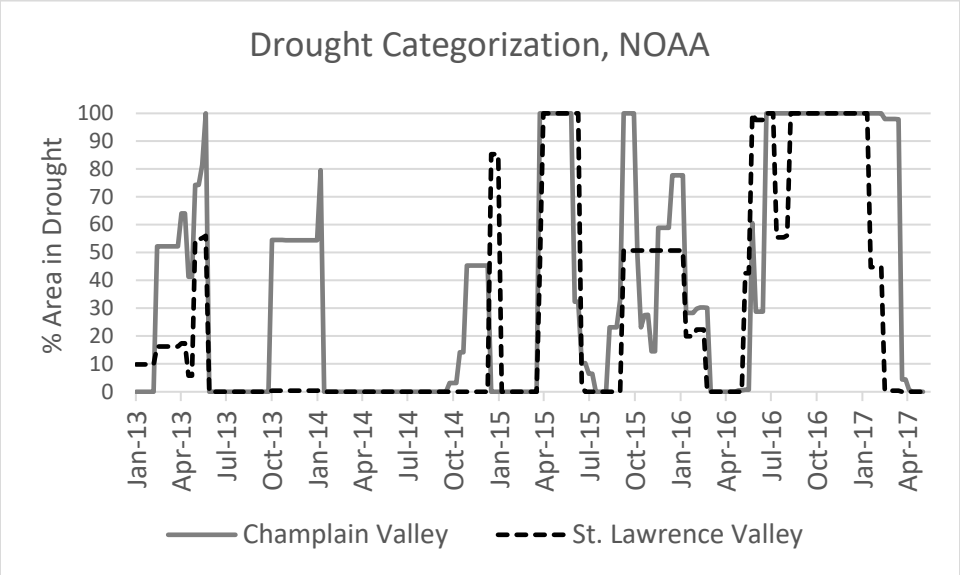
# 2016 North Country Drought in the Rearview?

By Kitty O'Neil, PhD, CCA

2016 drought conditions are drastically improved, but not gone, for NYS and the Northeast. Much of the Northeast recorded above-normal precipitation and above-normal temperatures for the last week in April and rain began to fall in early May. The region has been characterized by short-term wetness and long-term dryness, and lingering impacts from the long term dryness are still influencing the drought depiction in the region. As the environment slowly responds to short term moisture, small improvements are detectable, but the complete elimination of dryness and drought in the region will be slow.

For some context for the weather over the past year, percentage of the Champlain Valley and St. Lawrence Valley areas that were categorized in any type of drought between January 2013 and May 2017 is shown in the graph below. We've only very very recently returned to non-drought conditions according to NOAA criteria. Champlain Valley mostly returned to normal in March 2017 while the St. Lawrence Valley finally lost all dry and drought categorizations in February 2017. The North Country spent most all of 2016 in some sort of a drought categorization while in 2013 to 2015, we spent only brief periods in these categories. The amount of time with limited rainfall is what led to the severity of the 2016 drought.




Many effects of the 2016 drought will linger into 2017. Though most grasses can survive extended dry conditions, some hay fields and pastures may have areas that did not survive the drought. Many grass fields were grazed or mowed too short, due to limited forage availability. This stress, in addition to the drought stress, could cause death of grasses and legumes in extreme cases. Many hay seedings planted in spring 2016 were failures. Many of those fields remain open into spring 2017 and will need to be dealt with. 2017 annual crops such as corn and soybeans and new seedings, will be fine – assuming proper planting and as long as we receive adequate rains in a typical pattern. Paul Hetzler, Horticulture & Natural Resource Educator with

CCE of St. Lawrence County, cautions that we may continue to see drought effects in our forests, orchards and vineyards into 2017 and beyond. Many trees were severely stressed by the 2016 drought, and are still responding to it with increased pollen and seed production this year. Some trees will exude sap and goo atypically in 2017 and will succumb to pest pressures, as their defense mechanisms are now compromised. Many trees will die, but they may not appear dead for a couple of years. Trees respond more slowly than annual and perennial ag crops.

The current, May 2, 2017, Northeast US drought map is shown below. For comparison, the October 4, 2016 map is also shown.

