



Field Crops, Forages and Soils Updates for NNY

18 September 2017

• NNY Weather Summary for April 1 through August 31, 2017

----- Accumulation Since April 1, 2017 -----

County	Town/Village	--- Precipitation, in ---			- GDD Base 50F -		GDD Base 40F
		Total	DFN	Days	Total	DFN	Total
Clinton	Champlain	23.87	+1.95	80(+11)	1756	-185	3075
	Ellenburg Depot	23.95	+4.17	92(+23)	1594	-177	2873
	Beekmantown	18.89	-0.28	78(+12)	1823	-142	3145
	Peru	19.17	+1.53	74(+9)	1852	-88	3185
Essex	Whallonsburg	22.10	+2.55	75(+9)	1881	-72	3232
	Ticonderoga	25.09	+4.08	74(+9)	1907	-149	3258
Franklin	Bombay	28.55	+8.06	82(+12)	1762	-116	3075
	Malone	26.44	+6.13	92(+22)	1724	-23	3036
	Chateaugay	29.78	+8.96	97(+25)	1666	-117	2958
Jefferson	Rodman	27.85	+8.90	74(+10)	1700	-189	3034
	Cape Vincent	23.15	+6.60	87(+24)	1631	-162	2954
	Evans Mills	29.71	+10.89	80(+18)	1756	-255	3106
	Redwood	30.51	+9.93	86(+19)	1665	-246	2985
	Antwerp	26.37	+7.45	71(+9)	1643	-202	2966
Lewis	Talcottville	22.31	+2.29	74(+10)	1470	-121	2769
	Martinsburg	29.25	+10.92	71(+10)	1661	-135	2986
	Carthage	27.75	+9.11	77(+15)	1656	-191	2985
St. Lawrence	Gouverneur	28.30	+8.44	84(+16)	1604	-150	2919
	Hammond	31.09	+11.08	83(+16)	1626	-149	2940
	Ogdensburg	31.44	+11.50	85(+15)	1717	-138	3031
	Canton	31.50	+10.68	85(+14)	1727	-142	3037
	Madrid	31.46	+11.21	84(+15)	1703	-144	3009
	North Lawrence	30.15	+9.06	89(+18)	1750	-152	3067
	Louisville	33.34	+11.91	93(+23)	1716	-108	3024
Average		27.17	+7.38	82(+15)	1708	-148	3027

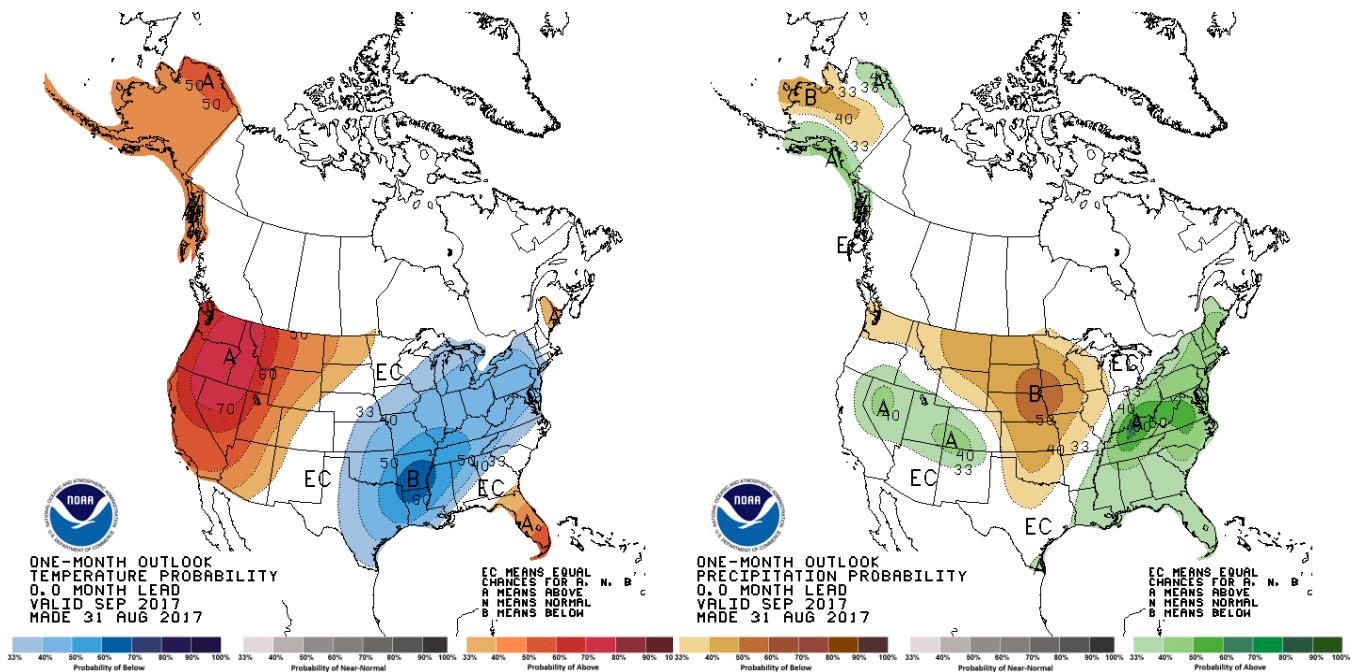
* Precipitation in inches, temperature in Fahrenheit, DFN = difference from 15-year average, Days = days with precipitation (difference from normal days with precipitation, in parentheses). Calculated from [ACIS NRCC 2.5-mile gridded datasets](#). Highs and lows in each column are highlighted in red.

