National Weather Service
Aberdeen, South Dakota

April 2012

Inside this issue:

Severe Weather Awareness Weeks	1
Seasonal Outlook (May-July)	2
Wireless Emergency Alerts on your Mobile Device	3
Record Setting March	4
Record Setting March (cont.)	5
U.S. Department of Agriculture Zone Map Changes	6
USDA Zone Map Changes (cont.)	7

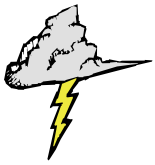
Severe Weather Awareness Weeks

Minnesota Severe Weather Awareness Week
April 16-20

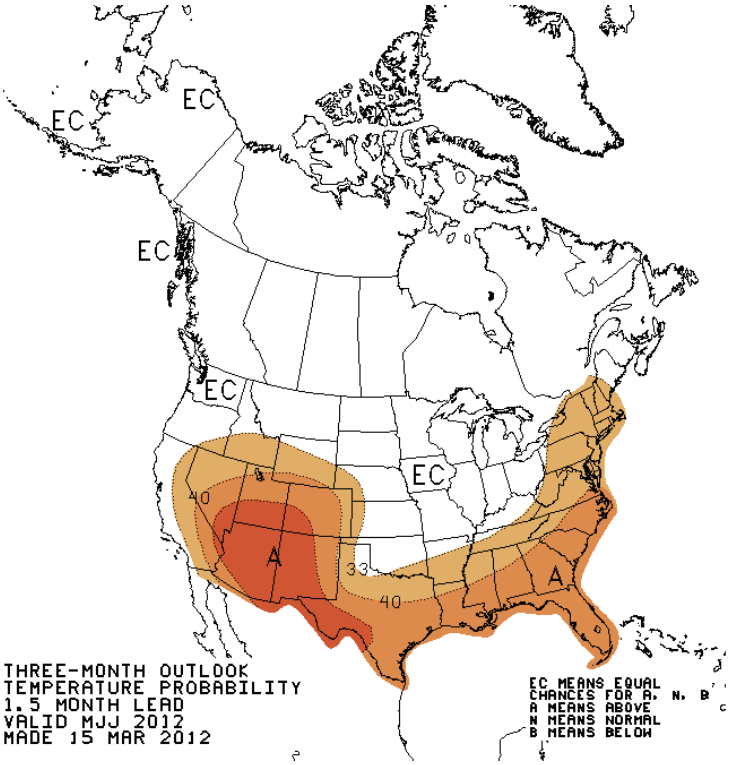
South Dakota Severe Weather Awareness Week
April 23-27

Severe Weather Weeks are a time to refocus one's attention from the cold and snow of winter, to the heat and severe weather experienced during the spring and summer. Now is the time to review severe weather plans and see if any changes need to be made. For example, if your family gets separated during an emergency or disaster, has a "check in" point of contact been established, preferably out of state?

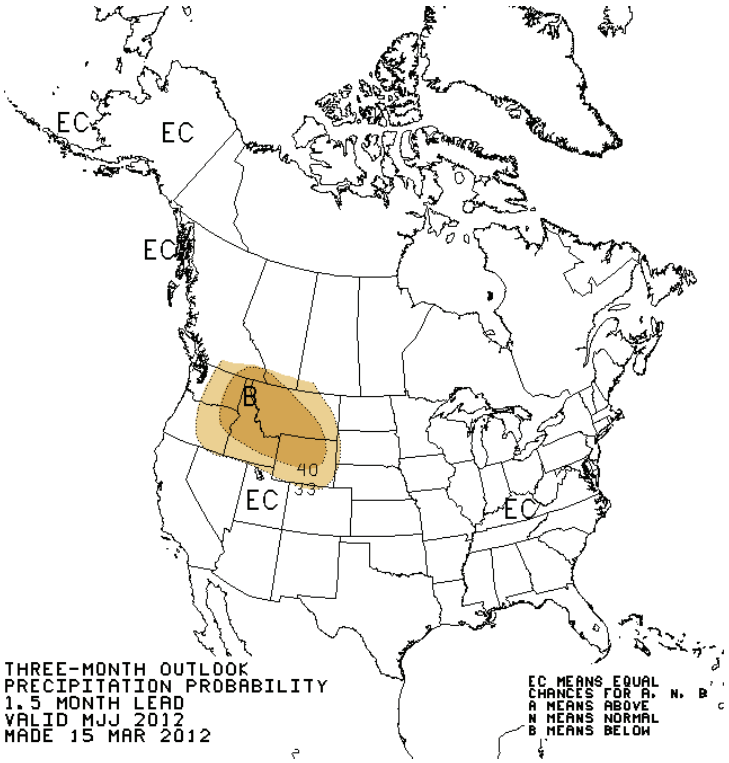
NOAA's National Weather Service, in partnership with state and local emergency management agencies, will hold drills during the awareness weeks. In Minnesota, a practice tornado warning will be issued at 1:45 pm and again at 6:55 pm on Thursday, April 19. For South Dakota, the practice tornado warning will be issued at 10:15 am CDT\9:15 am MDT on Wednesday, April 25. It is usually during these test warnings that some towns will test their tornado sirens with schools and businesses reviewing their tornado drill procedures.



