

# Oneida County Scouting Report

## May 18, 2023

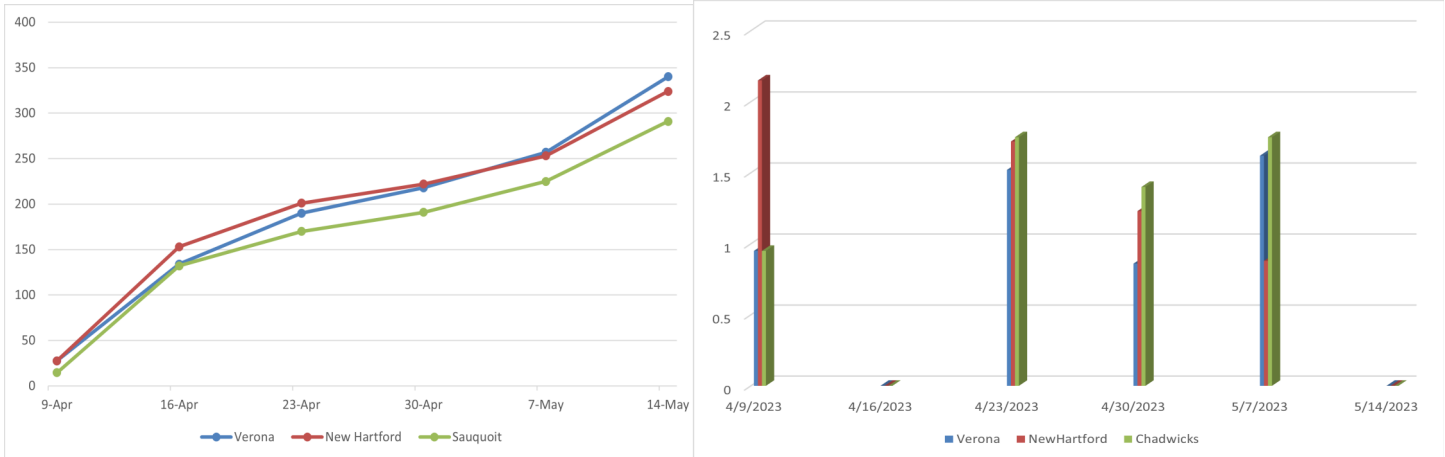
### Weather: For the week ending on May 14

Running total of GDDs base 48 starting April 3rd to May 14, for alfalfa weevil = 318 (look at chart below)  
 Rainfall total for the month of April was 4.1" with more than half coming in 3 events. 0.0" in the week ending 5/14

**Cropping activities:** Most growers took advantage of the dry soil conditions and were tilling and planting fields to corn and soybeans. Haven't seen any germination of corn or soy but, received one report of soybeans that had germinated. Potential frost predicted for Wednesday morning.

GDDs base 48F

Weekly Rainfall (inches)



## Crop Conditions:

### Hay

Grass fields in the lower half of the county are maturing quickly (many fields are ready for harvest now). Some growers have already started. Alfalfa heights ranged from 7-27" on 5/16.

We will be providing weekly updates of hay quality changes in the tables below from 5 farms across the county to help you time 1st harvest for optimal quality. Because of the early warmer temperatures this spring we may see alfalfa weevil damage before 1st harvest so it will be important to look for pinhole feeding in the upper leaves.

