

## 2009 CROP WEATHER SUMMARY

**JANUARY – APRIL:** New England experienced below average temperatures throughout the month of January. Average high temperatures ranged from the low-20s to low-30s. Average low temperatures were in the negative digits in some northern areas. Frigid arctic air during mid-January brought record lows all across New England with nighttime temperatures going as low as — 34 degrees. Snowfall totals ranged from 13 to 33 inches due to 3 major snowstorms. February was marked by average to above average temperatures with a few locations seeing record highs as much as 20 degrees above average on February 8. Snowfall amounts were below average with much of southern New England reporting less than 5 inches throughout the entire month. March began with very low temperatures and a region-wide snowstorm dumping anywhere between 5.0 to 11.6 inches of snowfall. The remainder of the month was mainly dry with light rain falling periodically. Maple producers were busy collecting and boiling sap towards the end of the month thanks to cool overnight temperatures, combined with warm, sunny days keeping the sap running. Some producers were delayed by damage from the devastating ice storm back in December. Temperature averages during the month of April were at average to above average levels. April began with rain showers, thunderstorms, and light snow showers. Mid-April boasted beautiful sunny days and warm spring temperatures while providing necessary moisture with a few heavy rain showers and thunderstorms. The last week of the month was dry and hot, with many areas breaking record highs. Maple syrup activities came to an end as nighttime temperatures were not cool enough to keep the sap running. Daytime temperatures on April 28 averaged in the upper 80s to low 90s. General farm activities during the month of April included working in nurseries and greenhouses, tending livestock, performing general maintenance, moving apples and potatoes out of storage, and making preparations for the spring planting season.

**MAY:** Cool and rainy conditions across New England ushered in the month of May. Below average nighttime lows brought threats of frosts. Showers occurred nearly every day during the week, slowing field work and planting. Many welcomed the precipitation, but by the end of the week, some areas were becoming waterlogged. Thunderstorms, heavy winds, and hail blew through the region during the second weekend of May, damaging fruit trees and newly planted fields. Temperatures warmed up to the mid-60s to low 70s by mid-May providing excellent field work conditions. More thunderstorms occurred the third weekend of May, bringing further hail damage to the southern states. Temperatures cooled down into the third week of May bringing heavy frost damage to some areas on early planted vegetables, peaches, and strawberries. Temperatures climbed back up to average to above average levels for the rest of the week with some areas seeing highs in the low 90s. Southern states received thunderstorms during the 4th weekend of May with more hail damage reported. Many areas of the south saw scattered rain showers through the end of May while the north saw heavier rainfall. High temperatures were below average in the low 50s to mid-60s, with nighttime lows ranging from the mid-30s to low 50s. Total rainfall for May ranged from 2.77 to 5.18 inches across New England, below average to average in the south and average to above average in the north. Vegetable producers planted early season vegetables throughout the month, while also harvesting asparagus, rhubarb, spring greens, and radishes. All fruits, except cranberries, were in full bloom to petal fall across the region by the end of the month. Orchardists and berry growers kept busy throughout the month monitoring for pests and spraying protective fungicides and pesticides. Planting of the majority of field crops was ahead of last year and normal by month's end. Planting of

field corn and sweet corn had passed the halfway mark by the end of May. Shade tobacco transplanting was close to completion at the end of the month. Broadleaf transplanting was just getting underway, on par with normal, but trailing last year. The first cut of grass for dry hay and haylage began near the end of the month.