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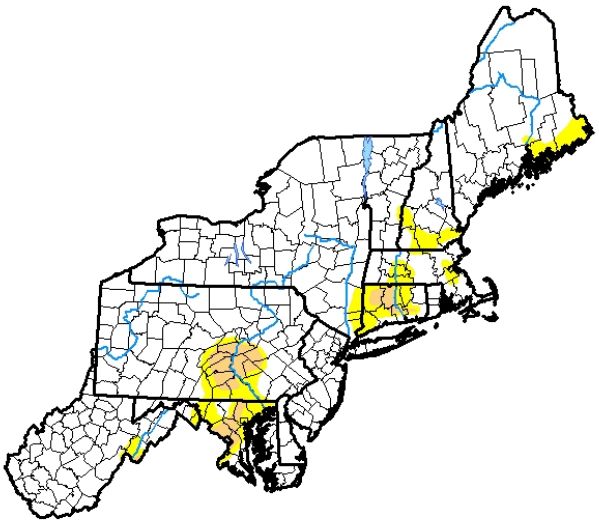
## U.S. Drought Monitor
# Northeast



### May 2, 2017
*(Released Thursday, May. 4, 2017)*
Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

| | None | D0 | D1 | D2 | D3 | D4 |
|---|---|---|---|---|---|---|
| Current | 88.81 | 8.19 | 3.00 | 0.00 | 0.00 | 0.00 |
| Last Week 04-25-2017 | 83.33 | 13.22 | 3.45 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago 01-31-2017 | 39.26 | 25.92 | 26.94 | 6.78 | 1.10 | 0.00 |
| Start of Calendar Year 01-03-2017 | 30.54 | 25.80 | 31.99 | 10.29 | 1.39 | 0.00 |
| Start of Water Year 09-27-2016 | 21.72 | 37.96 | 20.73 | 12.91 | 6.68 | 0.00 |
| One Year Ago 05-03-2016 | 62.87 | 33.66 | 3.47 | 0.00 | 0.00 | 0.00 |

*Intensity:*

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

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

*Author:*
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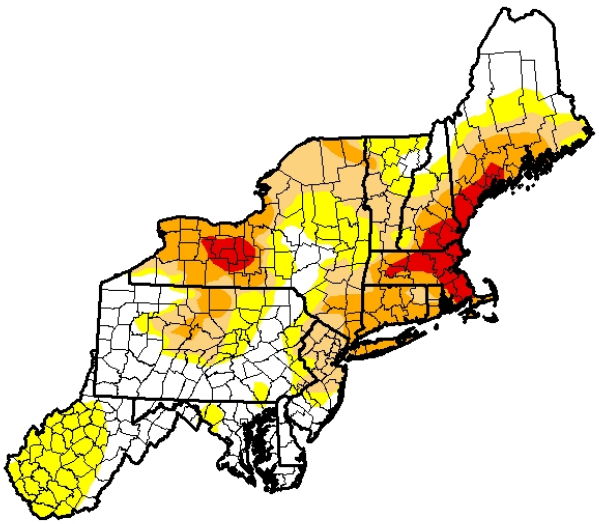
http://droughtmonitor.unl.edu/

## U.S. Drought Monitor
# Northeast



### October 4, 2016
*(Released Thursday, Oct. 6, 2016)*
Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

| | None | D0 | D1 | D2 | D3 | D4 |
|---|---|---|---|---|---|---|
| Current | 34.88 | 24.13 | 19.01 | 16.36 | 5.61 | 0.00 |
| Last Week 9/27/2016 | 21.72 | 37.96 | 20.73 | 12.91 | 6.68 | 0.00 |
| 3 Months Ago 7/5/2016 | 34.35 | 44.83 | 19.00 | 1.82 | 0.00 | 0.00 |
| Start of Calendar Year 12/29/2015 | 62.10 | 31.30 | 6.60 | 0.00 | 0.00 | 0.00 |
| Start of Water Year 9/27/2016 | 21.72 | 37.96 | 20.73 | 12.91 | 6.68 | 0.00 |
| One Year Ago 10/6/2015 | 71.27 | 22.95 | 5.78 | 0.00 | 0.00 | 0.00 |

*Intensity:*

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

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

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