



Earth Gauge

A National Environmental Education Foundation Program

Famous Thanksgiving Weather

As record has it, the English settlers and Wampanoag Indians had nice weather during the first Thanksgiving harvest celebration in 1621, a three-day event that took place in Massachusetts. However, not all Thanksgiving holidays have been as pleasant in New England or other regions of the United States since then. Below, you will find a recap of some of the most memorable Thanksgiving weather events on record from across the country.

EASTERN U.S.

Thanksgiving Weekend Storm: November 24-25, 1950^{1,2,3,4,5}

From November 24-27, 1950, the eastern United States experienced one of the most severe winter storms of the late 19th and 20th Centuries. A strong upper-level low pressure system moving southeast from Minnesota spawned the development of an intense surface low over the Carolinas that subsequently tracked inland along the Appalachians. The storm was sandwiched between two strong high pressure systems, producing a tight pressure gradient. Strong winds blew throughout the East, including a 94 mile-per-hour gust in New York City and a 110 mile-per-hour gust in Concord, New Hampshire. Effects were felt throughout the region, including crop damage and record-low temperatures in south and southeastern states, heavy flooding along the northeastern coast and significant snowfall in Ohio, Pennsylvania and West Virginia.

On Thanksgiving Day, Ohio received a record accumulation of snowfall – about 10 inches state-wide, with some areas receiving up to 30 inches – and high winds. Two days later, the so-called ‘Blizzard Bowl,’ a football game between Ohio State University and University of Michigan, was played in Columbus amidst single-digit temperatures and 35 mile-per-hour winds.

The severity and lack of warning of the storm served as motivation for it to become the subject of the first experiments in Numerical Weather Prediction, which ultimately led to the present-day National Centers for Environmental Prediction (NCEP).

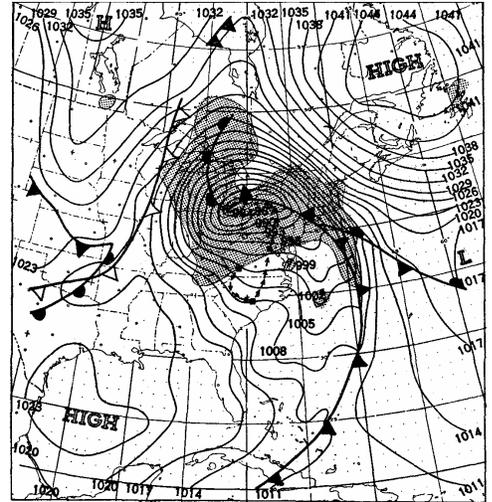


Image: Surface chart at 0030 GMT on November 26, 1950. Courtesy U.S. Weather Bureau/NOAA.

NEW ENGLAND

The ‘Portland Gale:’ November 26, 1898^{6,7}

On the evening of November 26, 1898, a strong low-pressure system trekking east from the Great Lakes and another moving north from the Gulf of Mexico combined over the Northeast and produced a severe winter storm along the New England seaboard. The storm led to around 450 deaths, hundreds of ship wreckages and widespread infrastructure damage from wind and snowfall throughout New England. The Blue Hill Observatory near Boston estimated that the average wind speed was 45 miles per hour with gusts up to 90 miles per hour.

The storm is referred to as the ‘Portland Gale,’ after the tragedy of the *Portland*, a steamship that sank off the Massachusetts coast while attempting to travel from Cape Ann to Cape Cod during the storm. An estimated 192 people died when the vessel sank.



Image: A towline on the sunken steamship *Portland*, off the coast of Massachusetts. Courtesy NOAA/NURC-UConn/The Science Channel.

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Knowledge to live by

SOUTHEAST

Pre-Thanksgiving Nor'easter: November 21-22, 2006 (Eastern Seaboard)⁸

On the two days before Thanksgiving in 2006, the southeast Atlantic coast was struck by a strong nor'easter that brought damaging winds and caused coastal flooding. Some areas of the North Carolina coast received 50 to 80 mile-per-hour wind gusts, which damaged trees and property along and inland of the coast. The storm brought the earliest snowfall ever recorded to Charleston, South Carolina, and Savannah, Georgia. The storm moved north and impacted the mid-Atlantic and southern New England coasts.

PLAINS

Blizzard in the Northern Plains: November 27-28, 2005⁹

The "Blizzard of 2005" traveled northeast from the southern Rockies and brought strong winds, snow and ice to the Northern Plains on the Sunday and Monday after Thanksgiving. It caused widespread travel delays, school closures and damage to infrastructure, including power lines and roads, throughout the region.

The Dakotas, Nebraska and Minnesota received the highest snowfall accumulation, with Central South Dakota receiving anywhere from 11 to 20 inches. However, ice accumulation from freezing rain and sleet, including more than two inches in parts of South Dakota and Minnesota, presented the most danger to travelers. Tens of thousands of people were left without power, some for up to a week or more.

