



# Newsletter

[www.carovail.com](http://www.carovail.com)  
[www.facebook.com/CaroVail](https://www.facebook.com/CaroVail)

CaroVail

Agronomy Update

June 10, 2016

*June is National Dairy Month*

**Thanks to all of America's dairy producers for providing the world with healthy dairy products**



Photo.elsear.com

**NUE**

**Nitrogen Use Efficiency**

**Frank Flis**

With economic, agronomic, and environmental concerns surrounding the use of Nitrogen (N) in crop production, the Nitrogen Use Efficiency (NUE) becomes critical. Determination of the NUE can be challenging, especially with one of the main variables being beyond our control (the weather). Rainfall amounts and timing, temperatures (air and soil), humidity and amount of solar energy throughout the growing season will impact the plants ability to utilize N. Weather conditions will even affect the efficiency of Nitrogen fixing plants, limiting their ability to gather N from the atmosphere.

Locations

*Auburn*

55 Columbus St  
Auburn, NY 13021  
315-253-7379

*Bernardston*

472 Northfield Road  
Bernardston, MA  
01337  
413-648-9900

*Niverville*

831 Route 28  
Niverville, NY 12130  
518-784-9166

*Oriskany Falls*

8341 US State Rt 20  
Oriskany Falls, NY  
13425  
315-841-3201

*Salem*

4134 State Rt 22  
Salem, NY 12865  
518-854-9446

*Tri Valley Crop Ctr*

337 State Hwy 162  
Sprakers, NY 12166  
518-673-5336

Understanding the plant's need for N, the natural N cycles, knowing the N sources that are available, the relationships of N to other plant nutrients, crop growth cycles, soil properties, and realistic yield goals are all factors involved in the NUE determination.

Plant tissue sampling with other N measurements such as Pre Sidedress Nitrogen Tests (PSNT's) at critical growth will help make NUE decisions in the growing season. Knowledge of N sources already applied to the crop and method applied, and soil test information will help narrow choices for timing and source of additional N. Determination of the value of other crop residues (either positive or negative) with special attention to the Carbon/Nitrogen ratio (C/N) needs to be considered.

Crop growth stage corn will consume the most N from V6 to Maturity. Forages, grasses, and even Alfalfa will need N post harvest to produce new leaf tissue and protein formation. Vegetable and fruit crops will look for N to produce fruit and seeds. Timing of supplementation will increase potential efficiency.

**Auburn**

Sources of supplemental N need to be considered. Be sure to think through the following:

1. Their availability to plants
2. Release time or conversion through soil mineralization to plant
3. Addition of other nutrients that enhance N efficiency such as Sulfur(S) and Boron (B) in proper ratios at the right time
4. Placement of the supplements need all be considered

**Bernardston**

**Niverville**

**Oriskany Falls**

The key point is this: take time to evaluate N needs throughout the growing season, not just at the beginning. There are many variables to consider as you evaluate these N needs, so do the best that you can in accounting for as many of these factors as your patience and time will allow. The time and patience will be worth it if you successfully narrow your NUE.

**Salem**

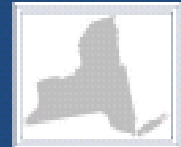
## Weather Update

**Tri Valley**

	Approx. Weekly Rainfall	Avg expected high Temp next week	Avg expected Low Temp next week	GDD (Base 50) since Jan 1	GDD (Base 50) since Mar 1	GDD (Base 50) since Apr 1	GDD (Base 50) since May 1
Auburn	0.05	75	56	451.3	451.3	426.8	390.5
Bernardston	0.01	75	54	484	484	458.1	405
Niverville	0.17	76	56	510.5	510.5	477.6	420.9
Oriskany Falls	0.23	71	54	458.5	458.5	421	384.5
Salem	0.08	74	53	434.6	434.6	410.1	366.1
TVCC	0.03	74	54	568.9	568.9	538.6	465.2



