



Central Iowa Weather News

November 25, 2005

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Visit the National Weather Service Web Site:

www.weather.gov/dmx

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NOAA Weather Radio Expansion

Nears Completion in Central Iowa

The recent devastating tornadoes in the Ohio Valley, which killed over 20 people, illustrate the importance of having a NOAA Weather Radio. The tornadoes occurred after midnight, when most people were in bed. The National Weather Service (NWS) issued timely tornado warnings, and those with a NOAA Weather Radio were warned of the impending tornadoes, even while in bed.

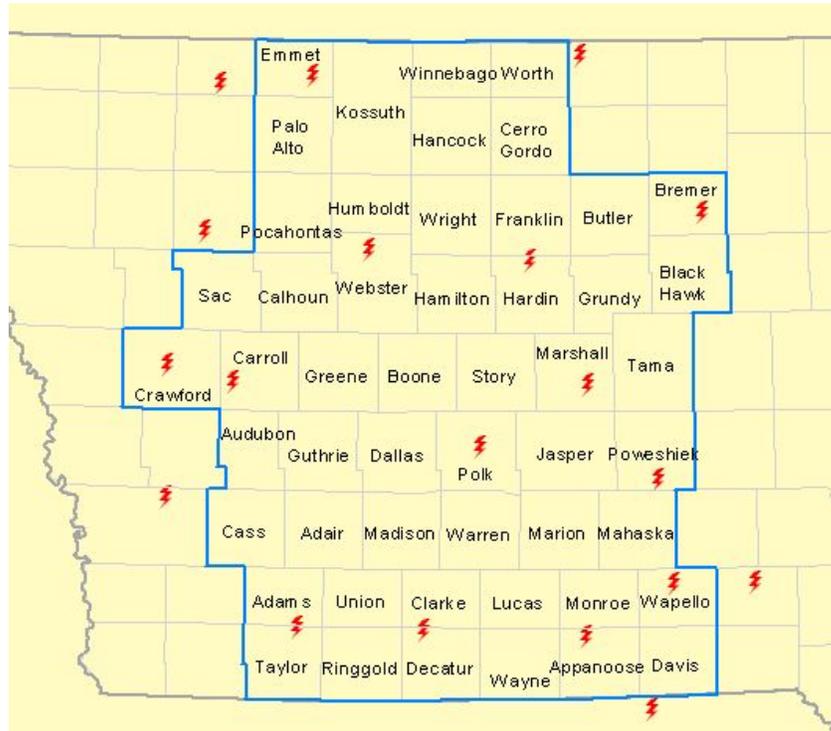
In 1994, the NWS was directed by then Vice President Gore to expand NOAA Weather Radio coverage in response to a deadly tornado outbreak in the southeast United States. In the late 1990s, the Iowa Homeland Security and Emergency Management (IHSEM) and the National Weather Service partnered to expand NOAA Weather Radio across Iowa. At that time, only 43 percent of Iowa was served by NOAA Weather Radio, mainly near large cities.



Mark Trail image courtesy of North America Syndicate, Inc., World Rights Reserved

Through a grant program, IHSEM obtained funding to purchase over 20 new NOAA Weather Radio transmitters. That was only the start. The new transmitters needed towers from which to transmit in order to reach Iowa's citizens. Tower owners came through and donated expensive tower space to host the new NOAA Weather Radio transmitters. After the transmitters were installed, the transmitters were gifted to the National Weather Service, who controls the programming and the maintenance of the transmitters.

In late 1999, the first new NOAA Weather Radio became operational in Fort Dodge, Iowa. Since then, about 20 new transmitters have been installed, the most recent in Ottumwa, Iowa. In the coming weeks, the final phase of the NOAA Weather Radio expansion project will be complete when a transmitter will be installed in Forest City. At that point, nearly 100 percent of central Iowa will be covered by NOAA Weather Radio.



NOAA Weather Radio Transmitters in Central Iowa as of October 2005

Why is NOAA Weather Radio important? NOAA Weather Radio allows people to be warned of impending danger 24 hours a day in their home or business. Nonweather-related emergency messages from local, state or federal officials are also aired. Nonweather-related emergency messages include AMBER alerts, hazardous-material spills, terrorist attacks and nuclear accidents. For a complete overview of NOAA Weather Radio programming, including broadcast station information, [click here](#).

2005 Iowa Tornadoes

On November 12, 2005, eleven tornadoes struck Iowa. The strongest tornadoes hit Woodward, northwest Ames and Stratford. Regrettably, one lady was killed in Stratford when the tornado destroyed her home. The strongest tornado to hit Iowa in 2005 was the Stratford tornado which was rated F3 on the Fujita Damage Scale.



**Tornado near Fort Dodge, Iowa, on May 18, 2005
(Picture by Stacy Vote)**

Even with the November 12th tornado outbreak, Iowa had slightly below average tornado numbers in 2005. Through late November, there were 43 tornadoes in Iowa in 2005. This is three below the 25-year average of 47 tornadoes per year. Of the 43 tornadoes, one was rated F3 on the Fujita Damage Scale, two F2, eight F1 and 32 were rated F0. One death and fourteen injuries were reported this year. The injuries occurred in September on the Iowa State University campus when a F1 tornado struck and during the November 12th outbreak.

