH of the soil using lime (CaCO₃), follow note below. Plant straight alfalfa and/or meadow brome grass.

Alternative 3 – Raise the pH only ½ way, meaning only apply enough lime to make the pH rise to 6.5, plant Garrison Creeping Foxtail, Cicer Milkvetch and Red Clover. Clover will not last and the Cicer will come later.

Alternative 4 – Combination of the above.

Note: plowing the subsurface deep and bringing up the higher pH soils may also help, although this may not last long, further investigation maybe needed on the feasibility.

(2 links for more information)

http://ag.udel.edu/extension/Information/Soil_Testing/CHAP3-95.pdf

<http://www.extension.umn.edu/distribution/horticulture/components/1731-04.html>

Moving?
Send your updated address to:
memberservices@swcs.org