

Cornell Cooperative Extension

Central New York Dairy, Livestock and Field Crops

Field Crop Update September 17, 2021

1. Field Observations
2. Growing Degree Days and Weather Outlook

1. Field Observations

Not much to report this week as many folks are harvesting hay and silage, while soybean and picking corn are rapidly maturing. Here is the link to our recent webinar on things to keep in mind in advance of silage harvest if you're still on track to top-off your silos and bunks: [2021 Central NY Corn Silage Pre-Harvest webinar](#)

As we talk about harvest timing and predicting whole plant dry matter, remember that prediction methods like growing degree days can only get you into the ballpark – there is no substitute for checking your crop to make sure you're harvesting at the right time. Please read the latest article from Joe Lawrence on this subject: [Corn silage harvest timing: Not all growing degree days are created equal](#)

And there is of course still time to plant your **cover crops**. The window to plant legumes is all but closed, but you can seed small grain cover crops into your now-empty fields for another few weeks. The following tables are adapted from: [Rye cover crop mgmt](#):

<i>Land preparation</i>	Prepare a seedbed free of clods and weeds. If tillage is impossible, rye can be broadcast on moist, untilled ground. Additional fertilizer is usually not needed, especially when following vegetables.
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<i>Seeding rate</i>	<u>Date</u>	<u>Drill</u>	<u>Broadcast</u>
	9/15	60	85 lb/ac.
	9/22	100	140
	10/1	140	200
	10/15	180	250

Drill 1 to 1½ inches deep. After broadcasting, cover 1 inch.²

Seeding date September 15 - October 10 for winter cover.
 October 15 for spring cover.
 April 15 as a nurse crop for clover.

And the following tables from [NRCS Cover Crop Planting Specification Guide \(New Hampshire, NH-340\)](#)

Table 2b - NH 340	Seeding Rate (lbs/acre)		Seeding Depth	Planting Season								Termination Method					
Cover Crop	Broadcast	Drilled	Inches	Spring	Early Summer	Summer	Early Fall	Fall	Late Fall	Dormant	Frost	Mow	Till	Crimp	Frost	Winter	Chemical
Cool-Season Grains																	
Winter Rye (Common)	150	110	1-2				✓	✓+				✓	✓	✓+			✓
Winter Rye (<i>Aroostook</i>)	150	110	1-2				✓	✓+	✓			✓	✓	✓+			✓
Triticale and Spelt	150	110	1-2				✓	✓+				✓	✓+	✓			✓
Wheat	160	120	½-1½	✓+			✓+	✓+				✓	✓+	✓			✓
Barley	160	120	1-2	✓+			✓					✓	✓+	✓		✓-	✓
Oats	140	100	½-1½	✓+			✓+			✓-	✓-	✓-	✓+	✓		✓	✓

Table 2a - NH 340	Purpose										Other Roles & Characteristics									
Cover Crop	Reduce Erosion	Increase SOM	Recycle Nutrients	Fix Nitrogen Save Energy	Improve Biodiversity	Suppress Weeds	Remove Excess Soil Moisture	Loosen Topsoil	Reduce Subsoil Compaction	Grazing Potential	Living Mulch	Broadcast Interseed	Companion Crop	Nurse Crop	Reduce Soil Diseases	Rapid Growth	Drought Tolerant	Flooding Tolerant	Shade Tolerant	Reseeds (Potential Weed?)
Cool-Season Grains																				
Winter Rye (Common)	✓+	✓+	✓+			✓+	✓+	✓+		✓-		✓		✓	✓	✓	✓	✓-	✓	✓
Winter Rye (<i>Aroostook</i>)	✓+	✓+	✓+			✓+	✓+	✓+		✓-		✓		✓	✓	✓+	✓	✓-	✓	✓
Triticale and Spelt	✓	✓+	✓			✓	✓+	✓	✓-	✓				✓+		✓	✓-			
Wheat	✓	✓+	✓			✓	✓+	✓	✓-	✓				✓+		✓	✓-		✓-	✓-
Barley	✓+	✓+	✓		✓-	✓	✓	✓	✓-	✓				✓+	✓-	✓	✓		✓-	✓
Oats	✓-	✓	✓-			✓+	✓	✓		✓-	✓-	✓-	✓+	✓+	✓-	✓+		✓-		

And once again, **take note** of problem areas in your soybean fields and let me know if you would like me to sample your field for soybean cyst nematode. This pest is widespread in NY, and I'm afraid that this year's wet conditions may have allowed them to spread more easily through infested fields. Sampling and analysis are free via grant funding from the NY Corn and Soybean Growers Association, though I am limited in the number of samples I can submit. So let me know.

