Field Crops, Forages and Soils Updates for NNY ***6 June 2018***

- NNY Weather Summary for April and May 2018. The 2018 growing season began very slowly, with a very cool April, but a warm May has helped to recover lost heat units. Most locations across the North Country accumulated very few base 50 growing degree-days (GDD_{50}) in April. Normally, April GDD_{50} range from 31 to 60 for the 24 locations listed in the table below. Actual April GDD_{50} accumulated for these same locations ranged from 4 to 23, or an average of only 24% of normal. Jefferson and Lewis Counties appeared to be the coolest, receiving just 15% and 12% of normal April GDD_{50}.

		- - - - - - - Accumulation from April 1 thru May 31, 2018 - - - - - - -					
		- - - Precipitation, in - - -			- GDD Base 50F -		GDD Base 40F
County	**Town/Village**	**Total**	**DFN**	**Days**	**Total**	**DFN**	**Total**
Clinton	Champlain	7.80	-0.11	31	287	24	648
	Ellenburg Depot	8.28	0.95	34	242	16	582
	Beekmantown	7.33	0.49	31	286	18	645
	Peru	6.87	0.76	26	306	41	660
Essex	Whallonsburg	5.93	-1.17	28	311	43	674
	Ticonderoga	5.64	-1.84	**22**	**329**	33	**700**
Franklin	Bombay	7.08	0.02	35	286	28	643
	Malone	7.66	0.56	34	313	**79**	671
	Chateaugay	**8.95**	**1.39**	**37**	275	37	623
Jefferson	Rodman	7.06	-0.53	33	323	57	673
	Cape Vincent	6.34	-0.5	29	**233**	39	**565**
	Evans Mills	6.97	-0.27	30	323	26	681
	Redwood	7.33	-0.95	31	270	**8**	613
	Antwerp	6.90	-0.31	29	279	26	621
Lewis	Talcottville	**5.43**	**-2.36**	32	252	40	567
	Martinsburg	**5.43**	-1.22	30	311	58	644
	Carthage	6.32	-0.89	32	304	44	645
St. Lawrence	Gouverneur	6.90	-0.90	34	247	18	590
	Hammond	7.19	-0.53	31	245	10	587
	Ogdensburg	7.71	-0.11	31	298	57	654
	Canton	7.72	0.33	32	285	22	640
	Madrid	7.55	0.55	31	272	20	621
	North Lawrence	7.29	-0.19	33	282	9	629
	Louisville	6.49	-0.91	30	273	30	625
Average		**7.01**	**-0.32**	**31**	**285**	**33**	**633**

* 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.

- NNY Weather Summary for April and May 2018, continued. May GDD_{50}, to date, have adequately compensated for April's cold temperatures. On average, the 24 locations listed are about 13% ahead of seasonal GDD_{50} as of May 31. Early season precipitation totals are hit-or-miss. Though the average for the NNY region is close to average (just 0.32" or 4% below the 2-month 15-year norm), locations listed range from 1.39" more than normal to 2.36" below normal rainfall. Most locations are within 1.0" of normal. Essex County appears to be the dry spot.

Cornell intern Amanda Bond measures alfalfa heights in St. Lawrence County. May 2018. Photo by K. O'Neil.

- Despite the late start, corn planting has progressed quickly and steadily across NNY - and many farms are finished. Across NYS, corn is about 3/4 planted, but progress has appeared to be ahead of that pace in the North Country. Many farmers finished planting corn last week. Corn planting season moved along very quickly and has included very few interruptions due to wet weather, though small areas have received enough rain to slow planters for a day or two. As a result of fast and furious planting, fertilizers have occasionally been in short supply, and waiting for a delivery has impeded progress more often than rain.

  After May 25th, we recommend that you consider switching full season corn hybrids for shorter day varieties if possible. We recommend planting your preferred full season hybrids up to about May 25th. After May 25th, start dialing back your relative maturities 5 days for each week that goes by.