**JUNE:** Cool temperatures and rain dominated the weather patterns across New England during the month of June. The first week of June saw below average daytime temperatures in the upper 60s to upper 70s and nighttime lows in the low 40s to mid-50s. Several morning frosts lightly damaged emerging sweet and silage corn and the Massachusetts cranberry crop. Temperatures improved the second week with average high temperatures in the mid-60s to upper 70s. Rain continued to fall nearly every day. The third week of June began with a hail storm in the southern states that damaged fruit, vegetable, and corn crops. Tuesday was the only dry day that week. Daytime temperatures were 5 to 15 degrees below average throughout the week, ranging in the mid-60s to mid-70s. Nighttime temperatures were average to above average, ranging in the upper 40s to low 60s. The last week of June once again experienced below average daytime temperatures in the mid-60s to low 80s. Nighttime temperatures were above average, ranging in the upper 50s to low 60s. Rain fell nearly every day in most locations. A series of hail storms blew through the area starting on June 26<sup>th</sup>, with some areas of Connecticut even experiencing tornadoes. Damage was reported on apples, peaches, tomatoes, field and sweet corn, and broadleaf tobacco crops. Total rainfall for the month of June ranged between 3.38 and 4.18 inches, 0.17 to 2.96 inches above average. Fungal diseases, weeds, and pests plagued farmers throughout the month of June due to the prolonged periods of cool and wet conditions. The strawberry harvest was 50 percent complete by the end of the month, on par with last year and normal. Highbush and Maine wild blueberries reached petal fall mid-month, with both reported in good condition. Massachusetts cranberries were in early bloom to full bloom at month's end. Potatoes were all emerged by the end of June, on schedule with normal. Maine barley and oats had also emerged by the end of the month and were reported in good condition. Shade tobacco transplants were all set out by the end of the first week of June. Broadleaf tobacco transplanting was nearly complete at month's end. Both crops were reported in good to fair condition due to hail damage. The first cut of dry hay was 65 percent complete, on par with last year and normal. However, many reporters stated yields and quality were low due to the lack of good drying weather. The second cut had just commenced.

**JULY:** Cool temperatures, cloudy skies, and heavy rainfall dominated the weather patterns across New England during the first week of July. Daytime temperatures were below average ranging in the mid-60s to mid-70s and nighttime temperatures were average in the mid-50s to low 60s. Precipitation of over 4 inches was reported in parts of southern New England and thunderstorms brought hail and tornadoes to Connecticut and New Hampshire, damaging apples, peaches and tobacco crops. Temperatures remained cool in the second week with daytime temperatures ranging in the upper 60s to mid-70s. Rainfall was lighter and sunshine was more prominent than the previous week. The latter half of the month was marked by significantly above average rainfall and below average to average temperatures. Daytime temperatures were initially below average but gradually increased to average levels ranging in the upper 70s to mid-80s, while nighttime temperatures remained average for this time period. During the latter half of July, most areas received over 3 inches of rain. Total rainfall for the month of July ranged between 4.67 and 10.58 inches, 0.70 to 7.41 inches above average.

Average temperatures for the month of July ranged in the low to upper 70s for daylight hours and mid-50s to mid-60s for nighttime hours. Fungal diseases, weeds, and pests continued to be a significant problem in New England throughout the month of July due to cool and very wet conditions. Cases of late blight were reported, particularly in tomato and potato crops. The strawberry harvest was nearly complete by the end of the month, slightly behind last year and normal. Peaches were 25 percent harvested by month's end, ahead of last year and normal. Apples, peaches and pears were reported in good to fair condition. Massachusetts cranberries reached petal fall in the last week and were reported in good condition. Highbush blueberries were 35 percent picked by month's end, slightly behind last year and normal and were reported in good condition. Harvesting of sweet corn was just beginning at the end of July, behind last year and normal. Conditions for field crops declined due to excessive rainfall. The shade tobacco harvest started near the end of the month and was well behind last year and normal. The first cut of dry hay was 85 percent complete and the second cut was 35 percent, both behind last year and normal and both reported in fair to good condition.

**AUGUST:** The beginning of the first week of August saw moderate precipitation across New England, while the rest of the week enjoyed drier conditions. Daylight average temperatures ranged from the mid-70s to low 80s. Temperatures during the following week were variable for all states. Rain returned on August 10 and 11; areas in Vermont and northern New Hampshire received over an inch of precipitation. No significant rain was reported until the end of the third week, with the exception of coastal Massachusetts. Due to a warm front passing through the region on August 15, both daytime and nighttime temperatures were well above average that week. Some areas reported maximum temperatures in the mid-90s and heat indexes beyond 100 degrees. Precipitation was widespread throughout New England from August 21 to 23 as a result of a cold front and Hurricane Bill's rain bands. The previously mentioned cold front ended the heat wave. August ended with the effects of Tropical Storm Danny. Daytime temperatures were below average during that period, ranging from the mid-50s to mid-70s. Heavy rain was reported, particularly in coastal areas. Some areas in Massachusetts reported over 3 inches of rainfall with localized flooding. Average temperatures for the month of August ranged in the mid-70s to low 80s for daylight hours and low 50s to mid-60s for nighttime hours. Total precipitation was below average, ranging from 1.01 to 4.13 inches. Despite the drier weather, late blight was widespread, particularly in tomatoes and potatoes. The picking of pears began the second week of August and was 15 percent complete by month's end. Apples, peaches and pears were reported in good to fair condition. The blueberry harvest picked up pace thanks to the better weather conditions and was 90 percent complete at the end of August, on schedule with last year and normal. Conditions were favorable for cranberry development, with Tropical Storm Danny keeping water supplies replenished. Pests continued to be a problem for vegetable growers. Harvest of sweet corn was 70 percent complete at month's end, behind last year and normal. Due to the sunnier conditions, harvest of field crops picked up pace. The field corn harvest commenced in some drier areas at the end of the month. Broadleaf growers in Connecticut and Massachusetts experienced severe losses from a July hailstorm and widespread disease and viruses; many growers were forced to harrow under their entire crop. Harvest of shade and broadleaf tobacco was active throughout August and was 75 percent complete by month's end on acreage not harrowed under. The cutting of hay was given a boost by the dry weather. The harvest percentages for first, second, and third cuts were 99 percent, 75 percent, and 15 percent, respectively, all ahead of last year and normal.