Have a good rest of the week, and happy harvesting!

Click to see the latest [Oneida County Scouting Report](#), [Northwest NY Crop Alert](#), [Capital Area Ag Report](#), and [New York State IPM Weekly Field Crops Pest Report \(cornell.edu\)](#)

2. Growing Degree Days (GDD) for planting date and silking date ([Climate Smart Farming Growing Degree Day Calculator](#))

For corn silage, we are using base 50/86, as corn development starts at 50F and ceases above 86F. Silage corn needs 750-800 GDD (depending on hybrid maturity) after silking to reach a whole plant DM of 32%. Remember that we can expect to accumulate 20-25 GDD per day, or even up to 30, so this is not a large window. **Under typical late season dry down conditions we can expect the crop to reach 35% DM four to seven days later. Check your crop to see how close you may be to harvest:**

Call your backup and make your plans (you will be at 35% DM anywhere between 5 – 11 days from now)

Gas up the harvester and the trucks (you're chopping in 2 – 8 days)

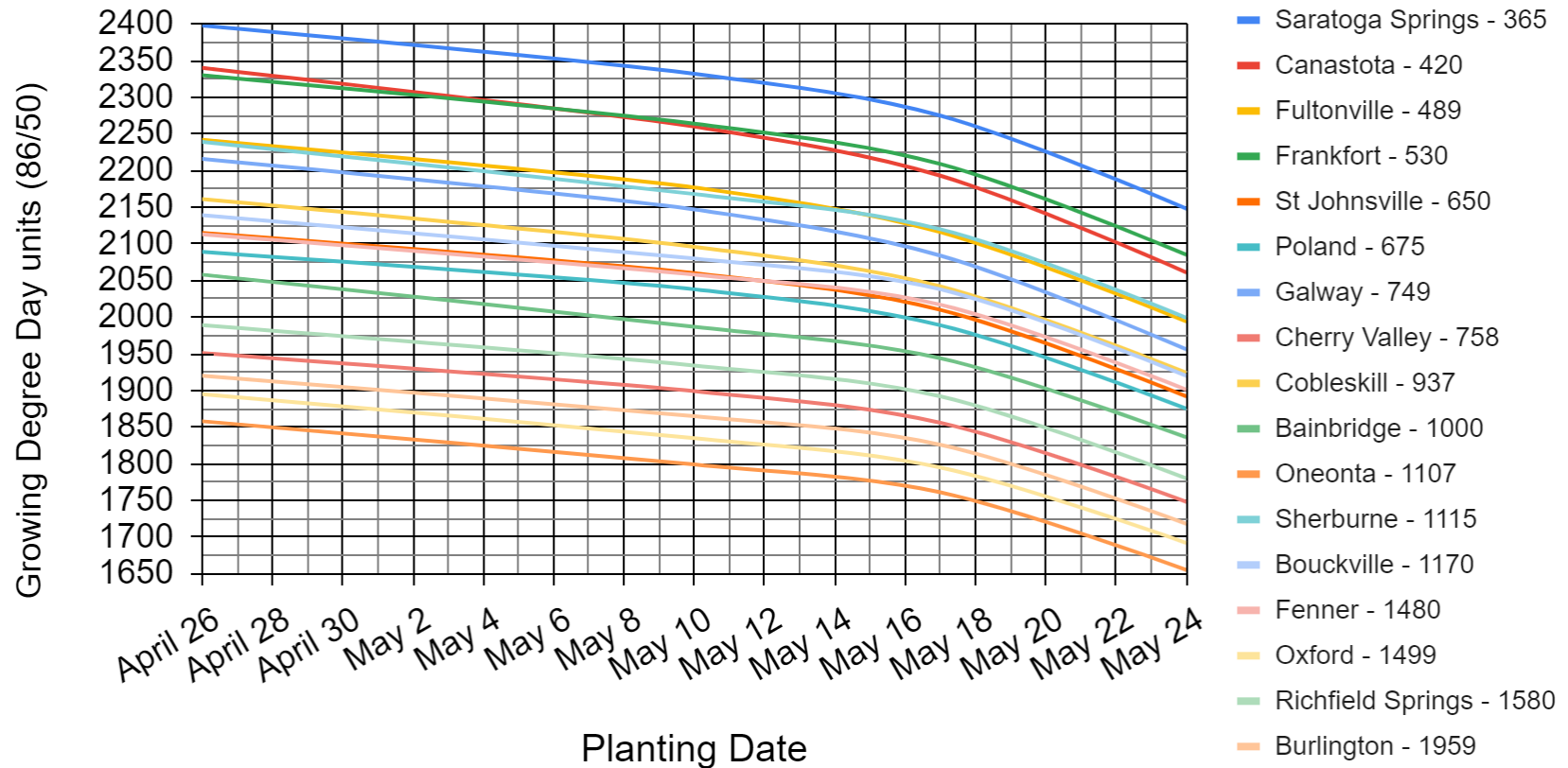
See you in the field (DM is likely in the optimal 32-38% range)