- First-cutting hay and haylage will be much better quality this year than 2017. Hay and haylage harvest has begun on schedule has progressed quickly. Grass and mixed fields monitored in our First-Cutting Alfalfa-Grass Quality Monitoring project are now 80% harvested. Quality of pure alfalfa stands is at peak, as most fields are just beginning to open blooms. Weekly reports on alfalfa-grass quality in NNY can be found here.

Newly emerged corn seedlings. June 5, 2017. Photo by Kitty O'Neil.

  Joe Lawrence says, when the weather permits mowing, prioritize alfalfa fields where you can still get optimum quality. If fields are already past their prime when it is feasible to harvest them, move them to the bottom of the list and return to them as time permits. Harvest the good quality forage when you can, then go back to the past-prime fields as time allows. If you do end up with some late cut, low quality first cutting, consider separate storage options for this crop so you have the option to use it for non-lactating animals.

- Herbicide Tank Mixes – What order? We have been getting quite a few sprayer tank mix loading questions this season. Here is a quick herbicide tank mix order refresher: When adding more than one herbicide to the sprayer tank it is important to follow the recommended mixing order. The old acronym W-A-L-E-S taught in pesticide sprayer courses has been slightly modified. Fill the sprayer tank ¼ to ½ full with water and begin agitation, add any ammonium sulfate, antifoam, compatibility and buffering agents (if necessary), **W**- wettable powders (WP), Water soluble pouches (WSP), Water dispersible granules (WDG), Dry flowables (DF), **A**- Agitate thoroughly, **L**- Liquid flowables

(not glyphosate and glyphosate premixes), **E**- Emulsifiable concentrates, next add any glyphosate and glyphosate containing premixes, **S**- Surfactants (COC, NIS, MSO) and drift control agents if used. Fill the sprayer tank with water to the desired level. Remember to check each of the herbicide labels to make sure that the tank mix is allowed.

Is a spray adjuvant necessary with the postemergent herbicide? The answer to this will depend on the particular herbicide(s) that you will be adding to the tank. Before adding a spray adjuvant such as a nonionic surfactant (NIS), crop oil concentrate (COC) or methylated seed soil (MSO), refer to each specific herbicide label to see if it is recommended and if so, which one. If you are given a choice between a NIS, COC or MSO we will typically recommend using an NIS under normal growing conditions when the weeds are small. If it has been dry and the weeds are a bit larger, a COC or MSO should be used if allowed on the herbicide label. The rate of NIS to add to the tank is normally .25% per volume or %v/v (or simply 1 quart NIS per 100 gallons of water). Sometimes you will see products that suggest NIS rates of .125% per volume (.5 quart NIS per 100 gallons water). COCs and MSOs are sometimes recommended to be used a 1 quart per acre and in other cases it will be listed as 1 to 2% per volume (1 to 2 gallons COC per 100 gallons of water). There is an increased risk of crop injury with COCs and MSOs, so make sure that you pay close attention to the herbicide label for correct rates and when they should be used.

- Scout emerging and seedling corn for Black Cutworm. A few farms have reported black cutworm in corn fields this spring. Some BCW injury has risen to economically important levels. Look for corn plants that are wilted or cut off at the ground, carefully dig up the soil around the plant to find the BCW larvae. BCW are nocturnal and do their damage during the night. During the day they hide in the soil. Threshold to justify spraying is 5% of plants cut off or missing due to BCW. Mike Stanyard, CCE NWNY Field Crops Specialist, has a video on how to scout for BCW here. Appropriate insecticides for BCW infestations above threshold are here.
- June is predicted to bring average temperatures and roughly normal precipitation. June-July-August is forecast to be warm and wet. *See 4 maps on the next page*. The 2 top maps depict forecasts for June and the bottom 2 represent the 3 month forecast. Warm June temperatures are forecast for the entire US except for most of NYS, where we have equal chances of above and below normal temps. June precipitation in NYS is predicted to be 50/50 above/below normal.

  The 3-month outlook for June, July and August is predicted to be warm and wet for the Eastern US, including NNY.