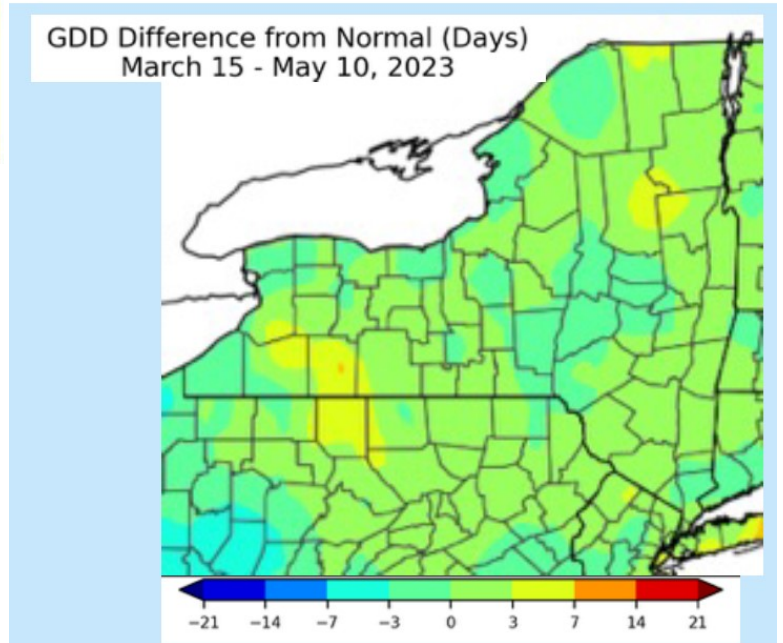
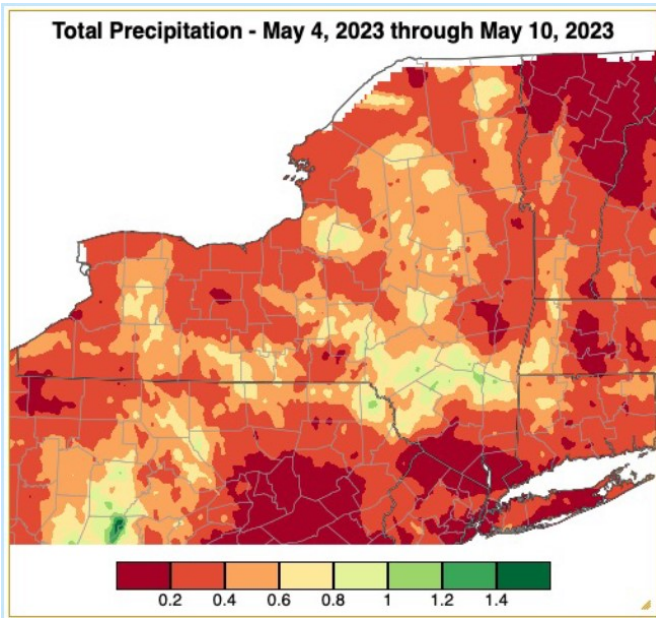
Growing degree Days for peak (50%) Occurrence of Alfalfa Weevil growth stage:

Stage or Event	Accumulated growing degree days*
Eggs hatch	280
Instar 1	315
Instar 2	395
Instar 3	470
Instar 4	550
Cocconing	600
Pupa	725
Adult Emergence	815