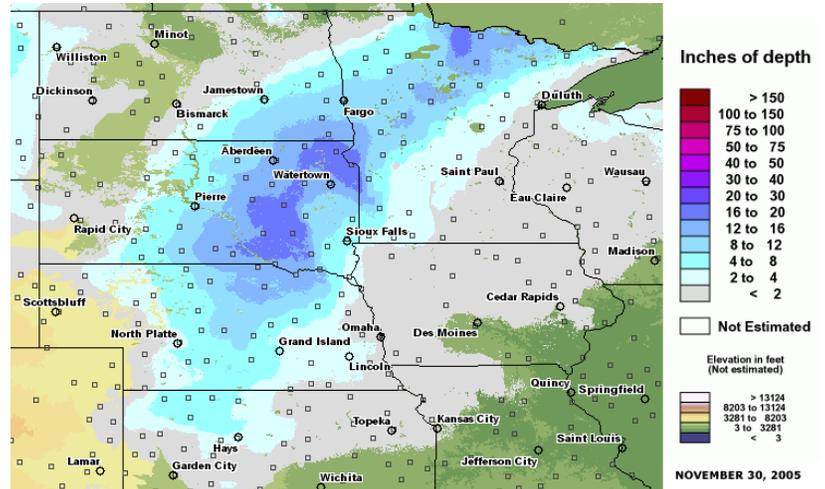


Image: Snow depth across northern Great Plains on November 30, 2005. Courtesy of NOAA National Operational Hydrologic Remote Sensing Center accessed on ncdc.noaa.gov.

'Blue Norther' in Texas: November 25, 1993^{10,11}

On Thanksgiving Day in 1993, a 'blue norther' storm brought sleet and cold temperatures to Texas. 'Blue norther' is the local name for a cold front that occurs during winter, bringing a characteristic dark blue-black sky, cold temperatures and strong north or northwest winds to the Southern Plains. In 1993, the Thanksgiving Classic football game between the Dallas Cowboys and the Miami Dolphins was played at Texas Stadium amidst cold and sleet. A slip on the ice by Leon Lett led to a Miami win during the last seconds of the game.

WESTERN U.S.

Windstorms: November 10-24, 1983 (Pacific Northwest)^{12,13}

The Pacific Northwest experienced two weeks of storms in November, 1983, all of which produced significant winds. On November 13, during the second of the storms, peak wind gusts ranged from 39 miles per hour in Spokane, Washington, to 63 miles per hour in Eureka, California. The Thanksgiving Day storm brought peak gusts of 62 miles per hour to Seattle-Tacoma Airport and Astoria, Oregon. This storm downed trees and damaged power lines and houses in Seattle and coastal Washington, impacting holiday celebrations throughout the region.

Colorado Blizzard: November 25, 1983^{14,15}

Although snow is not unusual in Denver in late November, a blizzard occurred on Thanksgiving Day in 1983 that produced over 20 inches of snowfall for the metro area. According to the National Weather Service, this storm began "the longest stretch of consecutive days with measurable snow cover in Denver," from November 26, 1983, to January 27, 1984 (63 days).

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- ¹ National Weather Service, Eastern Region Headquarters. Major Winter Storms. <http://www.erh.noaa.gov/aly/Past/WINTER.htm>.
- ² U.S. Weather Bureau. Monthly Weather Review, November, 1950: The Destructive Storm of November 25-27, 1950. <http://docs.lib.noaa.gov/rescue/mwr/078/mwr-078-11-0204.pdf>
- ³ Farmer's Almanac. Memorable Thanksgiving Weather. http://www.farmersalmanac.com/weather/a/memorable_thanksgiving_weather
- ⁴ Ohio Historical Society. November 23-27, 1950: Great Thanksgiving Storm. http://www.ohiohistory.org/etcetera/exhibits/swio/pages/content/1950_thanksgivingStorm.htm.
- ⁵ American Meteorological Society. The Norm Phillips Symposium: Thanksgiving Weekend Storm of 1950, by Robert E. Kistler, P. J. Kocin and L. Uccellini. http://ams.confex.com/ams/84Annual/techprogram/paper_73168.htm.
- ⁶ National Oceanic and Atmospheric Administration, Ocean Explorer. "The Storm and the Ship," provided by the Stellwagen Bank National Marine Sanctuary. <http://oceanexplorer.noaa.gov/explorations/03portland/background/storm/storm.html>.
- ⁷ Farmer's Almanac. Memorable Thanksgiving Weather. http://www.farmersalmanac.com/weather/a/memorable_thanksgiving_weather
- ⁸ National Weather Service, Eastern Region Headquarters. November 2006 North Carolina Summary. <http://www.erh.noaa.gov/rah/ncsummaries/MonthlySummary.Nov.2006.doc>.
- ⁹ National Weather Service Forecast Office, Aberdeen, South Dakota. Sky Scanner, January 2006. Holiday Weekend Blizzard Blasts the Northern Plains. <http://www.crh.noaa.gov/abr/skyscanner/Jan2006.pdf>.
- ¹⁰ The Weather Channel. Storm Encyclopedia: Great Plains. <http://www.weather.com/encyclopedia/winter/plains.html>
- ¹¹ ESPN. Legends, underdogs, goats shared Texas Stadium spotlight. http://sports.espn.go.com/nfl/columns/story?columnist=luksa_frank&page=hotread1/luksa.
- ¹² Seattle Office of Emergency Management. Wind Storms. <http://www.seattle.gov/emergency/hazards/windstorms.htm>
- ¹³ Read, W. The Storm King: Two Weeks of Storms, November 10-24, 1983, and the Thanksgiving Day Windstorm. <http://www.climate.washington.edu/stormking/November1983.html>.
- ¹⁴ The Weather Notebook. November 26, 1998 transcript: Thanksgiving Blizzards. <http://www.weathernotebook.org/transcripts/1998/11/26.html>.
- ¹⁵ The Weather Matrix. National Weather Service Snow Spotter Report, February 9, 2007. <http://www.weathermatrix.net/archive/snowreports/200702/1261.html>