

November 2007 New Hampshire Climate and Climate Forecasts

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What to expect in November in New England

From the Northeast Regional Climate Center (NRCC):

The month of November is typically considered to be the last of the three autumn months and is therefore expected to bring the first few days of winter weather. For residents of New England, weather during November is often decidedly winterlike. The deep snow cover and bitter temperatures of January and February are not present, but snowfalls are substantial by late November, coastal storms are frequent, and cloudiness is at a maximum.

Temperatures across New England during November continue the cooling, which begins in late July and August. Day-lengths decrease from 10.5 to 9 hours across the region during the month as the Earth approaches the winter solstice position in its orbit around the sun. In addition, the temperature contrast between the cold land surface and the relatively warm ocean waters encourages storminess along the New England coast and contributes to the wet and cool weather of November. Daytime temperatures, which average in the 45 to 60-degree range in early November, fall by at least 10 degrees by the end of the month. Morning low temperatures fall from the 30s and 40s to the 20s to low 30s during this month. Temperatures may vary widely from the average; in some years, temperatures have risen to summer-like readings in the 70s and 80s, while in other years, the mercury has fallen below zero. Minimum temperatures below 15 degrees are rare along the coast of Maine and for most of southern New Hampshire and southern New England, while temperatures below 10 degrees are rare for most of Vermont and higher elevations in southern New England. Readings near 0, however, are expected in some of the northern communities of northern New England by month's end.

Average precipitation, rain plus the water equivalent of snowfall, reaches a sharp peak in November for many communities. The cold air and a warm ocean create an unstable atmosphere and coastal storms swell the average November total to 5 to 6 inches near Maine's coast and in the southern mountains of Vermont, while southeastern portions of New Hampshire and much of southern New England can expect about 4 to 5 inches of precipitation. Summer is the wet season in the northern portions of northern New England, but a second maximum occurs in November with 3 to 4 inches of precipitation. Average precipitation increases to 6 to 7 inches at elevations over 2000 feet in New Hampshire. Vermont and northern portions of New Hampshire and Maine can expect 13 to 15 days of rain or snow, with 11 to 13 wet days across southern parts of these two states and much of southern New England.

November snowfall varies widely from year to year, but averages 2 to 7 inches across the majority of southern New England and near the coasts of New Hampshire and Maine, 5 to 10 inches in the central interiors of New Hampshire and Maine, and the southern and western valleys of Vermont, and 10 to 15 inches in the northern third of the northern three states. On average, two or three out of five or six Novembers will pass without measurable snow across most of the region with measurable snow reported during most Novembers across higher elevations and northern portions of northern New England. A snowstorm like the Thanksgiving Day storm of 1971, however, helped to boost monthly snow totals from 10 to more than 30 inches for many interior and northern portions of the region.

November is the cloudiest month for most places in New England's climate with from 30 to 50 percent of the possible sunshine across most of the region and 20 to 35 percent in the northern portions of northern New England. Heating degree day totals (total number of degrees, not really "days," above 65°F for the daily maximum temperature) average 750 to 1,000 throughout the northern three states, but the southern three can expect from 560 to 850 heating degree days.

November Records in New Hampshire

Based upon station data archived at the NRCC, 1977-2006.

Maximum Temperature Records for November (°F)

Northern NH

North Stratford 2	76	11/20/05
Grafton	74	11/21/91
Berlin	73	11/12/02
Lancaster	73	11/4/82

Southern NH

Concord Muni AP	77	1/3/90
Epping	77	11/5/84
Greenland	78	11/5/94
Massabesic Lake	77	11/4/90
Nashua	77	11/6/94
Nashua 2	77	11/6/94
Derry	82	11/15/05

Minimum Temperature Records for November (°F)

Northern NH

Mt. Washington	-17	11/29/89
Colebrook	-13	11/24/89
First Conn Lake	-11	11/25/89

Southern NH

Durham	-7	11/24/89
Franklin Falls Dam	-6	11/24/89
Greenland	-6	11/24/89
Tamworth 3	-6	11/24/89
Concord Muni AP	-5	11/24/89
Epping	-5	11/24/89
Plymouth	-5	11/25/89

Precipitation Amount (liquid, in inches)

Northern NH

Pinkham Notch	5.53	11/12/95
Mt Washington	3.97	11/28/80
Berlin	3	11/5/83

Southern NH

Alton	4	11/5/83
Greenland	3.95	11/15/95
Durham	3.5	11/2/97

Snowfall (in inches – single 24-hour period)

Northern NH

Mt Washington	17.9	11/5/01
Diamond Pond	16	11/17/99
Milan	12	11/18/80
Pinkham Notch	12	11/21/86

Southern NH

Macdowell Dam	14	11/19/86
Durham	12	11/18/80
Salisbury	11	11/15/97

Forecast Probabilities for a ‘White’ (snowy) Thanksgiving (11/22/07)

Northern NH

- 44 percent probability for precipitation to fall on that date.
- 11 percent probability for snow to fall on that date.
- 29 percent probability that there will be snow on the ground already.

Southern NH

- 38 percent probability for precipitation to fall on that date.
- 6 percent probability for snow to fall on that date.
- 17 percent probability for there to already be snow on the ground.

These probabilities are based upon the median probabilities from all available stations with 10 or more years from 1977-2006 that are in the Northern or Southern NH domain.

Forecasts for November

New Hampshire is forecasted to have temperatures and precipitation amounts similar to the climatological averages from past years.

Forecasts for the November through January season

New Hampshire has a strong probability of seeing above normal temperatures during this three-month period. However, the precipitation is expected to be close to climatological norms. In other words, the probability for NH seeing an above or below normal amount of precipitation are negligible. What this implies is that with normal precipitation amounts, but above normal temperatures, NH will probably see less snow than typical. The precipitation that does fall will either be as rain, or perhaps freezing rain. Without the slow melt-rate of snow, this could suggest an increased chance of flooding, especially if the ground freezes enough to discourage soil absorption.

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