For Iowa Tornado Climatology since 1980, [click here](#).

Product Change Update

As of November 1, 2005, the NWS will no longer issue a Special Weather Statement to change parts of severe thunderstorm and tornado watches. Instead, the Watch Coordination Message and the Public Watch Bulletin will be issued for additional convective-watch information. Here are the details:

Watch Coordination Message — Issued by the National Weather Service office in Des Moines (Des Moines WFO) for watch information concerning the 51 Iowa counties in its county warning area (CWA). Counties may be removed from a watch; the watch may be extended a few hours; or counties may be added to a current watch.

Public Watch Bulletin — Issued by the Storm Prediction Center for all counties within a severe-thunderstorm or tornado-watch area, regardless of the local WFO's CWA. Public Watch Bulletins are issued for the initial watch and for watch updates.

Winter Weather Awareness



Winter weather will soon be here. In an effort to help remind Iowans that it is that time of the year, the National Weather Service and the Iowa Department of Homeland Security and Emergency Management declared November 8, 2005, Winter Weather Awareness Day in Iowa. A very informative web site is available to answer your winter weather questions: <http://www.crh.noaa.gov/dmx/winter.php>.

Although Winter Weather Awareness Day 2005 has come and gone, it is not too late to promote winter weather safety and preparedness. The NWS will remain available for interviews concerning winter weather safety. Please contact Jeff Johnson to schedule an interview, (515) 270-4501, Ext. 726.

Thank you to the news media who have promoted winter weather safety this fall. Without your efforts and dedication, it would not be possible to reach the public with any measure of success.

Winter Focus Topic – Windchill

What is windchill? The windchill is how cold people and animals feel when outside. Windchill is based on the rate of heat loss from exposed skin caused by wind and cold. As the wind increases, it draws heat from the body, driving down skin temperature and, eventually, the internal body temperature. Therefore, the wind makes it FEEL much colder. If the actual temperature is 0 degrees Fahrenheit and the wind is blowing at 15 mph, the windchill is -19 degrees. At this windchill temperature, exposed skin can freeze in 30 minutes.



NWS Windchill Chart



		Temperature (°F)																	
		40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
Wind (mph)	Cal	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81
	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84
	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-97	
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98	

Frostbite Times: ■ 30 minutes ■ 10 minutes ■ 5 minutes

Wind Chill (°F) = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})
 Where, T= Air Temperature (°F) V= Wind Speed (mph) Effective 11/01/01

For more information about windchill, [click here](#).

Winter Focus Topic – Frostbite and Hypothermia

Frostbite:

Frostbite is damage to body tissue caused by freezing the tissue. Frostbite causes a loss of feeling and a white or pale appearance in extremities, such as fingers, toes, ear lobes or the tip of the nose. If symptoms are detected, get medical help immediately. If you must wait for help, slowly rewarm the affected areas.



When warming people affected by the cold, start from the center of the body and move out toward the extremities to avoid heart failure. Do not give them hot liquids.

Hypothermia:

Hypothermia occurs when the body temperature drops too low. Warning signs of hypothermia include uncontrollable exhaustion.