Wet and cool weather has been the common story across NNY this season, but some areas have been wetter or cooler than others. Clinton County has not seen quite as much rain as other areas while St. Lawrence County appears to be generally the wettest on average. The region has seen an average of 37% more rain and 22% more rainy days than normal. Every location listed has had more rainy days than typical and the range is from 9 more (+14%) to 25 more (+35%) than average. Rainy weather

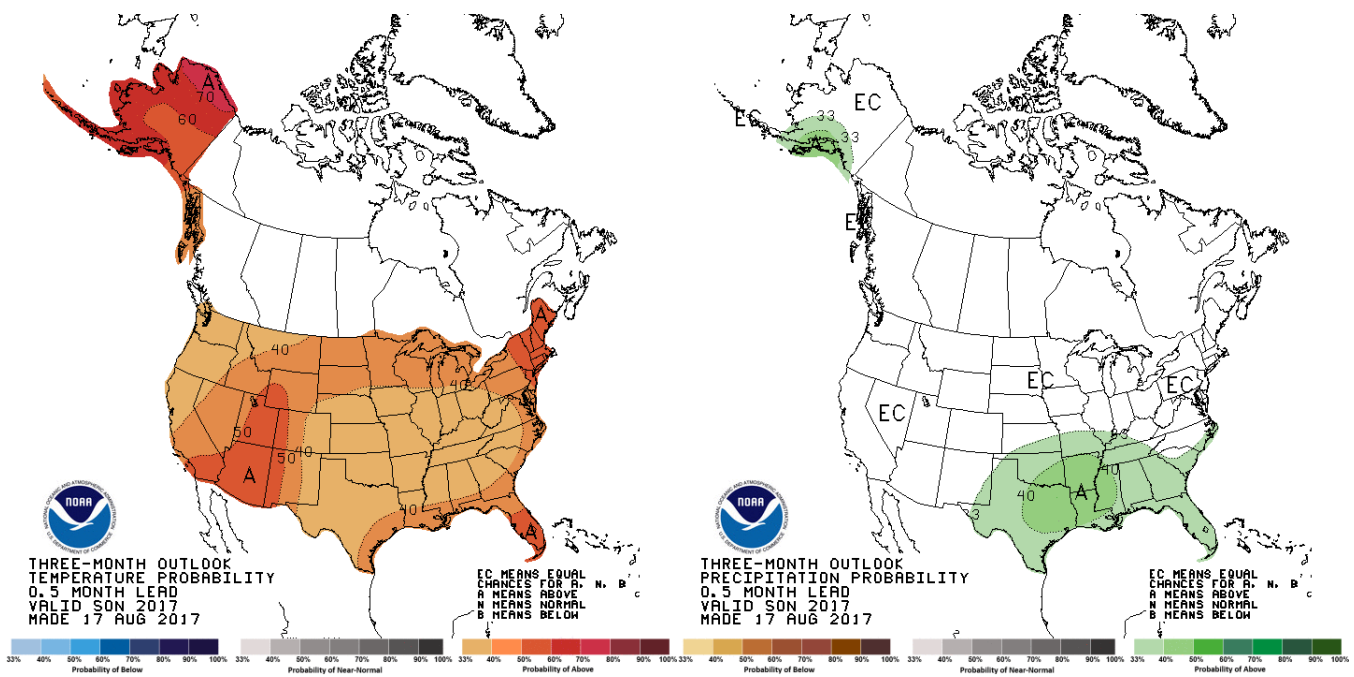
delayed planting most forage seedings and row crops this spring and has made hay and haylage harvest quite difficult across NNY all season. First cutting was delayed by a few weeks and it only got worse from there. Because of the difficult hay harvest options, many hay fields were mowed and chopped while still a bit wet, so ruts are a common observation across the region. NNY saw essentially no opportunity for making dry hay until late July and August, well beyond peak quality. Hay will be in short supply this winter and good quality hay will be even harder to find. More fields were left open this season as they were not fit to plant until beyond the acceptable time frame. Some forage seedings were planted beyond the latest recommended date of May 15 and are consequently poor stands with dense weed problems.