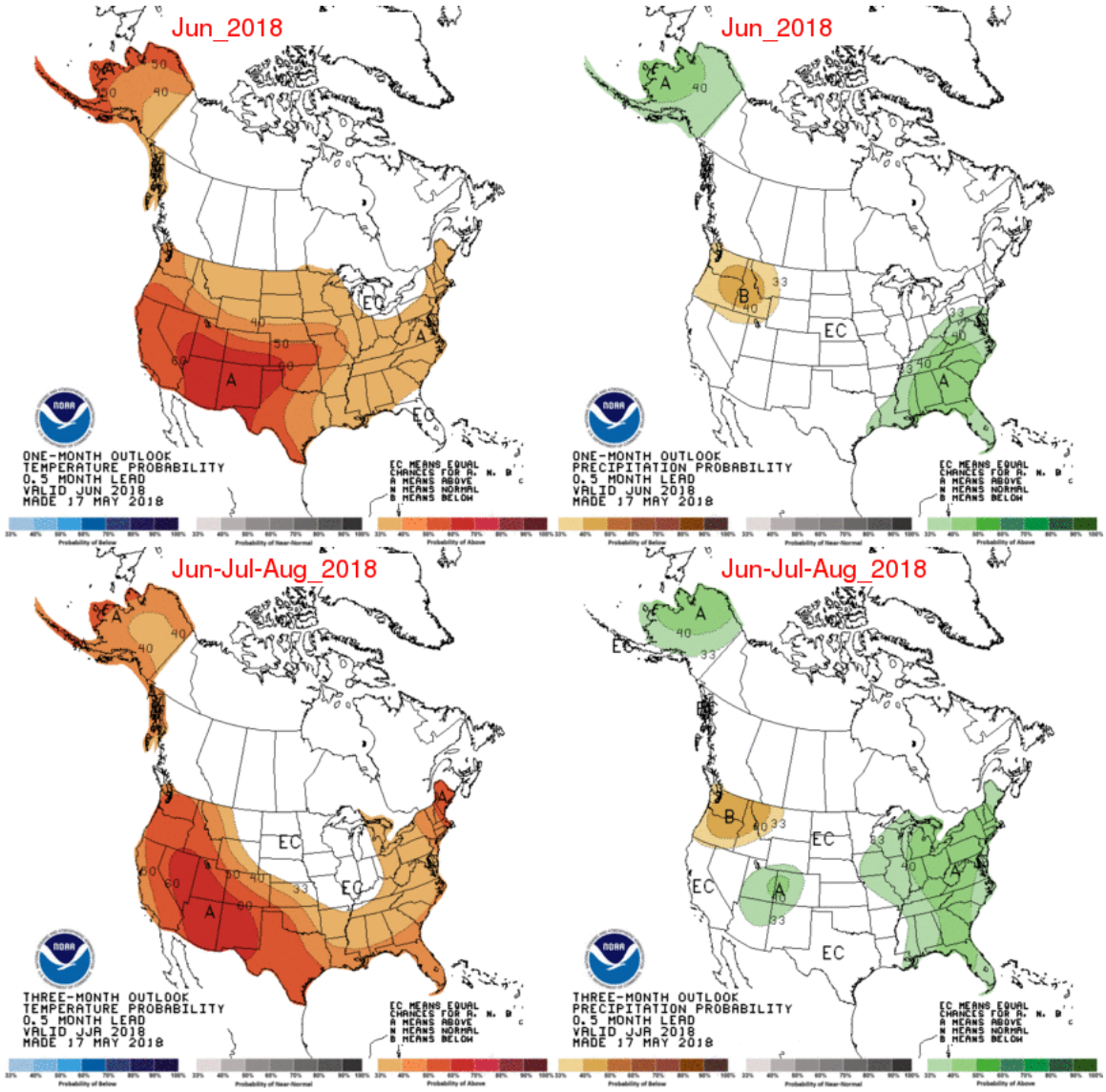
Additional resources:

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

Mike Hunter
Jefferson County CCE Office, Watertown
(315) 788-8450
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