

# Cornell Cooperative Extension

## Central New York Dairy, Livestock and Field Crops

Field Crop Update    Aug 6, 2021

1. Field Observations
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### 1. Field Observations

We've had some beautiful weather lately, and those who didn't manage to cut hay last week were all out this week. Most of us are right around the 'normal' accumulation of growing degree days (GDD) for this time of year, but we're below normal (near record low) for GDD since corn silking in mid-July. At this rate, most corn acreage may not be ready for silage harvest until perhaps September, but the long-range forecast suggests higher-than-normal temps toward the end of this month. So we still need to be on our toes so maturity doesn't get beyond us when we thought we had more time. Our team will be putting out some pre-harvest corn silage materials via email and snail-mail over the coming weeks, so be on the lookout for that.

So far the corn foliage is still looking clean, and I've yet to see any concerning soybean pathogens or insect pest issues. Lots of acreage suffered from the wet field conditions earlier in the summer, but it's becoming harder to see the residual effect of those issues as canopies fill out. I've heard reports of damaging levels of white mold in soybean crops in western NY, so the culmination of that disease cycle is just around the corner for our region.

Spring grain harvest is here as well, so instead of leaving the field fallow, here are some options for what to plant next: [Cropping Options After Small Grain Harvest \(psu.edu\)](#) And here: [Cover Crops for Field Crops Systems \(cornell.edu\)](#). Aside from weed suppression, cover crops can either give you another harvestable forage crop or at the very least, improve soil organic matter and capture nutrients that can be used by next year's crop.

And speaking of weeds, it's that time of year again: If you prefer to call them 'bachelor buttons', then you aren't growing hay. Because in a hayfield or pasture they're known as knapweed, and they're rearing their ugly seed-heads again. There are biocontrol options for knapweeds, but only for certain species – and not all knapweeds are 'spotted knapweed'. We have several species in our area, but only spotted knapweed, *Centaurea maculosa*, has *relatively* readily-obtainable biocontrol options. See pics for identification on the next page....:

So if you think you have spotted knapweed in particular, let me know and we can get a positive ID and see if there are biocontrol options available. Otherwise, options are limited.

Timely mowing and pasture clipping are essential to prevent perennial weeds like knapweed, summer asters, and goldenrod from establishing. Clip non-rotational pastures and paddocks several times per year, and clip your rotational pastures after animals leave that paddock. Hayfields should be cut at least twice, and optimally 3+ times per year to prevent these things from gaining traction in the first place. And of course, make sure your fields are properly fertilized to ensure your forage species have the upper hand from the start.

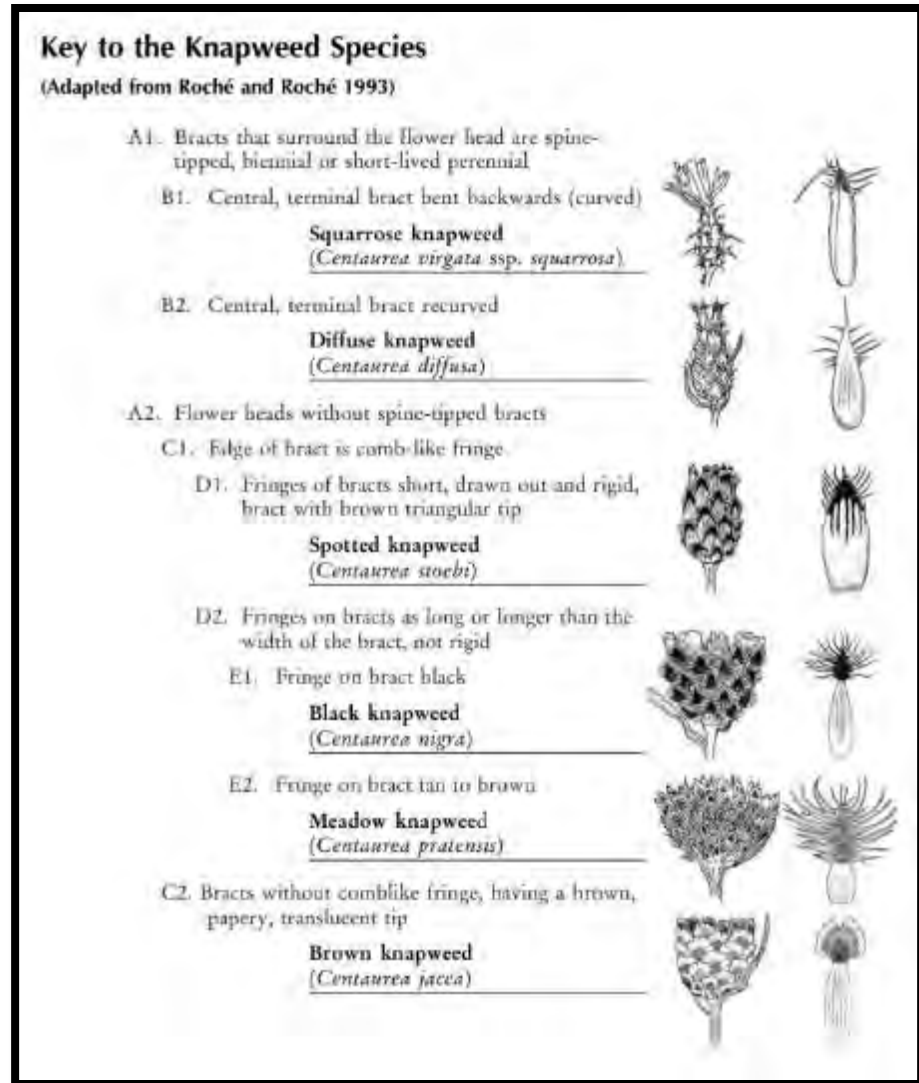
According to Mike Hunter of the North Country Ag Team, the following mixes are our best (but not perfect) options:

**Spotted Knapweed control in NY grass hayfields:**

<u>Tank mix option #1:</u>	<u>Tank mix option #2:</u>
0.625 oz/A Cimarron Plus	0.5 oz/A Cimarron
8 oz/A Banvel	8 oz/A Banvel
16 oz/A 2,4-D Ester	16 oz/A 2,4-D Ester

The bad news is, this is not the best time to control knapweed. If it's currently flowering, mow it before it sets seed. You can even bale it and dump it in the hedgerow to avoid allowing the seeds to stay in the field. The best time to apply herbicides to knapweed is in spring or fall, when these species are in the rosette stage.

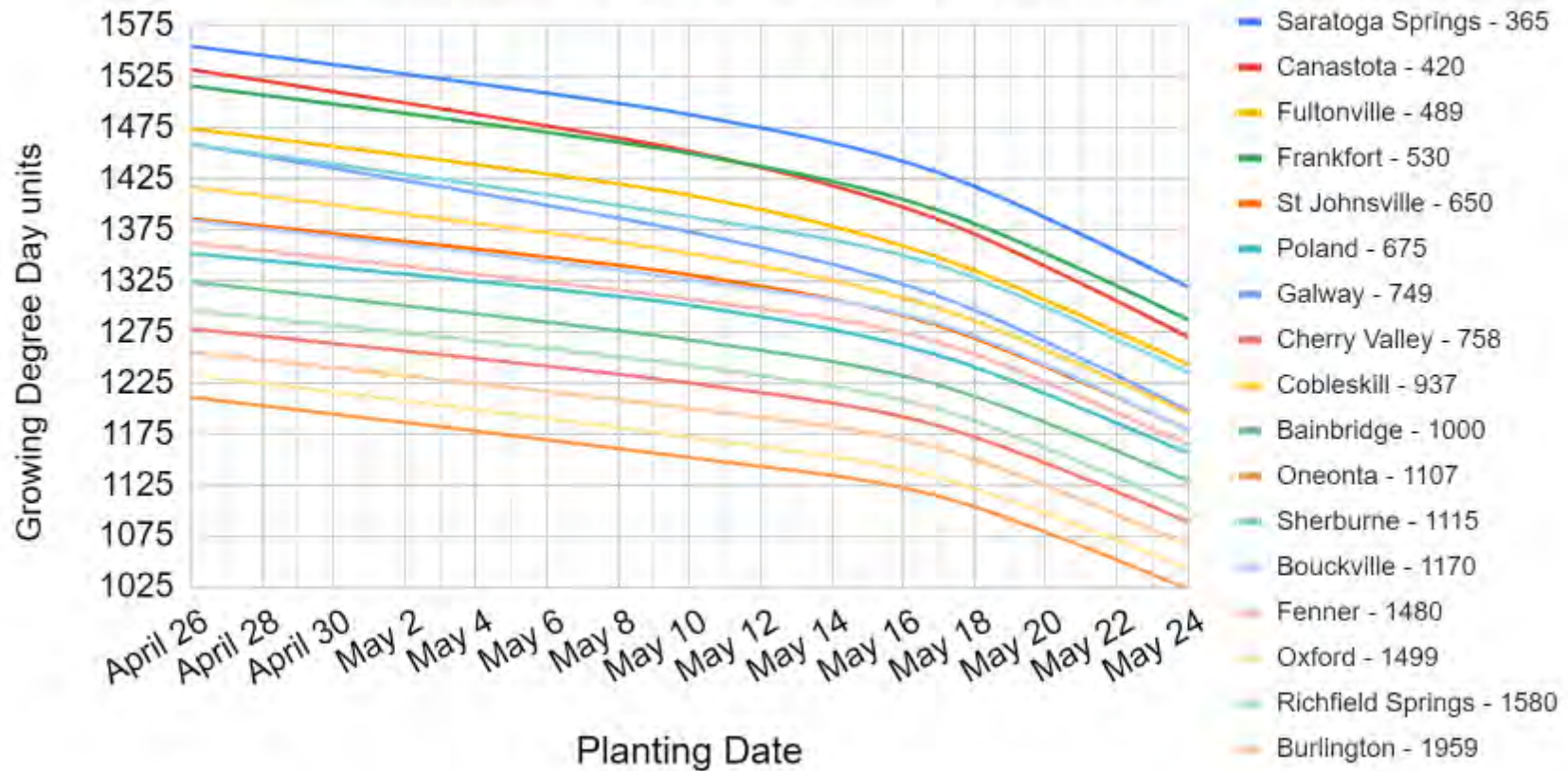
Click to see the latest [Oneida County Scouting Report](#), [Northwest NY Crop Alert](#), [Capital Area Ag Report](#), and [New York State IPM Weekly Field Crops Pest Report \(cornell.edu\)](#)