All locations are below normal GDD due extra cloudy and rainy days and below average temperatures. Combined with the late planting dates for grain and silage corn and soybeans, this low GDD accumulation will reduce chances of a mature crop at harvest time, or at the first killing frost. Some areas of NNY already saw a light frost on September 1.

- Weather outlook for September in the North Country is cooler than average with above normal precipitation.** See maps below. NOAA's one month outlook maps show a greater than 50% chance of cooler than average temperatures for the eastern half of the country, including NNY. Precipitation prediction is for above normal rainfall. If this prediction proves accurate, GDD deficits will likely persist and crops may not mature on time for good quality and yield at harvest time.

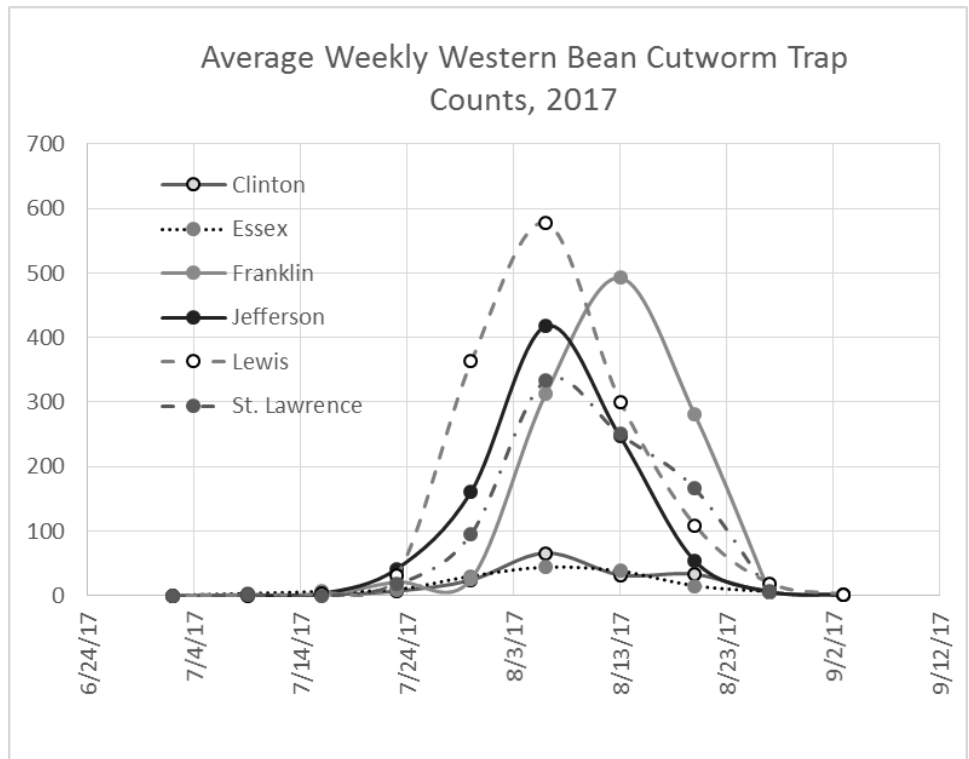


- Weather outlook for September-October-November is warmer than average with above normal precipitation.** See maps below. NOAA's 3-month outlook maps show a greater than 50% chance of warmer than average temperatures for the Northeastern US, including NNY. Precipitation prediction is for typical rainfall or, more specifically, a tossup between above and below normal tendency. We have a chance for some late fall GDD, but it's not likely that many fields will be able to take advantage.



• **Western Bean Cutworm populations continue to rise in NNY.**

Western Bean Cutworm (WBC) populations in NNY and in NYS have been increasing quickly from season to season since they were first detected in 2009. This year, traps in Lewis and Franklin Counties caught the most moths in NNY while Jefferson and St. Lawrence were again high. Though the populations in Clinton and Essex are much smaller, those numbers continue to increase also. NNY appears to have more WBC pressure than the rest of the state. Traps in 6 NNY counties averaged 1035 moths per trap while the state average was 569 moths per trap for the 2017 season.



Back in early July, Mike Hunter identified a field in Jefferson County that was well over the threshold of 5% of plants having a WBC egg mass – the first time we’d seen this early in the season. That grower followed up with a well-timed spray – between egg hatching and larvae moving inside the ear – and the pest was very well controlled. More recently, WBC larvae can be found in almost

any corn field in NNY, at a low level of infestation of 5-10% of ears. This is a pest we feel should be scouted and monitored to better understand its impact on quality and yield of corn silage and grain.

