

# Checking the Back Forty



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## Weekly Growing Degree Days and Rainfall thru June 12, 2011

Station	Temperature (°F)				Growing Degree Days (GDD) (Base 50°F)					Precipitation (Inches since 4/1/2011)			
	High	Low	Avg	Departure from normal	Week of May 30- June 5	Since May 8	Departure from normal	Since May 22	Departure from normal	Week	Departure from normal	Season	Departure from normal
Cobleskill	84	49	67	9	120	439	147	346	134	0.33	-0.55	9.07	2.39
Morrisville	81	48	64	8	117	414	139	306	108	1.23	0.33	11.4	4.86
Norwich	85	48	65	8	136	470	178	343	133	1.42	0.54	13.23	6.37
Oneonta	87	49	66	10	131	457	192	345	152	0.75	-0.23	14.39	6.90

*From the USDA National Agricultural Statistics Service New York Field Office and the New York Department of Agriculture and Markets  
 Weekly accumulations are through 7:00 AM Sunday Morning*

I will be keeping track of Growing Degree Days (GDD) during the season using 50°F as a base temperature. There will be two dates of reference for these GDDs, May 8 and May 23, 2011. Rainfall accumulation will be from April 1 on.

Corn needs around 110 GDDs to emergence and soybeans are more around 90 GDD. So weeks with 80 degree temperatures like last week should see corn out of the ground in 7 days or less. But early planted corn (week of May 8) is in the V6-7 stage and if you are looking to sidedress that corn with N now is the time.

Next stage to watch for is tasseling/silking which is out there at about 1250 GDD for 96-100 RM hybrids and 1300 GDD hybrids for 101-105 RM hybrids. Silking can be delayed in hotter, dryer weather. R1, beginning bloom in soybeans, comes at about 520 GDD.

### References

Using the Number of Growing Degree Days from the Tassel/Silking Date to Predict Corn Silage Harvest Date, Bill Cox, Crop and Soil Sciences, Cornell University  
<http://css.cals.cornell.edu/cals/css/extension/cropping-up-archive/Vol16No4A1.pdf>

Soybean Physiology: How Well Do You Know Soybeans? Shaun Casteel, Soybean Extension Specialist, Purdue University  
<http://www.agry.purdue.edu/ext/soybean/Arrivals/10SoyDevt.pdf>

## Time to check corn plant populations

This a time of year I start getting phone calls asking why plants are missing. In many instances the plants are just gone but if they aren't you often see plants in the field that look like the one in Figure 1. The seed is missing although in this case the empty shell is nearby. The plant is hanging on by the radical that



**Figure 1.** *Corn plant without seed*

grew from the seed and lateral seminal roots. The area where the first nodal roots should occur is actually above ground when that point should be .75 inches below ground. But many times there is just a small depression in the ground where the plant was pulled out by a bird or you see a plant top that was snipped off as the bird tried to get the plant out of the ground.



**Figure 2.** *Seed 1 inch deep*

The seed in Figure 2 is 1 inch deep; you can actually see the nodal roots just above the seed. Corn should be planted a minimum of 1.5 inches deep and I would rather have a goal of planting 2 inches deep. Too often a goal of 1.5 inches results in some of the corn planted less than that depth. I have never seen corn bothered by birds that is 2 inches deep. I have also never seen corn suffering any consequences from being planted 2 inches deep. Yet there seems to be a belief that planting erring on the side of shallow is better than erring on the side of deep. Remember just because you set a planter deeper doesn't mean the seed is deeper. Too often planter maintenance items like worn double disc openers, broken drop tubes, and leveling the planter are the problem and the seed just won't go deeper.

So to check your plant population use the table at right for the distance to count plants for your row spacing.

I always suggest counting plants in all rows of a planter pass to see if there are any row differences. The plants counted times 1000 or 500 are the number of plants per acre.

Row Width inches	1/1000 acre row length	1/500 acre row length
30	17 ft 5 in	34 ft 10 in
32	16 ft 4 in	32 ft 8 in
34	15 ft 4 in	30 ft 8 in
36	14 ft 6 in	29 ft 0 in
38	13 ft 9 in	27 ft 8 in
40	13 ft 1 in	26 ft 2 in