

**Field Crops, Forages and Soils Updates for NNY**

6 July 2018

- NNY Weather Summary for April through June 2018. The hot weather we've been complaining about during this first week of July makes it hard to fathom that we'd actually been a little behind on heat units through June 30. Most locations across the North Country remained just a bit below normal GDD<sub>50</sub> accumulations through the end of June. The first week of July has undoubtedly helped to correct that shortage. All locations listed were below normal precipitation, though deficits range from almost normal to very short: -0.03" in Chateaugay to -5.30" in Talcottville. Essex and Lewis counties have been the driest, though portions of Essex and Lewis received a bit of rain in the past couple of days. See map on the next page.



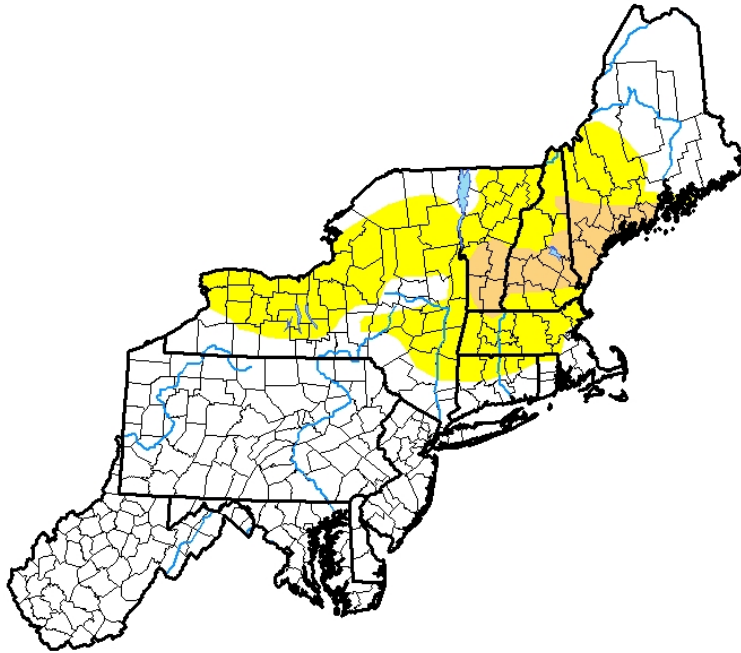
----- Accumulation from April 1 thru June 30, 2018 -----

County	Town/Village	--- Precipitation, in ---			- GDD Base 50F -		GDD Base 40F
		Total	DFN	Days	Total	DFN	Total
Clinton	Champlain	10.91	-2.08	44	685	-39	1346
	Ellenburg Depot	11.61	-0.64	47	610	-36	1250
	Beekmantown	11.14	-0.41	44	689	-45	1348
	Peru	10.03	-0.69	37	717	-6	1371
Essex	Whallonsburg	8.51	-3.34	38	722	-5	1385
	Ticonderoga	7.56	-4.96	<b>33</b>	<b>738</b>	-46	<b>1409</b>
Franklin	Bombay	11.43	-0.66	47	690	-18	1347
	Malone	11.93	-0.17	48	716	<b>65</b>	1373
	Chateaugay	<b>12.81</b>	<b>-0.03</b>	<b>50</b>	662	-1	1310
Jefferson	Rodman	10.29	-1.28	45	715	8	1365
	Cape Vincent	9.3	-1.25	41	<b>575</b>	-28	1207
	Evans Mills	10	-1.33	43	733	-40	1391
	Redwood	11.29	-1.35	46	645	<b>-71</b>	1288
	Antwerp	10.1	-1.18	43	654	-38	1295
Lewis	Talcottville	<b>7.01</b>	<b>-5.3</b>	40	578	-9	<b>1193</b>
	Martinsburg	7.57	-3.39	40	691	8	1324
	Carthage	9.02	-2.13	43	690	-8	1331
St. Lawrence	Gouverneur	11.02	-1.46	49	605	-38	1248
	Hammond	10.66	-1.64	48	600	-58	1242
	Ogdensburg	10.96	-0.99	46	680	-7	1336
	Canton	11.23	-0.70	45	674	-40	1329
	Madrid	10.29	-1.12	43	650	-48	1299
	North Lawrence	10.97	-1.39	46	683	-49	1330
	Louisville	9.67	-2.51	45	663	-21	1315
<b>Average</b>		<b>10.22</b>	<b>-1.67</b>	<b>44</b>	<b>669</b>	<b>-24</b>	<b>1318</b>

\* Precipitation in inches, temperature in Fahrenheit, DFN = difference from 15-year normal, Days = days with precipitation. Calculated from [ACIS NRCC 2.5-mile gridded datasets](#). High and low values within each column are highlighted.