United States Department of Agriculture  
National Agricultural Statistics Service



New York

# Crop Progress & Condition

Blair Smith, State Statistician

108 Airline Drive, Albany, NY 12235

Phone: 518-457-5570

Fax: 518-591-3834

[www.nass.usda.gov/ny](http://www.nass.usda.gov/ny)  
Week ending June 5, 2016

Issued weekly on the internet, April - November  
by the Northeastern Regional Field Office of NASS

[nassrfoener@nass.usda.gov](mailto:nassrfoener@nass.usda.gov)  
Released June 6, 2016

**Excellent Week for Field Work:** New York had an average of 6 days suitable for field work. Weather was warm and humid with several parts of the state reporting much needed rainfall. Planting of vegetables, corn and soybeans is nearly completed. Hay is reported in great condition. Hay chopping and dry hay harvest continues. Winter barley and winter wheat is mostly pollinated. Field activities for the week included weed control, tillage, seeding, applying fertilizer, manure, pesticides, spraying antibiotics, irrigation, repair and maintenance.

### Soil Moisture for Week Ending June 5, 2016 (in percent)

Item	Very Short	Short	Adequate	Surplus
TOPSOIL	8	24	53	15
SUBSOIL	3	23	63	7

### Crop Conditions as of June 5, 2016 (in percent)

Item	Very Poor	Poor	Fair	Good	Excellent
BARLEY	0	0	33	58	9
CORN	0	2	20	58	22
GRAPES	0	1	24	74	1
HAY, ALFALFA	0	4	33	53	10
HAY, OTHER	0	0	45	45	10
OATS	0	0	23	70	7
PASTURE AND RANGE	0	3	37	51	9
SOYBEANS	0	3	24	53	16
WINTER WHEAT	0	3	24	53	20

### Crop Progress as of June 5, 2016 (in percent)

Item	This Week	Last Week	Last Year	5 Year Avg.
SPRING TILLAGE: SINGLE	92	89	94	79
BARLEY: PLANTED	91	87	95	72
BARLEY: EMERGED	77	67	61	48
BARLEY: HEADED	13	0	16	<5
CABBAGE: PLANTED	65	43	62	42
CORN: PLANTED	83	78	90	80
CORN: EMERGED	68	40	69	41
CORN AVERAGE HEIGHT: (IN)	5	<5	5	N/A
HAY, ALFALFA: FIRST CUTTING	57	36	44	43
HAY, OTHER: FIRST CUTTING	52	32	37	34
OATS: PLANTED	94	92	96	92
OATS: EMERGED	79	66	78	63
OATS: HEADED	20	<5	7	<5
POTATOES: PLANTED	77	73	76	76
SNAP BEANS: PLANTED	25	8	33	34
SOYBEANS: PLANTED	70	53	68	52
SOYBEANS: EMERGED	46	14	39	15
SWEET CORN: PLANTED	67	30	67	62
WINTER WHEAT: HEADED	70	38	62	25
APPLES: GREEN TIP	93	93	100	99
APPLES: PINK	92	88	99	98
APPLES: FULL BLOOM	87	82	99	92
PEACHES: PINK	90	86	99	98
PEACHES: FULL BLOOM	84	73	84	84
PEARS: PINK	93	87	93	97
PEARS: FULL BLOOM	91	79	81	83
CHEERRIES, SWEET: GREEN TIP	93	88	99	100
CHEERRIES, SWEET: PINK	92	83	99	97
CHEERRIES, SWEET: FULL BLOOM	84	73	93	91
CHEERRIES, TART: PINK	97	92	100	98
CHEERRIES, TART: FULL BLOOM	97	77	100	91

For a complete nationwide weekly weather and crop bulletin, please visit [www.usda.gov/oc/weather](http://www.usda.gov/oc/weather) and click on "Weekly Weather and Crop Bulletin."

Auburn

Bernardston

Niverville

Oriskany Falls

Salem

Tri Valley