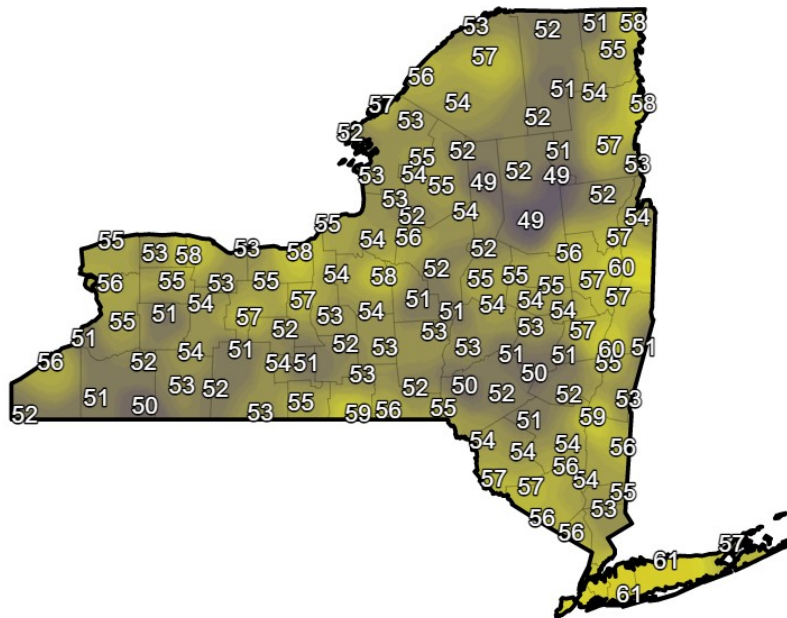
\* 48F base temperature



First step in evaluating alfalfa weevil damage is to look for pinhole feeding in the upper leaves of your alfalfa plants. If you see that consistently your next step is to pick 50 stems at random and create 2 piles: one with any pinhole feeding and the other with no feeding. If you have 20 or more of the 50 stems with pinhole feeding on the leaves you now should take the 3rd step. Use a sweep net at a few locations sweeping the top of the sward and look at the predominant size of the larva. Larva range from 1/16 to 3/8" in size. If you have more than 20 stems with injury and small larva and you are within 10 days of harvest then harvest early. If not within 10 days of harvest use an appropriate insecticide like baythroid or mustang (on mixed stands) after reviewing harvest interval



**Regions**



**Soil Temperature at 5 cm**

**May 12, 2023 8:25 AM EDT**



# CCE Oneida County Hay Quality Project 2023

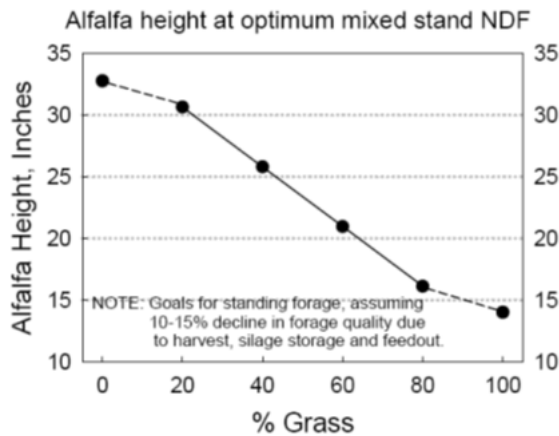
## May 2nd Report

**Forage Quality:** Each year local dairy producers get another chance to put up high quality forage for their herd. The first cut of hay is a critical time period. Nearly half the hay on their land is harvested in that first cut putting greater weight on trying to harvest all that forage at peak quality for their livestock. At the time of writing this (5-2-2023) an orchardgrass stand was 18" tall with the head 4 inches from emergence. Alfalfa stands ranged in height from 5-10 inches.

**Goal NDF for grasses is 48-55**, which means that these grass fields should be harvested when alfalfa in a neighboring field is 14" tall.

**Goal NDF for clear alfalfa fields is 39-43**, which means that these fields should be harvested when the tallest alfalfa plants are no more than 32" tall.

**Mixed alfalfa grass stands ideal NDF are between these two and vary depending on the percent of grass in the stand.** Jerry Cherney, Forage specialist at Cornell and field staff all around the state participated in 2 years of field sampling to develop a chart to help you use two factors: alfalfa height and % grass in your stand to identify the ideal time to harvest your individual fields. That information is contained in the chart below:



Date	Alfalfa Height in	grass percent	NDF	crude protein	NEL	calcium	predicted harvest date
5-2-23	7	60	35	28	.72	.9	Too early
5-9-23	10	50	38	27	.7	.88	Too early
5-16-23	15	50	42	20	.69	.7	5/25/23

Town: Augusta  
 Elevation: 1665 ft  
 Soil: Lansing silt loam  
 Slope: 15% south facing  
 Stand: Mixed mostly grass stand





Town: Cassville  
 Elevation: 1245 ft  
 Soil: Phelps Silt loam  
 Slope: flat

Date	Alfalfa Height	grass in percent	NDF	crude protein	NEL	calcium	predicted harvest date
5/2/23	10	0	29	32	0.73	1.28	too early
5/9/23	14	0	22	30	.79	.89	
5/16/23	19	0	33	26	.71	1.17	5/25

There are some tools online that lets you put in a few pieces of information to give you a prediction of when to harvest your hay crop. One specific for grass only, one for mixed alfalfa grass stands and one for clear alfalfa stands.

