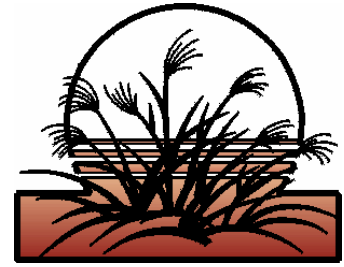
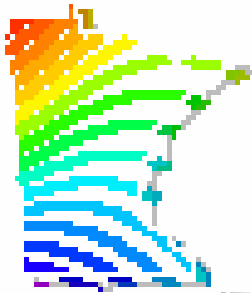




**NEWSLETTER
TWIN CITIES CHAPTER
AMERICAN METEOROLOGICAL
SOCIETY
September, 2003 Vol. 25 No. 1**



The September meeting of the Twin Cities Chapter of the AMS will be at 7 PM Thursday, September 18th, 2003, at the NWS, Chanhassen. Specific directions to the meeting can be found on page 2. AMS chapter members, interested acquaintances and potential members are invited to attend.



Featured Speaker: Don Reicosky

“Intensive Tillage: Soil Quality and Environmental Concerns”

There is a need for information on the impact of tillage on carbon dioxide (CO₂) flow from soil and how farming practices can be managed to minimize impact on global climate change. This work presents an overview of studies that evaluated the effect of fall tillage methods, soil variability, conservation tillage tools, seasonal differences (fall versus spring tillage), and different cropping systems on short-term tillage-induced CO₂ emissions. Soil organic matter losses are substantially reduced if tillage intensity is reduced or eliminated. The large gaseous losses of soil carbon following moldboard plowing compared to the relatively small losses with no-till have shown why crop production systems using plowing have decreased soil organic matter and why no-till crop production systems are stopping and reversing that trend. The environmental benefits of soil carbon sequestration are emphasized as they enhance our quality of life.

Donald C. Reicosky is a Soil Scientist for the USDA-ARS, North Central Soil Conservation Research Laboratory, Morris, MN, and Adjunct Professor in the Soil Science Department, University of Minnesota, St. Paul. He holds degrees from Ohio State University and the University of Illinois. His research deals with soil-water-plant-atmosphere relationships, with emphasis on measuring evapotranspiration, photosynthesis and plant water-status as related to soil water deficits and tillage. Research involves describing crop response and water use on conventional till and no-till systems with and without irrigation. Current research focuses on tillage and residue management as related to global change issues with emphasis on measuring gaseous losses of soil carbon following intensive tillage with a portable chamber. Recent research has shown short-term tillage-induced losses after moldboard plowing can help explain the long-term decline in soil carbon associated with intensive cropping. These results suggest need for improved conservation tillage methods for enhancement of the soil resource and environmental quality.



Comments from our Chapter President Dean Braatz

We have good news for our members during this 2003/2004 season as most everything around us is going up in cost our membership is remaining at \$12 for members and \$6 for student members. Last year we compared our chapter to other chapters around the country and discovered that it is a very good deal to join the Twin Cities AMS Chapter. Refer to the sheet at the end of this month's Newsletter to find the membership form that can be mailed along with your check to cover dues to Seth Binau. Or turn your check in at one of the monthly meetings to one of the officers. The new officers for 2003-2004 thank everyone for their support to the Twin Cities AMS Chapter during the past year and we look forward to serving you in the new season.

Please fill out this form and mail it in with your annual Chapter dues, whether or not you are entering the forecast contest. This information is used for Chapter purposes only, and only your name will be listed on the Chapter web site.

Name _____ Daytime phone _____

Address _____

City _____ State _____ Zip code _____

E-mail address _____ If you prefer to be notified via e-mail when the newsletter is posted on our website, rather than having us mail you a paper copy of the newsletter, check here _____

Suggestion for an AMS meeting topic _____

Forecast contest entry: TOTAL DECEMBER 2003 SNOWFALL (INCHES AND TENTHS) AT THE CHANHASSEN NWS OFFICE _____

LOW TEMPERATURE (F) ON JANUARY 1, 2004 _____

Tiebreaker question: NUMBER OF DAYS WITH A HIGH OF 22 DEGREES (F) OR HIGHER DURING JANUARY, 2004 _____

All temperature readings will be from MSP. Your contest entry and your 2003-2004 dues must be received by October 31, 2003 for you to be eligible to win.

Dues are \$12 per year for regular membership, \$6 per year for student membership.

Make checks payable to *Twin Cities AMS*, and mail to: Seth Binau
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3233 Snelling Ave. North
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