- **Northern Corn Leaf Blight symptoms are not appearing as expected this season.** Many agronomists expected the cool and wet conditions present for most of our 2017 growing season to be ideal conditions for Northern Corn Leaf Blight development in NNY corn fields. We are not seeing many infected fields at this point. Lesions are out there, but they're small, on lower leaves and it's late enough in the season now that NCLB is unlikely to significantly impact yield in most fields.

- **White mold in soybeans is problematic this year.** White mold infections are caused by a fungal pathogen which thrives in cool (59°F to 75°F), cloudy, wet and humid weather conditions at soybean flowering. Infection of the soybean plant by the *Sclerotinia* fungus occurs at flowering, but disease symptoms typically do not appear until early reproductive growth stages. Wilt and death of upper leaves beginning during pod development are often the first obvious symptoms of a white mold infection in a field. Application of appropriate fungicides at flowering stage can provide suppression of white mold in soybeans, but this decision must be made weeks before symptoms are present. Fungicides are not effective during pod development. Now, most fields show white mold infections that are visible from the road. These plants occur in patches that are brown, dead and dying, as opposed to the typical yellowing of maturing plants. Make note of fields with white mold infections and take appropriate steps to limit impact of this disease on subsequent crops. Do everything you can to minimize the spread of the sclerotia from field to field. It is possible to introduce white mold sclerotia into a field by transferring grain or soil on contaminated equipment. If you have a field with white mold present, harvest that infected field last and clean equipment between fields. Likewise, recommendations are to till or plant fields with a history of infection last and carefully clean and inspect equipment between fields. White mold can persist from season to season in the small black sclerotia noticeable on and inside infected plants. These sclerotia will germinate next season if left on the soil surface, but will persist up to 6-7 years if tilled into the soil. Ideally, infected fields should be no-till planted to a non-host crop, such as corn, in 2018.



White mold fungus on soybeans in St. Lawrence County. White fuzzy fungus, water-soaked lesions and black sclerotia are visible on this soybean stem. (Photo by K. O'Neil, August 2014)

- **Some CCE Offices and others are offering corn moisture measurements this fall.** Contact your local office to make arrangements or to find out their weekly schedule.
 - Clinton – call Sara Bull, 518-561-7450
 - Franklin – call Harry Fefee, 518-483-7403
 - Lewis – call Peggy Murray, 315-376-5270
 - St. Lawrence – Wednesdays, call Kitty O'Neil, 315-854-1218

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.

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