Seasonal Outlook (May-July)



Temperature Outlook



Precipitation Outlook

Wireless Emergency Alerts on your Mobile Device

Wireless Emergency Alerts (WEA), also known as Commercial Mobile Alert System (CMAS) or Personal Localized Alerting Network (PLAN), is a national emergency alert system to send concise, text-like messages to users' WEA-capable mobile devices starting May 2012. Wireless providers representing nearly 97 percent of subscribers are participating in distributing wireless emergency alerts.
There are three different kinds of alerts:

1. Presidential Alerts – Alerts issued by the President or a designee;
2. Imminent Threat Alerts – Alerts that include severe man-made or natural disasters, such as hurricanes, earthquakes, tornadoes, etc., where an imminent threat to life or property exists; and
3. AMBER Alerts – Alerts that meet the U.S. Department of Justice's criteria to help law enforcement search for and locate an abducted child.

While these alerts will appear on a person's mobile device similar to a text message, Wireless Emergency Alerts are not text messages. Instead, Wireless Emergency Alerts use a different kind of technology to ensure they are delivered immediately and are not subjected to potential congestion (or delays) on wireless networks. Additionally, there is no charge to receive these alerts. You can choose to opt-out of receiving the AMBER alerts and Imminent Threat alerts, but you cannot opt-out of receiving the Presidential Alerts.
There are a number of WEA-capable devices available today, and many of the new phones that are sold from participating carriers will be able to receive these alerts. To confirm Wireless Emergency Alerts are available in your area and your device is capable of receiving the alerts, please check with your carrier.
For more information pertaining to WEA, CMAS or PLAN, see the links below:
http://www.fcc.gov/guides/personal-localized-alerting-network-plan
http://transition.fcc.gov/pshs/services/cmas.html
http://www.fema.gov/emergency/ipaws/cmas.shtm

Record Setting March

March 2012 across central and northeast South Dakota and west central Minnesota was a record breaker for numerous daily and monthly records. The average monthly temperatures were an astounding 13 to 15 degrees above normal. The average high temperatures were from 16 to almost 20 degrees above normal. Eighty degree temperatures are a rarity in March across this region but, not for this year. Eighty degrees or higher was reached at all locations throughout March with Pierre reaching 80 degrees or higher five times throughout the month. The warmest temperature was 88 degrees at Pierre on March 18th which also broke their all-time March high temperature record. The 82 degrees at Watertown and Sisseton on March 18th tied their all-time March high temperature record. Some of the daily records set in March were broken by as much as 15 to 20 degrees.

All-time monthly March temperature records were also broken at all locations except for Aberdeen and Watertown. Although, Aberdeen and Watertown did have their second warmest March on record. The monthly records were shattered at several locations by as much as 4 to over 5 degrees. Finally, the difference between the highest and lowest temperatures in March were anywhere from 71 to as much as 85 degrees across the region.
March was also a very dry month across the region with precipitation amounts from a quarter of an inch to just over an inch below normal. Mobridge had its 6th driest March on record while Pierre had its 8th driest March on record. March is normally one of our snowiest months with 6 to 8 inches of snowfall. For March 2012, snow was almost non-existent throughout the month with amounts ranging from only trace amounts up to 3 inches. This lack of snow cover was also a big contributor in allowing for the very warm temperatures.

*Denotes the all-time record highs

Record Setting March (cont.)

