Heat Index Chart

% relative humidity

Temperature	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
110	108	112	117	123	130											
105	102	105	108	113	117	122	130									
100	97	98	102	104	107	110	115	120	126	132						
95	91	93	95	96	98	100	104	106	109	113	119	124	130			
90	86	87	88	90	91	92	95	97	98	100	103	106	110	114	117	121
85	81	82	83	84	85	86	87	88	89	90	92	94	96	97	100	102
80	76	77	78	78	79	79	80	81	82	83	84	85	86	87	88	89

National Weather Service
824 Brown Co 14 S
Aberdeen SD 57401

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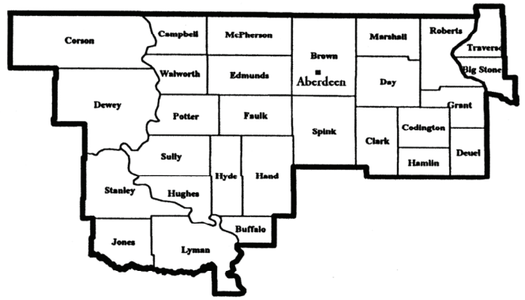
Science has never drummed up quite as effective a tranquilizing agent as a sunny spring day.

~ W. Earl Hall

We're on the Internet
http://www.crh.noaa.gov/abr



SKY SCANNER

National Weather Service Forecast Office
Aberdeen, South Dakota

April 2005

Severe Weather Awareness Week

April 18th-22nd
Minnesota

April 25th-29th
South Dakota

Severe Weather Weeks are a heads up, a call for your attention, sort of like a "Watch". Spring is coming, and with it, severe weather. Now is the time to pull out your personal, school, home, or business severe weather plan, dust it off and make sure it is up to date, and everyone knows what to do.

NOAA's National Weather Service, in association with state and local emergency management agencies, will hold drills during the awareness weeks. This is a chance for people to practice their procedures. In Minnesota the drill will be on Thursday, April 21, while South Dakota's drill will be on Wednesday, April 27.

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Minnesota Drill

9:00 AM — The National Weather Service will issue a simulated Tornado Watch.

1:45 PM — The National Weather Service will issue a simulated Tornado Warning. Cities and counties statewide will activate outdoor warning siren systems.

2:00 PM — The National Weather Service will issue an "end of test" message.

6:55 PM — Another simulated Tornado Warning will be issued for participating counties. Traverse county will be included in this warning, but Big Stone county will not.

South Dakota Drill (all times CST)

10:00 AM — The National Weather Service will issue a simulated Tornado Watch.

10:15 AM — The National Weather Service will issue a simulated Tornado Warning.

10:30 AM — The National Weather Service will issue an "end of test" message.

Additional safety and preparedness information can be found at:
www.weather.gov/aberdeen

Governor M. Michael Rounds proclaims April 25, 2005 as SKYWARN Spotter Appreciation Day in South Dakota.

By David Hintz

The Honorable M. Michael Rounds, Governor of South Dakota, has proclaimed April 25, 2005 as SKYWARN Spotter Appreciation Day in South Dakota. This is in conjunction with Severe Weather Awareness Week in South Dakota, which runs from April 25th to April 29th.

Currently there are over 1500 trained SKYWARN Spotters across South Dakota. These dedicated individuals set aside personal and business concerns during times of severe weather. They have braved blinding rainstorms, damaging hail storms, tornadic thunderstorms and extreme winds to provide accurate, timely and life-saving observations.

The SKYWARN Program is vital in assisting NOAA's National Weather Service (NWS) offices in Aberdeen, Rapid City and Sioux Falls in fulfilling their mission of "issuing forecasts and warnings for the protection of life and property".

Nationally, the storm spotter program began in 1942 and 1943 when the Weather Bureau cooperated with the military in setting up volunteer storm spotter networks to protect military installations.

On May 25, 1955, a tornado struck Udall, Kansas killing 80 people and injuring 273. The NWS recruited and trained severe weather spotters to help obtain real time severe weather information in order to help extend lead time and increase accuracy of severe weather forecasts. On March 8, 1959, the NWS held the first training course in Wellington, Kansas for 225 severe weather spotters.

In 1965, the Natural Disaster Warning System (NADWARN) was established to coordinate the natural disaster-related emergency functions of various Federal agencies. A special, tornado-specific plan called SKYWARN was created, under the guidance of the National Weather Service.

