

# Checking the Back Forty



**Kevin H. Ganoe**  
**Regional Field Crop Specialist**  
 Central New York Dairy & Field Crops Team  
 Cornell Cooperative Extension of  
 Chenango, Fulton, Herkimer, Montgomery,  
 Otsego and Schoharie Counties  
 5657 State Route 5, Herkimer, NY 13350  
 Phone: 315-866-7920  
 FAX: 315-866-0870  
 khg2@cornell.edu

## Weather Data for Week Ending Sunday, July 1, 2012

As of the week ending July 1 early planted corn fields are in the V10-12 stage. Table 1 shows the average temperature was 2-3°F higher than normal. GDDs remain above normal and are approaching 10 days ahead of normal. Table 2 shows rainfall continues below normal and crops have begun to show signs of drought stress.

As corn reaches the V 12-15 stage it is developing the potential number of kernels per row on the ear and susceptible to drought stress. Also drought stress reduces total plant growth at this stage and the plant will cannibalize lower leaves for nutrients to support the upper leaves.

Reference: <http://www.agry.purdue.edu/ext/corn/news/articles.12/HotDryMoreSame-0528.html>

**Table 1. Growing Degree Days**

Station	Temperature (°F)				Growing Degree Days (GDD)-Base 50°F							
	High	Low	Avg	Departure from normal	Week of May 21-27	Since April 22, 2012	Departure from normal	Since May 7, 2012	Departure from normal	Since May 20, 2012	Departure from normal	
Cobleskill	88	51	69	3	133	802	173	776	183	658	142	
Morrisville	89	50	68	3	125	791	199	749	190	649	164	
Norwich	90	48	67	1	118	817	190	768	179	658	148	
Oneonta	88	49	66	2	115	849	275	794	251	665	191	

**Table 2. Rainfall Data**

Station	Precipitation (Inches) 1/			
	Week	Departure from normal	Season	Departure from normal
Cobleskill	0.25	-0.69	9.79	-1.49
Morrisville	0.46	-0.45	10.85	-0.19
Norwich	0.3	-0.6	10.89	-0.45
Oneonta	0.52	-0.44	10.01	-2.14

It should take about 450 GDDs to get to that V5-6 stage and a new leaf should appear for every 70 GDDs accumulated.

Looking ahead it should take 1250 GDDs for 96-100 RM hybrids and 1300 GDDs for 101-105 RM hybrids to reach tasseling/silking. Early planted corn should be tasseling in 3 weeks.

From the USDA National Agricultural Statistics Service New York Field Office  
 and the New York Department of Agriculture and Markets

1/ Season accumulations are for April 1<sup>st</sup> to date. Weekly accumulations are through 7:00 AM Sunday Morning

Continued.....

## **Armyworms Gone!**

Armyworms should be gone by the time you read this. Continued to get a few calls at the end of last week as people were working on first cutting hay that was no longer there and second that had disappeared.

I continue to get questions about a second generation and one that would be worse than the first. There has not been an instance of a second generation that has posed any problem in the past. The armyworm moths tend to migrate and this time of year there is enough grass about there is not a likely hood of them concentrating to cause further damage especially in the field they were feeding on.

There has been some thought of moths travelling from the high concentrations in western NY to east for a next generation. That is an interesting thought but there is no reason to believe that will be anything but speculation. But if you have doubts, and I don't blame you given the summer, start checking grass hay fields toward the end of next week.

## **Potato leafhoppers are causing significant damage**

Alfalfa has had to deal with a lot this year and the picture below is very representative of quite a few second cutting fields. We had warm and open winter that led to a good deal of frost heaving. The warm late March led to a cold and frosty April that really seemed to set back the alfalfa and led to a first cutting that seemed more weeds than alfalfa. Alfalfa weevil that got a start with the warm temperatures arrived in the first cutting and seemed to last most of the second, very unusual. Then potato leafhoppers (PLH) arrived late May and have hung on ever since.

So the photo definitely is very typical of second cutting fields with lots of dandelion and other weeds and a healthy dose of PLH yellowing and stunting. This photo shows that the PLH are in great enough numbers that they have even injured the white clover.

Not only does the photo shows alfalfa stunted by PLH but also white clover that has been injured. PLH will also feed on clover and even soybeans. There is a lot of growing season to go so it is time to make sure you get them controlled and make the most of the alfalfa you have left.



Continued.....

