

Cornell Cooperative Extension

Central New York Dairy, Livestock and Field Crops

Field Crop Update July 30, 2021

1. Field Observations
2. Growing Degree Days and Weather Outlook
3. Pest Monitoring

1. Field Observations

The rain just keeps falling, and our GDD accumulations are also falling below the 15- and 30-yr averages, meaning our projected corn silage harvest dates are moving closer to September. Our earliest-tasseling silage corn would be on track to harvest by the 3rd week of August if we moved closer to the 15-yr normal, but at this rate we are not projected to reach our desired 750-800 post-silking GDD until at least a week later. But stay tuned....

So far the corn foliage is looking very clean, and now that most corn has tasseled, we are hopefully past the period of greatest risk to yield loss from pathogens such as grey leaf spot and northern corn leaf blight. Still, there can be some potential for yield loss, but the risk is low at this point.

An update about the north country farmer whose used midwestern combine had weeds seeds in it: 215 seeds turned out to be waterhemp, an invasive pigweed notorious for having evolved resistance to several classes of insecticides. Mike Hunter of the Northern NY Ag Team alerted Cornell weed scientists Lynn Sosnoskie (Cornell Agritech) and Bryan Brown (NYSIPM), who grew the seeds for proper identification (see pic). If these seeds had made it into the farmer's field, it would have been a management nightmare for years to come. See the attached pdf publication by Dr. Lynn Sosnoskie for ID of this and other invasive, herbicide-resistant pigweeds.