Today, the NWS has over 167,000 trained all hazard weather spotters in the SKYWARN program.

Two Area Cooperative Weather Observers Nominated for National Award

by Tim Kearns

Donna and Dale Meyer of Pollock and Marvin Seyer of Ipswich have been nominated for the John Campanius Holm Award. The Holm Award is one of the highest awards bestowed upon a volunteer Cooperative Weather Observer and is given for outstanding accomplishments in the field of cooperative observing. Only 25 observers out of the over 11,000 cooperative observers nationwide are honored each year with this prestigious award.

The Meyer's and Marvin Seyer were nominated by Aberdeen's Data Acquisition Program Manager. Each year the Aberdeen NWS office nominates observers based on longevity, dedication, and excellence in observing. These nominees, with the support of their families, exceed all three of these criteria and will be very competitive despite the keen completion from across the nation. United States Senator's Johnson and Thune, along with Congresswoman Herseth were so impressed with the spirit of volunteerism exhibited by our nominees that all three wrote letters of recommendation to the selection board.

Marvin Seyer has been taking observations for nearly 30 years from his home in Ipswich while the Meyer's have been doing the same from their home in Pollock for nearly 25 years. Each day, Marvin, Dale, and Donna measure the maximum/minimum temperature and any precipitation that's fallen within the past 24 hours. Once they've collected and recorded the information, they transmit the data through the internet to several different sources. The data are used by our forecasters here in Aberdeen as well as forecasters in the Bismarck office, hydrologist at the River Forecast Center, the State Climatologist, and several of the television stations across North and South Dakota. At the end of each month, our observers send monthly reports to the National Climatic Data Center in Asheville, North Carolina where the data is archived and used to study climatology and build a historic database.

Women in Science Conference held March 8th in Aberdeen

by Amy Parkin

The 4th annual Women in Science Conference was held at Presentation College in Aberdeen on March 8th, 2005. Over 350 area junior high and high school girls attended the day long conference, where they were able to meet and hear women scientists speak about their careers and education needed to get to where they are today.

The conference is a cooperative effort put on to encourage school age girls to become or remain interested in science. Local committee members are represented by the National Weather Service, the Aberdeen Area Career Planning Center, the Aberdeen Public School District, Roncalli High School, Avera St. Luke's Hospital, Northern State University, and Presentation College.

Below are some pictures taken at the conference.

For more information, please see the following website.
www.crh.noaa.gov/abr/2005_WIS.htm

The attendees of the conference during the morning welcome session in the Strode Center at Presentation College.

Pat Peterson of Aveda talks about her career creating and developing new cosmetics.

Jaime Stricker of the Bramble Park Zoo in Watertown shows a snake to the students.

Spotter Training Schedule

The spotter training program has been in high gear since the 1st of March. We have held classes in Brown, Corson, Day, Dewey, Grant, Hand, Hughes, Marshall, Roberts, Stanley, Sully and Walworth counties, as well as a class for South Dakota Office of Emergency Management staff.

Just because you missed these, don't feel left out. There are still plenty of opportunities to attend a spotter training class. Following is a list of upcoming classes:

April 18 — Edmunds County — 9:00 am at the courthouse in Ipswich.

April 19 — Deuel County — 7:00 pm at the City Building Community Room in Clear Lake.

April 20 — Spink County — 7:00 pm at the Courthouse basement Community Room in Redfield.

April 21 — Potter County — 7:00 pm at the Hoven Fire Hall

April 25 — Potter County — 7:00 pm at the Gettysburg Fire Hall

April 26 — Edmunds County — 7:30 pm at the Courthouse in Ipswich

April 27 — Hamlin County — 7:00 pm Location still to be determined.

The public is invited to attend and become a severe storm spotter. More information can be found at:
http://www.crh.noaa.gov/abr/skywarn.htm
Or contact George Marshall or David Hintz at:
605-225-0519.

1-605-225-0519

When significant or unusual weather events occur, give us a call! We're always happy to hear from the public, especially if you're calling to report freezing rain, snow accumulations of 2" or more, or severe weather. Don't wait until the next day...call us when it's happening.