# U.S. Drought Monitor Northeast

**July 3, 2018**  
(Released Thursday, Jul. 5, 2018)  
Valid 8 a.m. EDT



**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:**

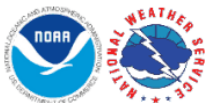
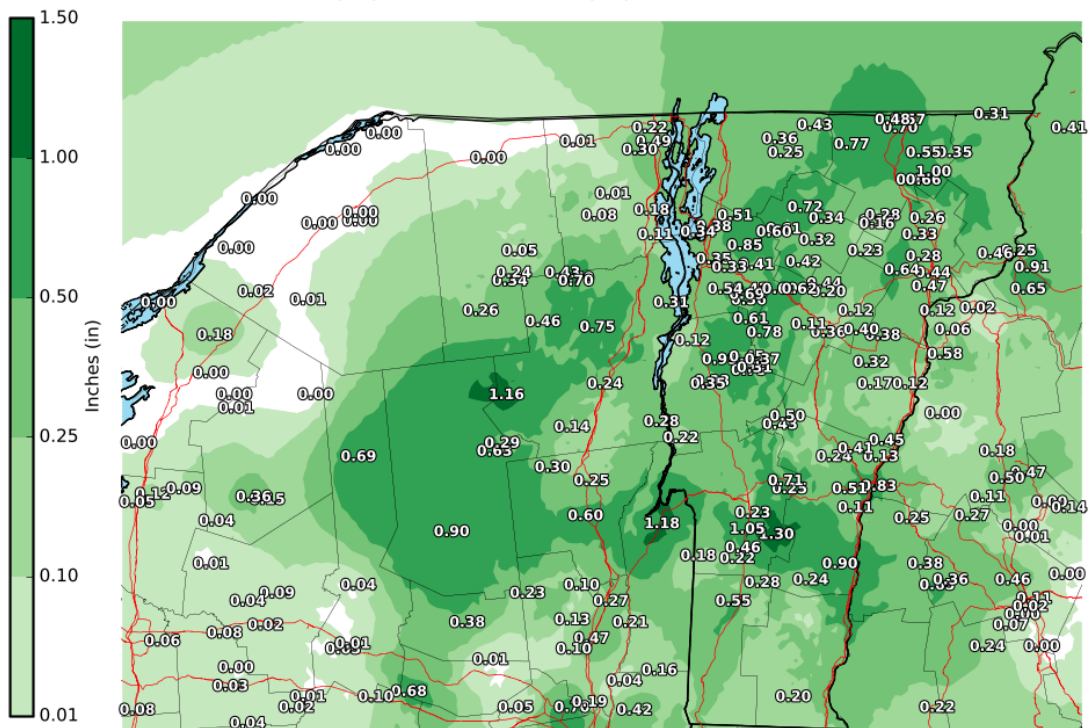
Richard Tinker  
CPC/NOAA/NWS/NCEP



<http://droughtmonitor.unl.edu/>

## 24-hr Precipitation Totals

Valid: 07/05/2018 07:00 AM - 07/06/2018 07:00 AM EDT



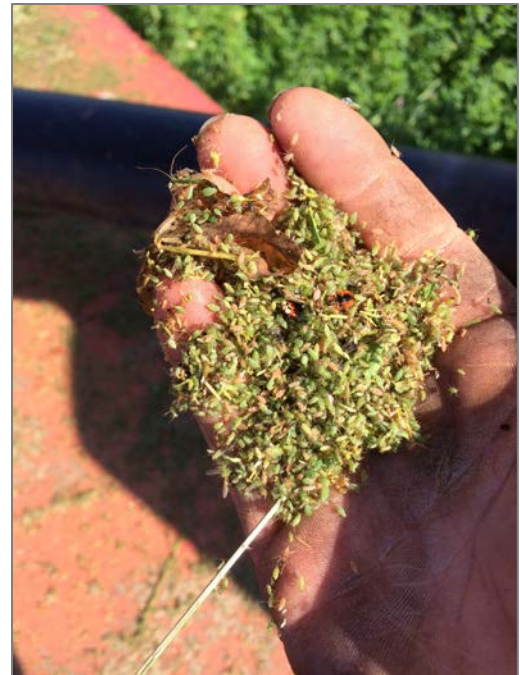
National Weather Service  
Burlington, VT  
07/06/2018 11:29 AM EDT

Follow Us:   
[weather.gov/Burlington](http://weather.gov/Burlington)

- NNY Weather Summary for April through June 2018, continued. Despite the little bit of rain this past week, a good portion of NYS and the Northeast remains categorized as abnormally dry or moderate drought in the most recent US Drought Monitor. See map on the previous page.

Above normal temperatures are predicted for the next 6-14 days across the Northeast while precipitation is also expected to be above normal.

- Second cutting alfalfa and grass has been taken off without delay. Alfalfa, alfalfa-grass and grass hayfields have looked very good and hay and silage harvest has progressed quickly and smoothly with our warm dry weather. Quality and yield appear to be high. Third cutting growth, however, has been limited by hot dry conditions.



Farmer-submitted picture of pea aphids (and a couple of ladybugs) accumulated on a haybine while mowing 2<sup>nd</sup> cutting. St. Lawrence County, July 2018.