MARCH 2012				
Temperature Data	**Aberdeen**	**Sisseton**	**Wheaton**	**Watertown**
Warmest Temperature / Date	85 / 18th	82* / 18th	82 /19th	82* / 18th
Coldest Temperature / Date	6 / 4th, 5th	-3 / 5th	-2 / 5th	2 / 5th
Average High / Departure from Normal	57.9 / +17.9	55.5 / +16.2	52.3 / +15.5	56.1 / +17.2
Average Low / Departure from Normal	29.6 / +9.8	30.3 / +9.5	29.7 / +11.7	31.8 / +11.9
Monthly Average / Departure from Normal	43.8 / +13.9	42.9* / +12.9	41.0* / +13.6	43.9 / +14.5
Precipitation Data				
Monthly Precipitation / Departure from Normal	0.38 / -0.78	0.83 / -0.29	0.55 / -0.93	0.85 / -0.26
Monthly Snowfall / Departure from Normal	0.1 / -7.2	2.1 / -6.1	3.3 / -5.0	1.4 / -4.8
Most Precipitation in 24 hours / Date	0.27 / 12th	0.39 / 29th	0.30 / 30th	0.39 / 4-5th
Most Snow in 24 hours / Date	0.1 / 4th	2.1 / 4th	2.2 / 5th	1.4 / 4th
Temperature Data	**Pierre**	**Kennebec**	**Mobridge**	**Timber Lake**
Warmest Temperature / Date	88* / 18th	87 / 18th	83 / 16th	82 / 16th
Coldest Temperature / Date	14 / 1st	7 / 1st	8 / 3rd	11 / 1st
Average High / Departure from Normal	62.9 / +17.5	67.4 / +19.5	59.1 / +16.5	62.1 / +18.9
Average Low / Departure from Normal	33.7 / +10.2	33.1 / +9.7	30.3 / +9.2	32.1 / +10.6
Monthly Average / Departure from Normal	48.3* / +13.9	50.2* / +14.5	44.7* / +12.8	47.1* / +14.7
Precipitation Data				
Monthly Precipitation / Departure from Normal	0.09 / -1.12	0.17 / -1.09	0.13 / -0.77	0.49 / -0.66
Monthly Snowfall / Departure from Normal	Trace / -6.2	Trace / -8.0	1.0 / -4.9	1.0 / -6.6

US Department of Agriculture Zone Map Changes

On January 25, 2012 the U.S. Department of Agriculture (USDA) released a new version of its Plant Hardiness Zone Map (PHZM). The new map was jointly developed by USDA's Agricultural Research Service (ARS) and Oregon State University's (OSU) PRISM Climate Group, and is now available online at www.planthardiness.ars.usda.gov

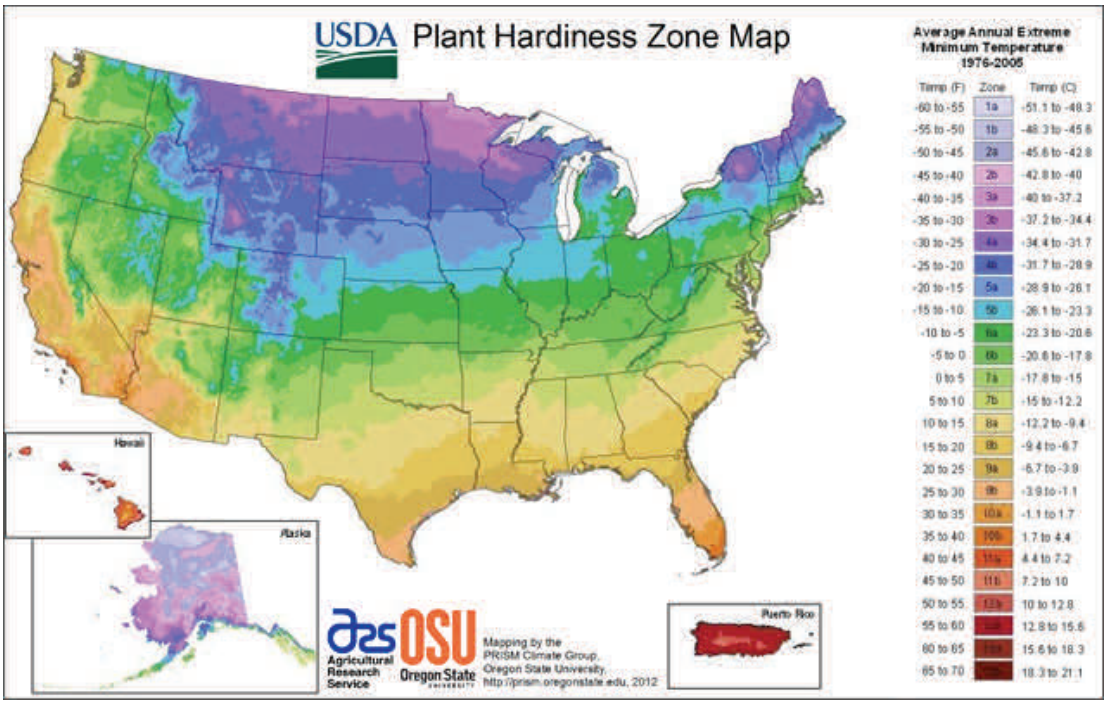
The new map offers Geographic Information System (GIS)-based interactive format and is specifically designed to be Internet-friendly. The map website also incorporates a "find your zone by ZIP code" function.