<https://tools.forages.org/tools/Grass-Only>

Active Ingredient (Example Product(s))	Alfalfa Weevil	Armyworm	Pea Aphid	Potato Leafhopper	Comments
alpha-cypermethrin (*Fastac)	X	X	X	X	
cyfluthrin (*Baythroid XL)	X	X	X	X	For use in mixed stands (alfalfa/grass); see label.
dimethoate (*Dimethoate)	X		X	X	
flupyradifurone (*†Sivanto)			X	X	
lambda-cyhalothrin (*Warrior II)	X	X	X	X	
lambda-cyhalothrin + chlorantraniliprole (*†Besiege)	X	X	X	X	
methomyl (*Lannate LV)	X	X	X		
permethrin (*Arctic, *Perm-up, *Pounce 25WP)	X	X	X	X	
afidopyropen (*†Sefina Inscalis)			X		
zeta-cypermethrin (*Mustang Maxx)	X	X	X	X	For use in mixed stands (alfalfa/grass); see label.

### Nitrogen management on hay fields

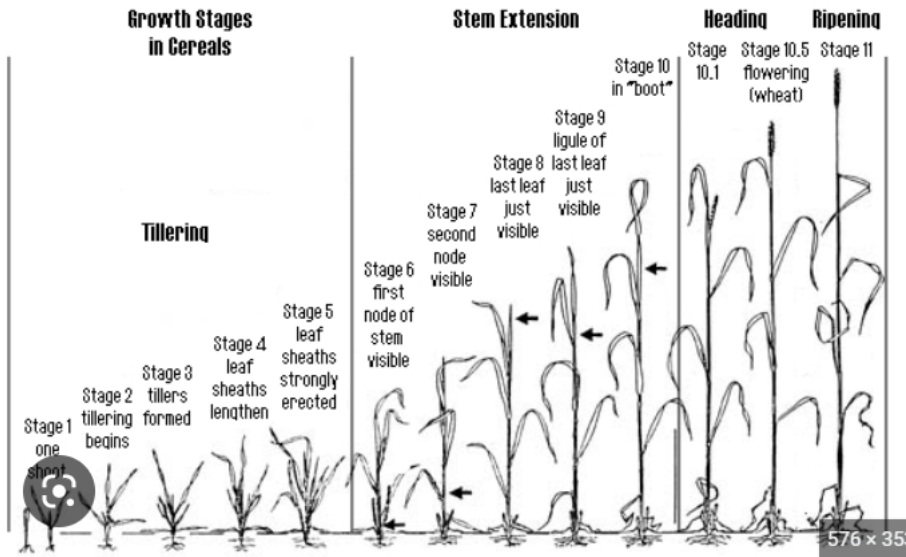
- ◆ 2-cut system for modestly priced horse hay– a soil test is important to identify if there are any significant deficiencies otherwise it may be difficult to recoup significant costs of N fertilizer
- ◆ Grass hay for beef– you will most often get a return from Nitrogen applications to grass hay for beef. 75 lbs of N per acre per cut is a reasonable way to feed the crop as you go. Soil test every 3 years
- ◆ Grass hay for high producing milking cows can provide a highly digestible fiber with protein levels that can meet their needs. 100 lbs of N and 20lbs of sulfur / ac should be applied to these fields in the early spring. An additional 75lbs of N/ac after each cut.
- ◆ Alfalfa hay needs no additional N if there are 5 or more crowns/sq ft. Soil test previous to the last year of corn and apply lime 9 months or more before planting alfalfa. Add adequate rates of P and K at planting based on soil tests. Take another soil test in the 3rd year of the stand. By this time K from manure applications during the previous years of corn production may be running low. Apply potassium at rates recommended by the soil test.