## Potato leafhoppers are causing significant damage... *continued*

PLH adults are a narrow wedge shaped light green insect about 1/8 of an inch long. The adults lay eggs in the stem or larger veins of leaves and the yellow/green nymphs or young leafhoppers emerge after 7 to 10 days. They reach the adult stage after about two weeks and the entire cycle takes about 28 days. This cycle goes quicker in warm weather.



Photo by Keith Waldron

The young nymphs are very small and do not fly but can crawl rather quickly. The adults will fly on to other food sources if the alfalfa is removed, the nymphs cannot. What makes new seedlings very susceptible to PLH is the fact that the leafhoppers come in when there is still considerable time to harvest and lay eggs and the nymphs have time to mature. Also young alfalfa plants have considerable leaf area left even after harvest so PLH nymphs may remain.

Here are your options at this point if you have visible yellowing and stunting

- Harvesting may be the most effective control if you have enough material to harvest
  - ⇒ If you don't because the stunting is so severe, clipping may be a good option and needs to be done to promote regrowth
  - ⇒ You are mowing/clipping to deny the PLH material to feed on
- Spray the regrowth if sufficient numbers of PLH are present. You need enough leaf area to catch any insecticide application so spraying fresh cut stubble is not advised

Here are your options at this point if you do not have visible yellowing and stunting and you have PLH present

- Use a sweep net to determine if PLH are present to justify control. There are several methods available:
  - ⇒ [http://www.nysipm.cornell.edu/publications/plh\\_bro/sampling.asp](http://www.nysipm.cornell.edu/publications/plh_bro/sampling.asp)
  - ⇒ <http://ipmguidelines.org/FieldCrops/Chapters/CH04/CH04-10.aspx>
- If you find you have more than threshold numbers of PLH:
  - ⇒ Harvesting may be the most effective control if you have enough material to harvest
  - ⇒ Use an insecticide if you don't have sufficient growth. You need enough leaf area to catch any insecticide application so spraying fresh cut stubble is not advised. Follow all harvest restrictions on label. For a list of insecticides go to <http://ipmguidelines.org/FieldCrops/Chapters/CH04/CH04-10.aspx>.

I can only encourage that if not controlled PLH will continue to do damage over the next 6-8 weeks. New seedlings are basically a given for needing control if you have removed the first cutting.

For sweep nets go online and look for ag supply warehouses like NASCO, Gempler's and Ben Meadows. There are certainly others, no endorsement implied. You need a 15 inch diameter net.

### References

[http://www.nysipm.cornell.edu/publications/plh\\_bro/identification.asp](http://www.nysipm.cornell.edu/publications/plh_bro/identification.asp)  
<http://www.ca.uky.edu/entomology/entfacts/ef115.asp>

## Soybean aphids are present

We have found over threshold numbers of soybean aphids (SBA) in a field in the V 3-4 stage. You should start scouting your fields for these insects. If you are not familiar with soybean aphids you can usually find them first on the underside of the youngest trifoliolate soybean leaves. As numbers build you may find them on the stem and older leaves.



SBA do over winter here unlike armyworms and PLH with common buckthorn as the winter host. Winged females fly to soybeans in season. During the growing season reproduction is asexual with females giving birth to more live females. It is common to see the older female with her young around her. As you can see in the picture at right SBA are yellow-green, small, roundish, less than 1/16 of an inch in length.

A big clue to the presence of SBA are predators such as lady beetles and syrphid fly and lace wing larvae. Typically populations of these predators increase as the SBA numbers increase. Predators may actually keep high populations of SBA in check. Control of SBA may be warranted if you are finding more than 250 per plant and populations are increasing. If you find 250 per plant wait a week count again. You may find, given the presence of predators that the numbers hold or decline over the next few weeks. If not consider the use of an insecticide.

Lady beetle larvae



Lady beetle adult



Adult

Lacewing

Larvae



Syrphid fly



Adult

Larvae

Reference: <http://ipmguidelines.org/FieldCrops/Chapters/CH06/CH06-6.aspx>

### **Watch for two spotted spider mites on soybeans**

With hot dry weather can come two spotted spider mites on your soybeans. The two spotted come from the fact that if you look at them with a hand lens you will see a dark spot on either side of their body. Spider mites are very small arachnids (think eight legs like spiders) that live in colonies on the underside of leaves and will spin a fine web. Check edges of fields first, you will see a yellow speckling that turns more bronze. Leaves will eventually turn brown and fall off and plants may eventually die. Applying insecticides to control SBA have been known to increase the likelihood of an outbreak.

*Reference:*

*<http://ipmguidelines.org/FieldCrops/Chapters/CH06/CH06-6.aspx>*