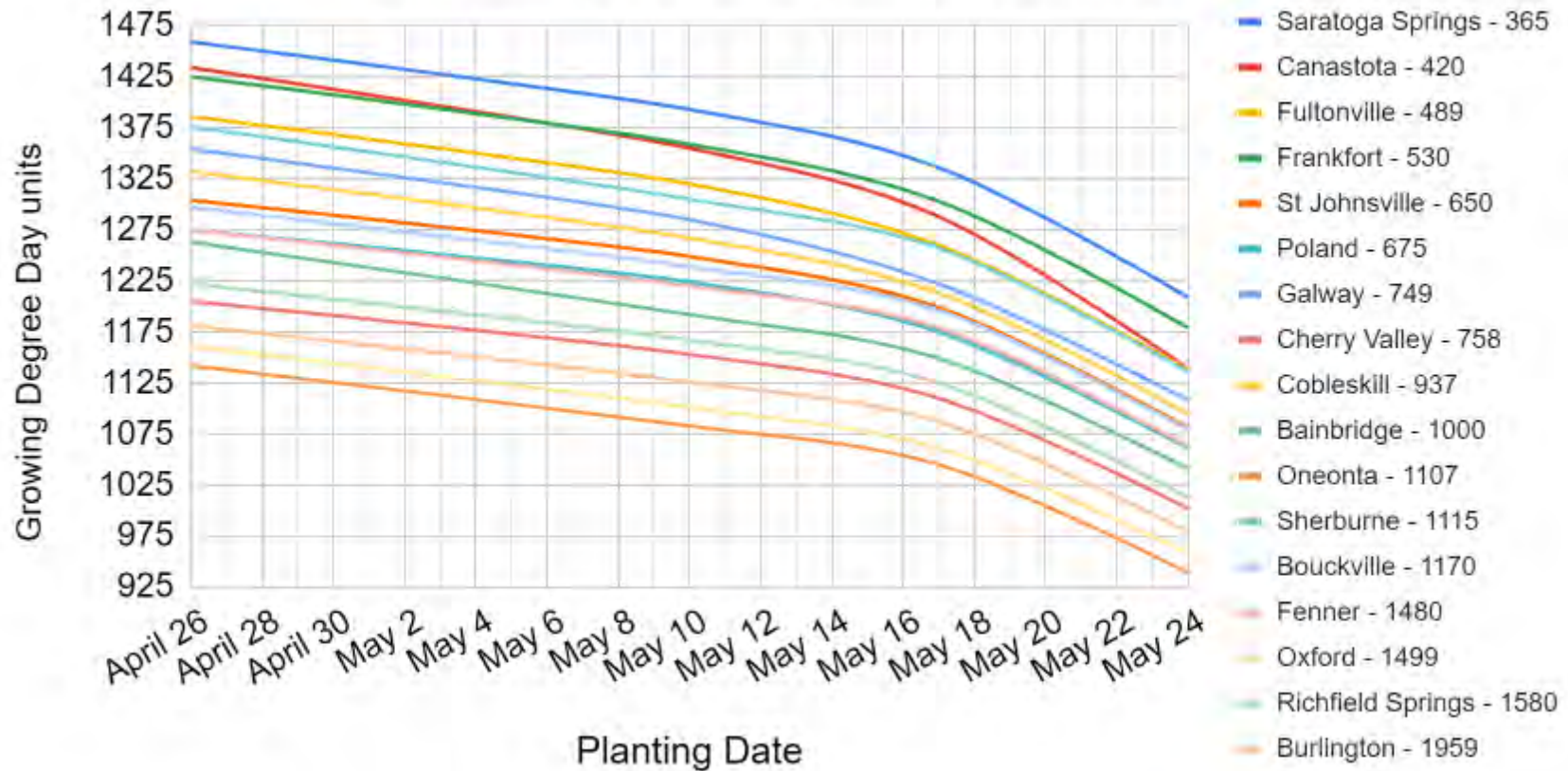
Bryan Brown, NYSIPM

Click to see the latest [Oneida County Scouting Report](#), [Northwest NY Crop Alert](#), and [Capital Area Ag Report](#).

2. Growing Degree Days (GDD) for planting date and silking date as of July 28th ([Climate Smart Farming Growing Degree Day Calculator](#))
 GDD are calculated by taking the average daily temperature and subtracting the base temperature for development of a given organism ((High + Low)/2 – base temp = GDD). For corn silage, we are using base 50/86, as corn development starts at 50F and ceases above 86F. **Your actual silk date will likely fall sometime within this range of dates no matter where you are and what variety you're expecting to chop. Corn needs 750-800 GDD after silking to reach a whole plant DM of 32%. Under typical late season dry down conditions we can expect the crop to reach 35% DM four to seven days later:**

As of: 20 July 2021 (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	July 30
Poland	675	43.23	1275	1224	1175	1061	267	188	118	54	
Canastota	420	43.08	1459	1393	1336	1209	287	205	130	58	
S'toga Springs	365	43.08	1434	1355	1288	1139	300	209	116	60	
Frankfort	530	43.03	1425	1359	1303	1179	293	204	129	58	
Galway	749	43.02	1354	1285	1222	1108	278	190	129	43	
St Johnsville	650	43	1304	1249	1199	1081	272	190	120	56	
Fenner	1480	42.97	1275	1220	1179	1063	250	178	114	51	
Fultonville	489	42.95	1386	1320	1260	1138	294	205	130	60	
Bouckville	1170	42.93	1297	1239	1196	1079	259	181	116	51	
R'field Springs	1580	42.85	1222	1167	1125	1013	251	173	110	51	
Cherry Valley	758	42.81	1205	1153	1110	1002	250	172	110	52	
Burlington	1959	42.72	1181	1126	1087	979	240	163	104	47	
Sherburne	1115	42.69	1376	1305	1257	1136	283	195	125	56	
Cobleskill	937	42.68	1332	1267	1213	1095	278	190	120	56	
Oneonta	1107	42.47	1142	1083	1045	939	236	157	100	58	
Oxford	1499	42.4	1161	1101	1061	958	239	159	101	48	
Bainbridge	1000	42.3	1263	1192	1149	1041	261	172	109	49	

Estimated GDD by planting date for each location



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.

3. Pest Monitoring

True armyworm season is over, but western bean cutworm (WBC) season is ramping up. We had at least 1 WBC in all but one trap this week, but *again*, these numbers pale in comparison to those reported from around the state (some in the ***thousands***). Regardless, *pre-tassel* corn is the most attractive to these moths, so while we are now seeing WBC (perhaps peaking) in these fields, all have long-since tasseled, so these moths may be laying eggs elsewhere. Sure enough, I've scoured each one of these corn fields and have yet to see one WBC egg mass. But *those in the higher elevations and with later plantings, take note!* WBC lay eggs in the upper third of corn plants (see pics at right). Purdue states that the economic threshold for this pest has been reached when 8% of plants have egg masses, and 5% of plants with egg masses and/or young larvae feeding. Bt corn with **Cry1F** is resistant to WBC, but not earlier Bt events.



Western Bean Cutworm								
Week	Munnsville, Madison	Poland, Herkimer	Canajoharie, Montgomery	C. Bridge, Schoharie	W. Charlton, Saratoga	Cherry Valley, Otsego	Oxford, Chenango	Total
June 21	Traps placed							0
June 21 - 28	0	0	1	0	0	0	0	1
June 28 – July 7	0	0	0	0	0	0	0	0
July 7 - 13	0	2	0	0	1	0	0	3
July 13 - 20	0	7	0	0	14	0	0	21
July 20 - 27	1	66	24	3	90	0	12	196
Total:	1	75	25	3	105	0	12	221

Some helpful links:

[New York State IPM Weekly Field Crops Pest Report \(cornell.edu\)](http://www.cornell.edu/ipm/weekly-field-crops-pest-report/)

[Potato Leafhopper Scouting and IPM Thresholds in Alfalfa](#)