One of the Lowest Snowfall Winters on Record

By Dan Mohr and Glenn Nielsen

With El Nino weakening in the central and eastern Pacific Ocean this spring, it played an influence in the lack of snowfall for the Winter of 2004-2005 across central and northeast South Dakota as well as west central Minnesota. The jet stream for much of the winter across South Dakota was from the northwest with an upper level ridge of high pressure centered across the western United States and western Canada and an upper level trough of low pressure across the eastern United States and eastern Canada. The eastern part of the United States had a snowy and cold winter as storm systems moved over this region. The systems that moved over our region were generally weak and moisture-starved. Thus, not much snowfall occurred.

Snow has occurred and still can occur in South Dakota in late April and even into early May. Barring an unlikely significant snowfall yet this season, the latest snowfall totals for many reporting locations across central and north central South Dakota and west central Minnesota show the winter of 2004-05 should be one of the least snowfall winters on record.

Aberdeen, Watertown, Mobridge, Pierre, Sisseton, Timber Lake, Kennebec, and Wheaton, MN all ranked in the top ten least snowfall winters in recorded history. As of mid April 2005, snowfall amounts for this winter ranged from only 11.1 inches at Pierre to 22 inches at Kennebec. These snowfall amounts are all well below the seasonal snowfall averages across the area which range from 31 to 43 inches for a typical winter.

Below are the total snowfall amounts for the specified locations for this winter, where this winter ranked with past winters, the normal seasonal snowfall, the least snowfall winter, and the season of occurrence.

	2004-05 snowfall/rank	normal snowfall	least snowfall/years	most snow/years
Aberdeen	13.3”/ 2nd	36.3”	8.3”/80-81	109.9/36-37
Watertown	12.7”/ 7th	31.3”	10.2”/80-81	73.0/00-01
Mobridge	13.0”/ 3rd	33.4”	4.5”/80-81	75.9/96-97
Pierre	11.6”/ 4th	31.8”	6.7”/82-83	82.0/51-52
Sisseston	13.1”/ 4th	42.6”	8.2”/80-81	71.0/36-37
Timber Lake	20.7”/ 10th	39.2”	5.1”/80-81	92.9/49-50
Kennebec	22.0”/ 9th	33.7”	7.5”/73-74	73.2/01-02
Wheaton, MN	18.8”/ 4th	37.8”	9.4”/30-31	82.8/96-97

Fire Weather

by Stan Keefe

The National Weather Service office in Aberdeen has been operating a fire weather program for the last several years. This program is an off shoot of the program that is so prominent in the vast forests of the western United States. The weather service attempts to forecast those elements that will most affect fire potential and fire growth.

In our part of the country we lack the large forests and vast federal land holdings. Instead we are largely privately owned agricultural land, however fire is still a concern. Some of the largest fires by acreage occur in this area. They also tend to be very hot and fast moving as grass or last years stubble is the primary fuel.

It is a common and economical practice to burn off fields prior to planting. Especially to return Conservation Reserve Program acres to production. This practice is as old as the country, but wild fire is also as old. One of the more common problems is burning a field on a warm, calm day only to have the wind crank up that night or the next day and reignite smoldering embers. To prevent this some counties around the region have enacted burn bans until the grass greens up.

We have tailored our fire weather program to the primarily agricultural users of this region. Every morning we compile a Grassland Fire Danger rating based on expected temperature, wind, and relative humidity that afternoon as well as a measure of the percent of the ground that is green and issue a statement and graphical map assigning a rating of low, moderate, high, very high, or extreme. The statement will list the values that contribute to the rating.

There is also a special category that we issue. It is called a Red Flag Warning. It is taken from the wild land programs of the western United States. It is reserved for the most volatile fire weather days. In this area it is only issued when the temperature will reach 80 degrees or more, with relative humidity of 20% or less, and wind of 25 mph or more and a grassland fire danger rating of very high or extreme. All of these conditions must be met at the same time to warrant a red flag warning. The purpose of the warning is to allow firefighters to prepare for a potentially bad day. They typically line up manpower and equipment and prepare to deal with any wild fire.

The value of this program is to people who need to burn outdoors or to first responders and emergency managers who deal with escaped fires. Check out the products in the fire weather section of our web page at: http://www.crh.noaa.gov/abr/FireWeather/fire_danger.php
If you have any comments or suggestions call Stan Keefe, George Marshall or William Tallman.