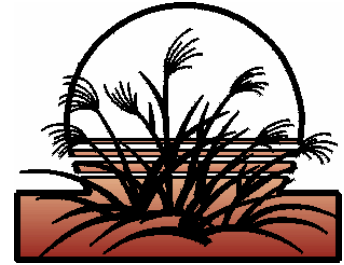
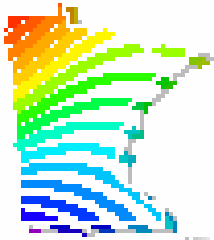




**NEWSLETTER
TWIN CITIES CHAPTER
AMERICAN METEOROLOGICAL
SOCIETY
May, 2003 Vol. 24 No. 9**



The May meeting of the Twin Cities Chapter of the AMS will be at 7 PM Thursday, May 15th, at Lake Susan Park, Chanhassen. Specific directions to the meeting can be found on page 3. AMS chapter members, interested acquaintances and potential members are invited to attend.



Featured Speaker: Bruce Watson

How Our Body Responds to Temperature, Humidity, Sunshine and Wind.

Bruce Watson has been a professional meteorologist for 45 years. He received his BS degree in meteorology from the University of Wisconsin, Madison, in 1954. Bruce has served as a full-time meteorological consultant to private enterprise, education, and government. He originated the first weather calendar, and since 1977 has been senior author of the Minnesota Weather guide, published by the Freshwater Foundation. Bruce has developed the largest existing private data base on the climate of Minnesota and adjacent states and provinces.

Bruce has maintained a weather station making conventional observations since 1966. For the fifteen years prior to establishing his own consulting practice, he performed meteorological research for the defense industry, largely directed toward modeling atmospheric structure, diffusion, visibility of objects and light sources, long-range forecasting, and severe weather systems.

Bruce is a member of a number of professional societies including the Royal Meteorological Society of the United Kingdom and the American Meteorological Society. He has twice served as President (1968, 1989) of the Twin Cities Chapter of the AMS.



Comments from our Chapter President Dean Braatz

The May Picnic on May 15th at Lake Susan Park in Chanhassen is planned to include the All-American Feast provided by Famous Dave's. The cost will be \$15 per person. The food will be delivered at 6 pm so plan to attend and enjoy our last meeting prior to the Summer 2003 break. Here's hoping you registered and mailed in your check for the meal. Craig Edwards has assured me there will be good weather that day.

If Craig is not on target, then we can move to the NWS office, which is close by, for a back up location. I hope to see many of you there!

Lightning Kills, Play It Safe

[Lightning Safety Awareness Week: June 22-28, 2003](#)

Summer is the peak season for one of the nation's deadliest weather phenomena—lightning. Safeguarding U.S. residents from dangerous lightning is the goal of this Website. The campaign is designed to lower lightning death and injury rates and America's vulnerability to one of nature's deadliest hazards. In the United States, an average of 73 people are killed each year by lightning. That's more than the annual number of people killed by tornadoes or hurricanes. Many more are struck but survive. However, they often report a variety of long-term, debilitating symptoms, including memory loss, attention deficits, sleep disorders, numbness, dizziness, stiffness in joints, irritability, fatigue, weakness, muscle spasms, depression, and an inability to sit for long. Lightning is a serious danger. Through this site we hope you'll learn more about lightning risks and how to protect yourself, your loved ones and your belongings. As a start, go the ametsoc.org/ams/ site to get an overview of [Lightning Safety](#) or stop by their comprehensive page of [more resources](#).

The outgoing officers for the 2002-2003 Season wish to thank everyone who attended our meetings this past year. Neat topics and speakers made for a most productive set of meetings. Please keep the officers informed if you know of a speaker who we can contact for the next season. I can be reached at dtbraatz1@msn.com.