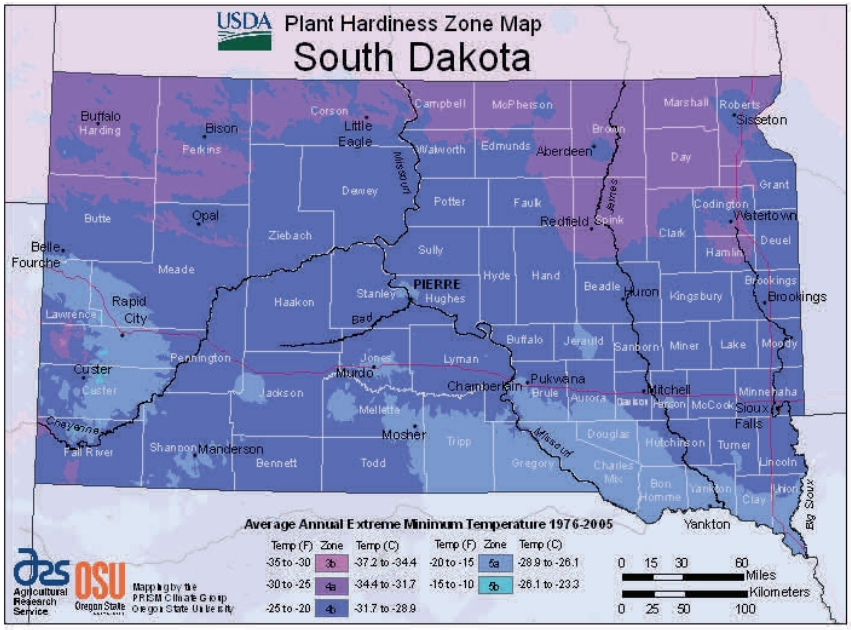
Plant hardiness zone designations do not reflect the coldest it has ever been or ever will be at a specific location, but simply the average lowest winter temperature for the location over a specified time, which is a crucial factor in the survival of perennial plants.

To help develop the new map, USDA and OSU requested that horticultural and climatic experts review the zones in their geographic area.

Zone boundaries in the latest edition have shifted for many areas. The new map is generally one 5-degree Fahrenheit half-zone warmer than the previous map, which is the case for many locations in South Dakota. The change is a result of using temperature data from the 30-year period: 1976-2005. In contrast, the 1990 map was based on temperature data from only a 13-year period: 1974 -1986. Additional changes are the result of more sophisticated techniques for mapping between weather stations, as well as accounting for the proximity to bodies of water along with position on the terrain (think valley bottoms and hilltops). Also, the new map used temperature data from many more stations than did the 1990 map. These advances lead to greatly improved accuracy and detail.

USDA Zone Map Changes (cont.)





USDA Plant Hardiness Zone Map, 2012. Agricultural Research Service, U.S. Department of Agriculture. Accessed from http://planthardiness.ars.usda.gov/.

Heat Index Chart

Temperature (°F)

Relative Humidity (%)	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

Caution · Extreme Caution · Danger · Extreme Danger

NATIONAL WEATHER SERVICE

824 Brown County 14 South
Aberdeen, SD
57401

Phone: 605-225-0519

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

www.weather.gov/aberdeen

Spring is sooner recognized by plants than by men.

~ Chinese Proverb