2. Growing Degree Days (GDD) for planting date and silking date 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: 4 Aug 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
Poland	675	43.23	1352	1301	1252	1156	361	282	213	149
Canastota	420	43.08	1555	1488	1431	1319	397	314	236	164
S'toga Springs	365	43.08	1532	1452	1385	1270	415	323	247	174
Frankfort	530	43.03	1516	1450	1394	1287	401	312	237	166
Galway	749	43.02	1459	1373	1310	1198	383	294	219	148
St Johnsville	650	43	1386	1331	1281	1179	370	287	218	154
Fenner	1480	42.97	1362	1307	1265	1164	350	275	208	144
Fultonville	489	42.95	1474	1409	1348	1243	399	311	236	166
Bouckville	1170	42.93	1384	1326	1283	1179	357	278	211	145
R'field Springs	1580	42.85	1296	1242	1199	1102	340	261	197	137
Cherry Valley	758	42.81	1278	1225	1183	1089	337	259	197	139
Burlington	1959	42.72	1255	1200	1161	1066	327	250	190	134
Sherburne	1115	42.69	1459	1388	1340	1235	382	294	224	155
Cobleskill	937	42.68	1417	1352	1298	1195	379	291	220	157
Oneonta	1107	42.47	1211	1152	1114	1023	320	241	182	130
Oxford	1499	42.4	1233	1172	1132	1043	325	244	185	132
Bainbridge	1000	42.3	1324	1267	1223	1129	349	261	197	140

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

Potato leafhopper counts have been quite low, and most folks are cutting hay, so there's low risk for this pest at the moment.

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

This was our biggest week for western bean cutworm (WBC), but while some fields showed increases, others decreased. Numbers from elsewhere in the state suggest that adult populations are currently peaking for this pest, so the fact that most corn crops have tasseled means that we may have avoided potentially damaging infestations (they are most attracted to pre-tassel corn). Sure enough, I scoured each of these fields for egg masses and have yet to find any. Though if you have a later planting and your corn is still pre-tassel, you may be at higher risk.



WBC typically lay eggs in the whorl of pre-tassel corn, so by the time you see the eggs, they're on the top side of leaves in the upper-third of the plant (see pics). 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 said to be resistant to WBC, but not earlier Bt events. A study published a year ago suggests that WBC populations in NY may have evolved resistance to even Cry1F, though the distribution of resistant populations throughout the state is not clear. Rotation is unfortunately ineffective (moths will just fly to the nearest cornfield) unless tillage is employed, which disrupts pupating individuals in the soil. For the time being, it seems that corn planted early enough to tassel before adult flights take place may avoid infestation, while later-planted corn is at higher.

Find the latest numbers on the next page:

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
July 27 – Aug 3	0	38	100	29	107	0	1	275
<b>Total:</b>	1	113	125	32	212	0	13	496