**SEPTEMBER:** September began partly cloudy with average temperatures in the upper 60s to mid-70s and remained relatively cool through Labor Day weekend. Nighttime lows were average in the 40s and 50s. Much needed rain passed through the region September 10 - 13, bringing up to 4 inches of rain to coastal areas. Other areas reported only a sprinkle. Temperatures remained cool in the low 60s to mid-70s for most of the month with isolated light rain showers, but most of the region was dry. The weekend of September 19 brought cooler temperatures in the mid-30s to low 40s. Most areas experienced their first frost of the fall season; however, no significant crop damage was reported. Temperatures warmed up towards the end of the month with highs in the low 70s to low 80s and nighttime lows in the upper 30s to low 60s; however, September 26 brought temperatures down into the upper 20s in some areas. Severe frosts were abundant across New England. Rain moved into New England overnight Saturday, September 26 and continued through Monday, September 28 in many areas. Most areas picked up approximately an inch of rain during that time. Many farmers welcomed the rain, but soils remained dry. September ended with cloudy skies and cool temperatures in the mid-50s to low 60s. Monthly average high temperatures were ranged from the upper 60s to mid-70s and average nighttime lows were the mid-40s to mid-50s across New England. Total precipitation was 1 to 2 inches below average in many areas, ranging from 1.05 inches to 3.09 inches. The Massachusetts cranberry harvest was underway by September 20 and was 10 percent harvested by month's end. The apple, peach, and pear harvests were active during September and by month's end the crops were 50 percent, 99 percent, and 75 percent picked, respectively. Both wild and tame blueberry harvests were completed during September; both on par with last year and normal. Harvest of sweet corn was 95 percent complete at month's end, on par with last year and normal. The field corn harvest picked up pace during September and was 25 percent harvested at the end of the month, well behind last year's 55 percent harvested and normal of 45 percent. Field corn in many areas developed slowly due to the cool, rainy summer and when corn was ready to harvest, fields were too wet to work in. Maine's oat and barley harvests came to a close by September 20, ahead of last year and normal. Harvests of shade and broadleaf tobacco were active throughout September. The shade harvest was complete by September 20, but broadleaf lagged behind last year and normal, and was 99 percent complete by month's end. Both Maine's and Rhode Island's potato harvests were behind last year and normal at the end of the month, while Massachusetts' potato harvest was ahead of schedule. The first cut of dry hay was complete by September 6 and rated in fair to good condition. The harvest percentages for second and third cuts were 99 percent and 80 percent, respectively, both ahead of last year and normal.

**OCTOBER:** October began mostly cloudy with cooler than normal high temperatures averaging in the 50s and 60s. Nighttime temperatures were variable, with light to moderate frost in some areas. Rain moved into the area on October 2 and 3 with the southern States receiving the most intense showers. Rainfall returned on Tuesday and Wednesday of the following week. This week brought average temperatures and by week's end nighttime temperatures dropped significantly, causing widespread frosts. The next week was dominated by November-like temperatures ranging in the mid-40s to low 50s during the day and in the 20s and 30s north to south. Killing frosts and light snow showers were reported across the region. Coastal areas in New England experienced heavy rainfall during October 18. While the week of October 19-25 began with widespread frosts, weather conditions improved with temperatures in the 60s except for the northernmost regions in New England. Heavy precipitation was present during October 23-24 in all States. The final week of October was mostly cloudy and