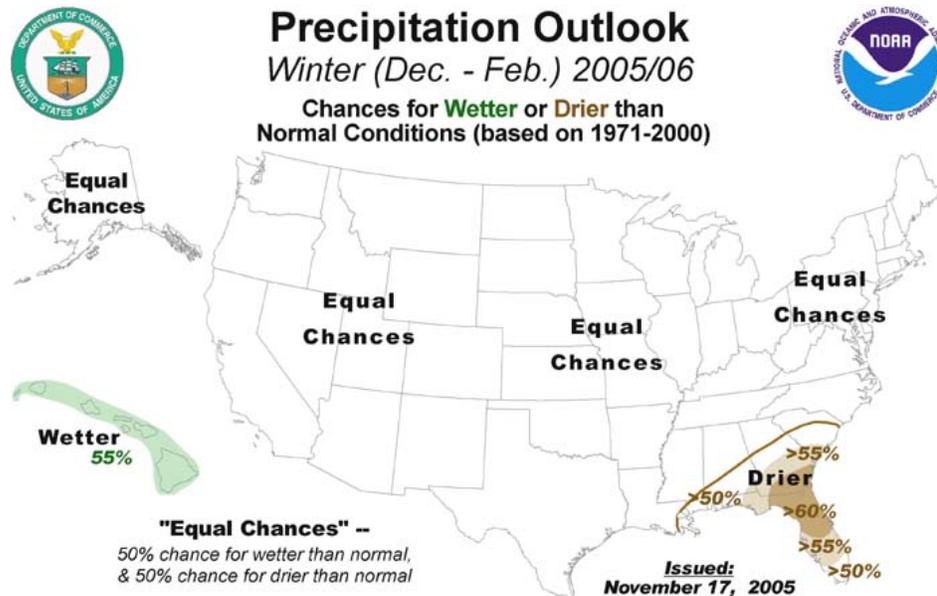
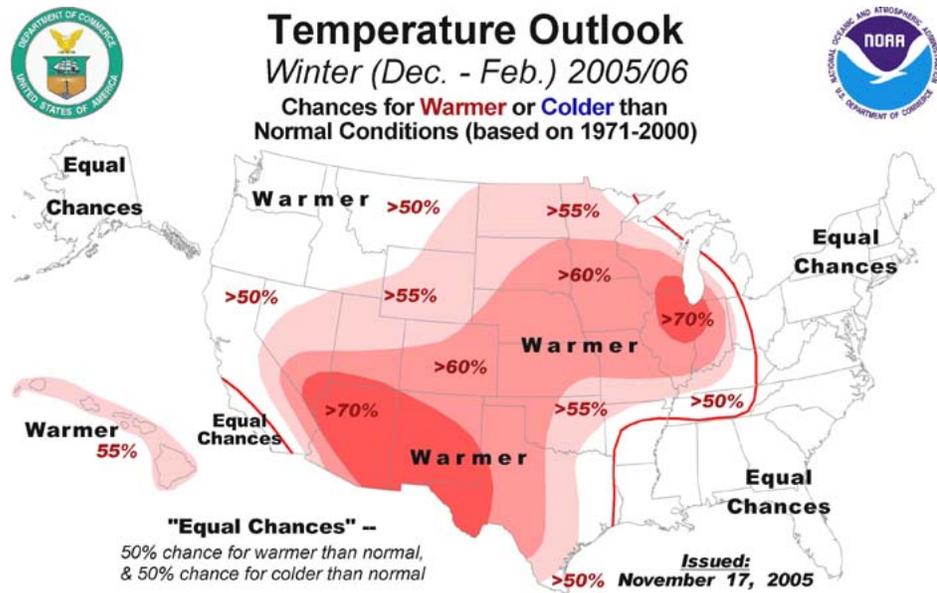
If a person's temperature is below 95° F (35° C), seek medical care immediately. If medical care is not available, begin warming the person slowly. Get the person into dry clothing, and wrap him/her in a warm blanket covering the head and neck.

Do not give the person hot beverages or food; warm broth is better. Do not warm extremities first. This drives the cold blood toward the heart and can lead to heart failure.

Winter Weather Outlook

The winter weather outlook for the upcoming winter finds no strong indication of how this winter will compare to previous winters in to precipitation. The winter weather outlook is calling for better than equal chances of Iowa seeing above normal temperatures.

Here is the official winter weather outlook for 2005-06:

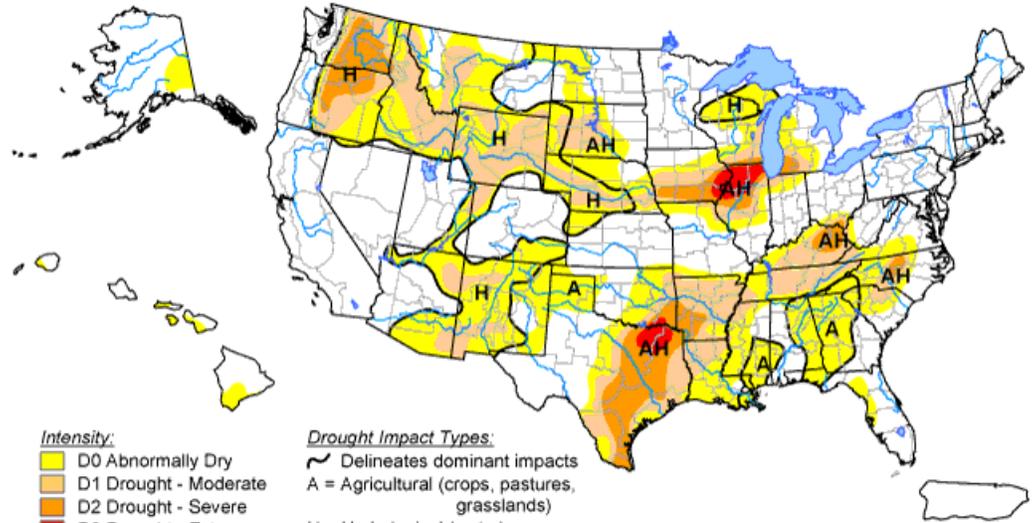


Iowa Drought Update

Dry conditions that have impacted southeast Iowa much of the year are spreading into south central and central Iowa this fall. The rainfall deficit has increased since the end of the growing season. The issue this fall becomes reloading the subsoil moisture before the winter freeze, which has not occurred. If dry conditions persist next spring, the impact to agriculture would increase.

U.S. Drought Monitor

November 22, 2005
Valid 7 a.m. EST



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. See accompanying text summary
for forecast statements.



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<http://drought.unl.edu/dm>