The slate of officers for the 2003-2004 Season is listed below. We will be voting on the new officers for next year at the May meeting. The slate of officers for 2003-2004 is:

President – Dean Braatz
Vice Pres – Doug Dokken
Sec-Treasurer – Seth Binau
Newsletter – Kurt Scholz

Member of the Month – Mikhail Shvartsman

Mikhail came to the U.S. from the former Soviet Union in 1987. In the Soviet Union he worked for a few years as a material scientist after graduating from college in 1982. He did his graduate studies in Applied Math at the University of Maryland (College Park) from 1988 to 1994. In 1994 he moved to Pittsburgh, Pennsylvania to undertake his postdoctoral work at the Carnegie Mellon University. He worked in Pittsburgh until 1998. Mikhail came to the Twin Cities and started teaching at the University of St. Thomas in 1998. He got very interested in weather modeling after doing some joint projects in meteorology with Doug Dokken and Kurt Scholz at the Department of Mathematics. Climate in the Twin Cities is somewhat close to that of the City Moscow where he grew up. The difference is that there were very few tornadoes there. And modeling tornadoes and supercell thunderstorms became his main focus in research. One of particular aspects he is interested in is the role of turbulence. He is planning to present his joint work on turbulence with Doug Dokken at the International Workshop on Turbulence in Florida this May. His other interests include modeling membranes of neurons, cancer growth models, phase transition and mechanical fracture where he draws on his experience from material science. Mikhail also likes music and playing piano.

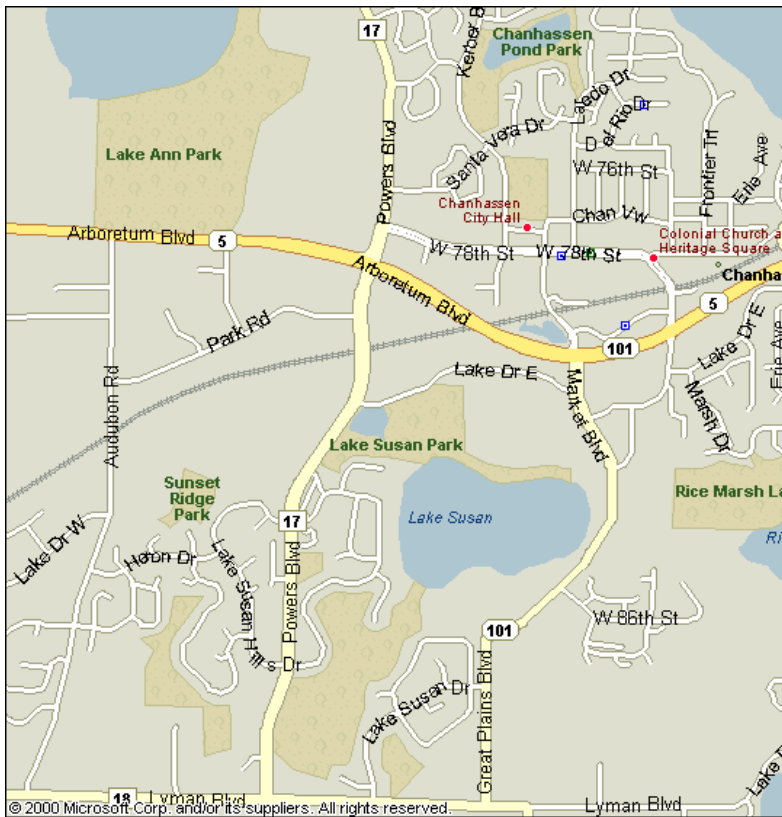


Historical Twin Cities Weather – by Thomas St. Martin

"Records Reported Broken."

Like the February 1899 cold wave, the cold of January 1912 was not without its lighter side. First, there was St. Paul observer J. N. Ryker's well publicized complaint that his office received so many calls from people wanting to know how cold it was that the weathermen could not properly attend to their regular duties. Also, when told that temperatures well below the official reading had been recorded by local residents on the morning of 12 January (including a reading of -40 F in White Bear Lake and a reading of -38 F in the Hamline Avenue area), Ryker responded by stating that such readings were probably due to "defects in the instruments". His advice to those making such reports was to "break" their thermometers and throw them away. In his view, no instrument should have varied more than "three or four degrees" from the Weather Bureau thermometer. Finally, there was Ryker's response to articles written by H. W. Shadle and A. L. Larpenteur, St. Paul "old timers" who claimed that the January 1912 cold paled in comparison to that experienced by St. Paul residents during the 1880's. Although he admitted that some extremely cold temperatures had been recorded during that period, Ryker pointed out that official records showed temperatures 20-30 degrees warmer than the extreme readings claimed by the pioneer residents for several dates in the late 1880's. This response apparently sparked a controversy which, among other things, seems to have brought a bit of humor to an otherwise dismal situation.