It's either in the bunk or it's going in the bin (or wait to harvest high-moisture corn) (DM% is likely higher than 38-40% at this point)

As of: <u>15 Sept 2021</u> (Base: 86/50)			Planting Date				Silking Date (750-800 GDD to 32% DM):			
Location	Elevation (ft)	Latitude N	April 26	May 10	May 17	May 24	July 14	July 18	July 22	July 26
Poland	675	43.23	2089	2038	1989	1875	Past	989	932	868
Canastota	420	43.08	2398	2332	2275	2148	Past	Past	1065	993
S'toga Springs	365	43.08	2340	2260	2193	2061	Past	Past	1038	965
Frankfort	530	43.03	2330	2264	2209	2085	Past	Past	1034	963
Galway	749	43.02	2216	2147	2084	1956	Past	Past	976	905
St Johnsville	650	43	2115	2060	2010	1892	Past	985	931	867
Fenner	1480	42.97	2113	2058	2017	1901	Past	1000	944	880
Fultonville	489	42.95	2242	2177	2116	1994	Past	Past	987	917
Bouckville	1170	42.93	2139	2080	2038	1920	Past	Past	952	886
R'field Springs	1580	42.85	1989	1934	1892	1780	Past	940	876	816
Cherry Valley	758	42.81	1951	1899	1856	1748	996	902	856	798
Burlington	1959	42.72	1920	1865	1826	1718	979	902	841	785
Sherburne	1115	42.69	2239	2168	2120	1999	Past	Past	988	919
Cobleskill	937	42.68	2161	2096	2042	1924	Past	Past	949	886
Oneonta	1107	42.47	1858	1799	1761	1655	952	873	814	762
Oxford	1499	42.4	1895	1835	1795	1692	958	892	834	781
Bainbridge	1000	42.3	2058	1987	1944	1836	Past	967	903	847

Not everyone planted their corn on one of the planting dates or in one of the locations I have listed, so this chart shows the estimated GDD for each location on each potential planting date in between (based on the actual GDD on those four dates). The locations are ordered top-to-bottom from lowest elevation to highest (the number after the location name is the elevation in feet above sea level). So if your farm is near one of the locations on this list but there's a location here that more closely matches your elevation, try that instead. You can find GDDs for your own specific location and planting date using the [Climate Smart Farming CSF Growing Degree Day Calculator](#), but for those who might have more difficulty using that tool, maybe this chart can help.

Estimated total GDD (86/50) by planting date for each location



As we get closer to silage harvest, remember that silage corn needs **750-800 GDD after silking to reach a whole plant DM of 32%** (depending on hybrid maturity). Under typical late season dry down conditions **we can expect the crop to reach 35% DM four to seven days later**. When using this chart, remember that actual GDD were calculated for July 14, 18, 22, and 26 silking dates. Dates in-between those four dates are estimates. As always, remember that GDD estimates are good for getting you in the ballpark, but are no substitute for actual conditions in the field.

Estimated GDD (86/50) by SILKING DATE