**PEST UPDATES:**

- Pea aphids in alfalfa. Abnormally high populations of pea aphids have been observed, in pockets, across NYS. CCE staff and farmers have found high numbers in NNY also. The pea aphid is tiny, though large for an aphid. It is bright green and sometimes pink. Pea aphids prefer cool temperatures, which may help explain the high numbers found in spring 2018. Pea aphids are almost always present in alfalfa and alfalfa-grass fields, but we typically don't worry about them because the populations required to cause detectable economic yield or stand loss is quite high. Thresholds for insecticide treatments for pea aphids are 100+ per stem (½ to 1 cup per 20 sweeps) in 20+” alfalfa or 70-80 per stem in 10-20” plants. No fields have yet been found to have been over threshold and farmers reporting aphids have also reported that the alfalfa stand was not stressed. A couple of fields have been sprayed, however.

Pea aphids are held in check by a few natural predators. Lady beetles, parasitic wasps and a naturally occurring fungus help to control pea aphids, so consider these populations as when making treatment decisions.

- Alfalfa weevil in alfalfa. A few fields were found to have significant tip feeding damage from alfalfa weevil during early 2<sup>nd</sup> growth 2-3 weeks ago. No additional observations have been reported.
- Potato leafhoppers have been found to be problematic in a few NNY fields. Near-threshold numbers of PLH have been discovered in the last week or so in several NNY fields. *Scout regularly for PLH to avoid being surprised.* Alfalfa plants are more sensitive to leafhopper damage during moisture or fertility stress and we have abnormally dry conditions at present. When alfalfa is moisture-stressed, spraying for PLH can be justified at or just below recommended thresholds.

Alfalfa Height	No. Leafhoppers per sweep
<3”	0.2
3-7”	0.5
8-10”	1.0
11-14”	2.0
15+”	2.0

We recommend a weekly scouting program, using a standard 15” sweep net. Adult PLH are 1/8” long, bright green and very active. Developing nymphs are smaller and green. Severity of the

PLH infestation depends on the alfalfa height. Short, young regrowth has a lower threshold than taller and older alfalfa. Thresholds to indicate economic response to intervention are listed in the table below.

- Armyworm in grass fields. July 1<sup>st</sup> and 2<sup>nd</sup>, we discovered a few grass hay fields in NNY with small (1-1.5mm, 1<sup>st</sup> instar) armyworm larvae. These are likely the result of moths arriving with late June storms from the south. Small larvae don't do much damage but 80% of feeding is done once they've become ¾ to 1" long. Infested fields were scouted again late this week and larvae are still present and at about 3<sup>rd</sup> instar. Armyworm tend to hide on the ground, protected by surface litter during the day, so small larvae are difficult to quantify. Thresholds for treatment decisions are based on number of larvae per square foot, rather than per sweep. A reasonable threshold for grass hay fields and small grains is about 4-5 larvae, less than ¾" length, per square foot. Recommendations are to continue monitoring small size armyworm numbers and to also notice if larvae are parasitized by wasps (white eggs attached to armyworm head area). Once larvae approach 5<sup>th</sup> and 6<sup>th</sup> instar, and if they're numerous enough and are not parasitized in sufficient numbers, damage can occur almost overnight. Treatment decisions should be made before those latest development stages.



Small armyworm larvae discovered in an orchardgrass field. Photo by Mike Hunter. Jefferson County, July 2018.

- Soybean aphids have been observed in below-threshold numbers, but we caution against forgetting about them. Soybean aphids often become problematic in hot, dry weather and that's a good description of our current conditions. It's been a few years since we've had high soybean aphid numbers, which can cause us to forget about being vigilant.
- Two-spotted spider mites in soybeans. While we're on the subject of soybean pests, two-spotted spider mites (TSM), an occasional pest of soybeans in NNY, are definitely worth scouting for this season. TSM are tiny – you need magnification to see them. Very hot, dry weather conditions are favorable for the development of TSM so we recommend keeping an eye out for them this season. TSM damage in soybeans will cause the leaves to appear bronzed or sand blasted.



Magnified view of Two-Spotted Spider Mites on soybean. Photo from Purdue Univ. Extension.

Additional resources:

1. [Cornell Cooperative Extension's North Country Regional Ag Team Web Resources](#)
2. [New York Integrated Pest Management \(NYSIPM\) Web Resources](#)
3. [Weekly Crop Progress & Condition Report. 2017. New York USDA-NASS.](#)
4. [Northeast Regional Climate Center](#)

For more information about field crop and soil management, contact your local Cornell Cooperative Extension office or NNY Cornell University Cooperative Extension Regional Field Crops and Soils Specialists, Mike Hunter and Kitty O'Neil.

Kitty O'Neil  
St. Lawrence County CCE Office, Canton  
(315) 854-1218  
[kitty.oneil@cornell.edu](mailto:kitty.oneil@cornell.edu)

Mike Hunter  
Jefferson County CCE Office, Watertown  
(315) 788-8450  
[meh27@cornell.edu](mailto:meh27@cornell.edu)

Our Mission

“The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton and Essex Counties by promoting productive, safe, economically and environmentally sustainable management practices and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry.”

*Building Strong and Vibrant New York Communities*

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of Agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associates, county governing bodies, and U.S. Department of Agriculture cooperating.