Reminder: The May meeting will be held at 7pm, on Thursday May 15th Lake Susan Park, Chanhassen.



Directions to Lake Susan Park: Take **Highway 1494** to the exit for MN **Highway 5** west in Eden Prairie. Travel west on 5 into Chanhassen. Turn **left (south) at Powers Boulevard**. Continue south about 2 blocks, passing underneath a bridge, then take a **left turn at Lake Drive**. Follow Lake Drive past the baseball field and take the **first right turn** after the tennis court. Follow the road into **Lake Susan Park** and meet us at the picnic tables under the pavilion. (In case of inclement weather, the barbecue and meeting will be moved to the NWS Forecast office in Chanhassen. To get there, take Powers Boulevard south to Lake Drive West. Take a right turn and follow Lake Drive West to the NWS office.)

Editor's notes



Let's hope for good weather at our annual picnic at Lake Susan. I hope my little rainy day duck logo for Dean's column will not bring us rain.

On May 3, the Minnesota Academy of Science sponsored the Winchell Undergraduate Research Symposium at the University of Minnesota, St. Paul campus. Doug Dokken and I were among the judges for the meteorological presentations. The six presentations from St. Cloud State University were simply outstanding. Congratulation to the students and their faculty advisor, Tony Hansen. The six presenters and their titles were:

Amy Henry, *Precipitation Verification of the LAPS Storm Total Precipitation Estimates*;
Sven Sungaard, *An Application of the First Law of Thermodynamics to Maximum Temperature*;
Stephanie Nordin, *Significant Severe Thunderstorm Soundings*;
Angela Rogers, *The Influence of ENSO on the Dynamical Characteristics of the Upper Midwestern Temperatures*;
Paul Iniguez, *Thermal Effects of the Twin Cities Urban Heat Island*;
Brian Billings, *Case Studies of Recent Orographic Flash Floods*.

Sven won the competition. Sven, Paul and Brian had also given excellent presentations at our April meeting at SCSU.

Here are a number of good reasons to become a member of the AMS.

New and improved Bulletin of the AMS (BAMS).

BAMS, the official organ of the Society, has been re-formatted to appeal to a broader readership. *BAMS* contains shorter peer-reviewed articles and a greater number of noteworthy stories. The feedback on the new *BAMS* has been outstanding, with many members saying they have never enjoyed it as much as they do now – often reading it straight through from cover to cover. Visit the [AMS Web site](#) to view a list of recent articles.

Weatherwise magazine

By agreement with Heldref, the publishers of *Weatherwise*, AMS members can now subscribe to this exciting magazine at a discounted price. Written for a general audience, *Weatherwise* offers a non-technical look at the latest discoveries in meteorology and climatology. The magazine's annual Photo Contest is a breathtaking gallery of prize-winning photography. Check out the [Weatherwise Web site](#) to view the latest table of contents.

New benefits for Associate Members

Our new [Associate Member benefits package](#) includes a subscription to either *BAMS* or *Weatherwise*, substantial discounts on journal subscriptions and meeting registration fees, access to information for members only, and much more. Annual dues are just \$50 per year.

If you or any of your fellow chapter members do not belong to the Society, I invite you to give AMS membership a try. Our **Associate Member** category is open to any person regardless of educational or professional background and is an excellent way for weather enthusiasts to become a part of the Society. Our full **Member** category is intended for individuals that have a science degree or have completed a minimum amount of coursework in meteorology (see the [AMS Interpretive Memorandum](#) for specific requirements). **Members** enjoy full voting privileges, the highest member discount on journal subscriptions and meeting registration rates, and a host of other great [benefits](#).

Applying for membership in the Society is easy. Simply download a membership application from our [Web site](#) and return it to us by fax or by mail. If you are applying for Associate Membership, **you need only complete Sections 1, 8, 9, and 10 of the application**. If you have any questions regarding membership or the application process, or if you would like to receive multiple copies of the membership application by mail, our Member Services department is available by email at amsmem@ametsoc.org or by phone to 617-227-2425 to assist you.



AMS on the WWW

The address for the Twin Cities Chapter of the AMS is:

http://byte.stthomas.edu/www/math_http/weather/tcametsoc.html. Please send any comments, suggestions, changes of address, misspellings, etc. to Kurt Scholz, k9scholz@stthomas.edu.

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