had generally average to below average daytime temperatures in the 50s. October 30<sup>th</sup> was an exception, when temperatures were 8 to 21 degrees above the average. Total rainfall for the month ranged from 3.04 inches in northern Vermont to 8.06 inches in Rhode Island. Apple harvest was active in October and was 99 percent complete at the end of the month. The pear harvest was complete by the end of October while peaches were all picked by the first week of the month. The Massachusetts cranberry harvest began winding down during late October and many growers had finished harvest by month's end. Yields were expected to be lower than predicted, but quality was good to excellent. The sweet corn harvest was complete by mid-October, on par with normal. Harvest of cool season vegetables was active across New England and included root crops, brassicas, winter squash, greens, and pumpkins. Growth of many field crops struggled due to cool, wet conditions during the first half of summer, resulting in low yields and inconsistent quality. The field corn harvest was nearly finished by the end of the month, slightly behind last year, but on par with normal. The potato harvest was finished in Rhode Island by late October and in Maine and Massachusetts at the end of the month. The third cutting of hay was 95 percent complete by month's end, on par with last year and normal. Operators were busy cleaning up fields, planting cover crops, and storing equipment.

**NOVEMBER:** November began with partly cloudy skies and above average high temperatures ranging in the low 50s to mid-60s. Temperatures cooled down to slightly below average levels by November 2 and remained cool until November 7. Skies were overcast during the middle of the first week, with some areas reporting light precipitation and windy conditions. Temperatures were significantly above average between November 8 and November 10, ranging in the low 50s to low 70s. The remnants of Tropical Storm Ida moved into the area on November 13, resulting in widespread heavy rains. The third week of November began with above average daytime temperatures in the northern states and average temperatures elsewhere. Widespread heavy frost was reported on November 17 and 18. Temperatures were unseasonably warm on the second half of this week, with mornings being mostly free of frost and highs reaching the 60s in many areas. The 4th week began with average temperatures in southern New England and above average temperatures elsewhere, resulting in relatively uniform highs in the upper 40s and low 50s. Clouds moved into the area on November 27, bringing precipitation to all states until November 28. Precipitation fell as snow in higher elevations. Heavy wind conditions were present throughout New England on November 28, with gusts exceeding 50 mph in some areas. The month ended with significantly above average nighttime temperatures. Overall,

average temperatures for November were above average. Total precipitation for the month of November varied between 2.08 to 6.39 inches. The last of the cranberries were harvested by November 9 with good to excellent crop conditions reported. Field corn harvest was finished early this month, on par with last year but ahead of normal. Field corn quality was inconsistent in some areas due to excessive moisture. The third cutting of hay was wrapped up by late November and was reported in good to excellent condition in Vermont and in good to fair condition in other States. Once the harvest was complete, growers started spreading manure and lime, soil testing fields for next season, and cleaning and storing equipment for winter. Farmers were also active moving crops out of storage and marketing goods for the holiday season.

**DECEMBER:** Average high temperatures for the month of December ranged from the high 20s to low 40s across New England with average lows ranging from the low 10s in the northernmost regions to the mid-20s in the southern states. Temperatures in New England were average overall. Total precipitation for the month was 1.7 to 5.4 inches and did not greatly deviate from normal levels in most locations. December began with partly cloudy skies and average to above average temperatures. Temperatures were at record levels on the humid December 3rd, ranging from the 40s in northern Maine to the 60s in most of New England. A minor snowstorm entered the region over the weekend, leaving at least 3 inches in western Massachusetts, New Hampshire and Maine. Other regions experienced moderate precipitation. Another storm affected New England on December 9th, dumping 3 to 8 inches of snow in most of New England. Areas farther south experienced less snowfall but around an inch of rain. The weekend of December 13 was marked by a mixture of rain, ice, snow, and variable high temperatures ranging from the mid-10s in northern Maine to the low 50s in the southern coastal areas. No major precipitation fell on the third week, except for Sunday. Temperatures were below average this week, ranging from the low 20s to mid 30s and occasionally dipping below 0 in northern latitudes, particularly during December 17-19. On December 20th, 3 to 14 inches of snow fell on the southern states; northern New England received no measurable snowfall. Apart from 10 inches of snow in northern Maine and 2 inches in northwestern Vermont, the rest of New England had little to no precipitation from December 21 to 26. Temperatures increased during the weekend of December 26 and peaked during the rainy Sunday, when they were 11-22 degrees above the average. Total precipitation for that day was 0.2 to 2.0 inches. The year ended with widespread light snowfall that would intensify over the beginning of January.



Photo courtesy of Lincoln AgriSource, Randolph Ctr., VT