# Wheat

Most of the wheat fields I have scouted this spring look great! Early planted fields are 24" and thick. Most fields are fekes 9. Split stem in 1 field head was 3" from emergence. Prepare to scout for flowers early this yr



Nue.okstate.edu



Video on identifying wheat growth stages 6, 7 and 8. <https://www.youtube.com/watch?v=PZ7Lvsuxly8>

Predicting head emergence next week. Be ready to look for flowers soon after and start to look at Penn State website for fusarium head blight risk level. <https://www.wheatcab.psu.edu/>

This is the time of year when temperatures are below 80F and leaves may be wet that we can get an infestation of **powdery mildew**.

wheatcab.psu.edu

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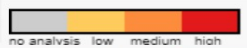
Risk Tool

select assessment date and forecast period (hrs)

05/17/2023

0 2d 4d 6d

Current Risk Forecast for May 17, Winter



# Corn and Soybeans



## Corn and Soybeans

Last weeks soil temps at 2 inches were between 41 and 44F at 9 am. On 5/9I had readings of 50-51 at 9am. Didn't take soil temps on 5/16.... Time to plant

Growers can plant soybeans at temps lower than 50F with a warming trend in the 10 day forecast you have to be more cautious with corn because seeds can be torn apart by imbibitional chilling at lower soil temperatures.

On the flip side, corn seedlings are more tolerant of frost than soybeans because their growing point remains below ground until the fifth leaf stage.

The future forecast points to **Wednesday 5/17 next week for potential frost.**

### Temperature

To kill soybean tissue, temperatures usually need to be at or below 28 to 30 degrees Fahrenheit for several hours. However, an air temperature of 28 does not guarantee a soybean crop will freeze.

Compared to soybean, corn seedlings have a lower risk of death from freezing temperatures. This is because the corn plant's growing point remains below ground until the V5 to V6 stage.

### Growth Stage

In soybean, the growing points are above ground and exposed after the cotyledons open. It's fatal when all growing points freeze. However, compared to corn, soybean is better able to compensate for partial stand losses.

#### Newly emerged soybeans

The nearby warm soil protects newly emerged soybeans. Plus, small, emerging and cotyledon stage soybeans can tolerate freezing temperatures a bit better than older soybean or corn leaves.

For example, in a 2001 North Dakota State University study, the temperature required to kill half the seedlings was as low as 24 degrees. Older soybeans are less freeze-tolerant.

#### Crook stage soybeans

Crook stage soybeans will die if the crook tissue below the cotyledons dies. Likewise, frozen tissue below the cotyledons of any older soybean will result in death. However, if the frost only affects the tops of young soybean, those with one or more intact cotyledons might recover with new growth from the surviving axillary buds.

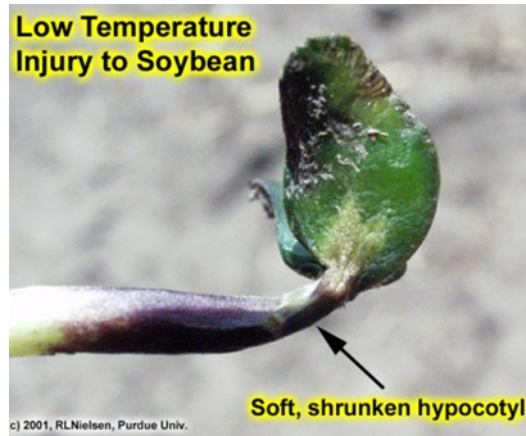
### Regrowth

In more advanced early season soybeans, regrowth may occur from one of the vegetative buds in the leaf axils. If leaf axils haven't been frozen, the frosted soybean should regrow from one of these growing points.

#### Assessing frost injury

Soybean frost injury appears as water-soaked lesions on the cotyledons, leaves or hypocotyl that dry and turn brown after several days.

Before assessing frost damage, wait three to five days to allow the soybean plants to show signs of new growth. Check for firm, healthy stems, cotyledons and growing points. At this point, you should be able to tell whether the soybeans are recovering or dead.



## How plant population affects soybean yield

Table 1 shows how plant population affects soybean yield. This relationship is valid for all soybean row spacings.

For example, when stands reduce to 50 percent of optimum population, yields only reduce by 10 percent, assuming weeds don't compete with remaining plants. If weeds aren't a problem, replanting just to re-establish a full stand can't usually be economically justified.

Table 1: Effect of population reduction on yield

Plants per acre	Optimum stand	Optimum yield produced
157,000	100%	100%
118,000	75%	98%
78,000	50%	90%
39,000	25%	75%

## How to count healthy plants

To determine the number of live plants in your field, do not try to visually estimate the remaining stand. You'd underestimate the live plant population.

Instead, follow these steps to estimate health plants and the corresponding yield:

1. Measure the distance for one-thousandth of an acre for your row spacing, using the length of row equivalents in Table 2.
2. Count the number of live plants in that row section. Don't count badly bruised plants, or those you don't think will recover.
3. Multiply that count by 1,000 to determine the number of healthy plants per acre.
4. Make several checks throughout the field. Ideally, scout the entire field to identify areas that don't need replanting.

Use Table 1 to determine the expected yield reduction from the reduced stand.

30 in row spacing 1/1000 acre est. 17ft 5 inches



Because early-May plantings usually result in maximum yields, expect lower yields with later plantings.

Table 4 lists expected yield reductions for various late planting dates. Also consider the later maturity of replanted fields.

Table 4: Soybean yield potential when planted after May 1

Planting date	Yield potential
1-May	100%
5-May	99%
10-May	98%
15-May	97%
20-May	94%
25-May	91%

Replanting decision worksheet

Soybean comparison worksheet

**Field not replanted:**

Estimated loss due to:

- Reduced stand: \_\_\_\_ percent
- Weed condition: Good, Fair or Poor

Sum of losses: \_\_\_\_ percent

**Remaining crop potential of existing stand: \_\_\_\_ percent**

**Field replanted:**

Estimated loss due to:

- Late planting: \_\_\_\_ percent
- Replanting: 15 - 20 percent

Sum of losses: \_\_\_\_ percent

**Crop potential of a replanted crop: \_\_\_\_ percent**



One bucket trap is set up in Kirkland to identify when armyworm flights occur in our county. Another bucket trap is set up in Verona to help identify flights of black cutworm into our county. 9 or more moths of either spp in a 2 day period would indicate a significant flight.

300 GDDs from this date eggs will hatch and growers would be alerted to check their fields for cut plants



Black cutworm moths		
week of collection	Week reported	Moth Counts
4/27/23	5/4/23	0
5/4/23	5/11/23	0
5/11/23	5/18/23	2
5/18/23	5/25/23	
5/25/23	6/1/23	
6/1/23	6/8/23	
6/8/23	6/15/23	

True armyworm moths		
week of collection	Week reported	Moth Counts
4/27/23	5/4/23	1
5/4/23	5/11/23	1
5/11/23	5/18/23	2
5/18/23	5/25/23	
5/25/23	6/1/23	
6/1/23	6/8/23	
6/8/23	6/15/23	



## Seed corn maggot trial

Oneida county CCE staff place sticky cards at three corn fields each week, collect the cards and send them to Cornell. Some insects in the field fly into the sticky card. Cornell staff count the number of seed corn maggot adults (flies) on the cards. These cards were placed the 1st week of April and will be posted until the 2nd week in June. CCE staff across the state are participating in this effort to measure the risk this pest poses to corn and soybeans in our state.

We also bury 10 corn seeds in two locations and 10 lima beans at 2 locations in each of these fields and collect the seeds every 2 weeks. These are also sent to Cornell to identify feeding damage to the seed and trap some of the organisms causing the damage.

There are at least 7 sites where 3 treatments: neonic treated seed, Anthranilic diamide treated seed and no insecticide treated seed are being planted in replicated plots by collaborating farmers and CCE staff. The objective is to measure the effectiveness of these 2 groups of insecticides in controlling pests that attack corn seeds.