

# Weekly Berry Call – May 18, 2011

**Participants:** Amy Ivy-host (Northern NY, Plattsburg), Colleen Cavanaugh (Alleghany Co.), Heather Faubert (University of Rhode Island), Laura McDermott (Eastern NY/Upper Hudson/Lower Adirondack), Molly Shaw (South Central/Southern Tier), , Marvin Pritts (Finger Lakes region/Ithaca), Cathy Heidenreich (Western NY/Finger Lakes region/Geneva), Dale Ila Riggs (Stephentown, Eastern NY), Sonia Schloemann (University of Massachusetts, Amherst), Sharon Bachman (Erie Co.), Sandy Menasha ( Suffolk Co., Long Island)

**Growing conditions:** (courtesy NY NASS)

**Week ending May 15, 2011:** The week began with a cool and dry northerly flow of air around the west side of a low pressure system off the New England coast. This pattern persisted through much of the week and resulted partly to mostly sunny weather across the state. Temperatures averaged close to normal with highs rising into the mid to upper 70's by Thursday. Initially, the northerly flow brought cool air resulting in below freezing temperatures in the North Country on the morning of the 9th and 10th. The growing season does not normally start in this area until around May 25th. An approaching frontal boundary brought cloudiness into the region on Friday with rain developing in some areas late Friday into Saturday especially across northern and western New York. Rainfall varied from over an inch across northern and western areas to less than a quarter inch over the southern tier and southeast part of the state.

## Reports from the Field

### Western NY – Alleghany and Erie Counties

Lots of water, very wet. Temperatures seem cooler than normal, but may be due to lack of sunshine. Some blueberries just beginning bloom in Erie.

### Western NY/Finger Lakes region/Geneva

Lots of rain – very difficult to get cover sprays on. Day Neutral strawberries in full bloom, June bearers have king blooms open. Blueberries in pink to early bloom; Ribes are in green fruit and raspberries are slow in developing buds.

### Northern NY/Canadian border

2" of rain over the weekend. Flood plain where some berries are has flooded 3x this spring. Still strawberries have good growth, bloom is delayed.

### South Central/Southern Tier region

Lots of rain, but still temps in terms of GDD are right at average. In warm spots blueberries have just begun bloom. Strawberries in Owego were in bloom.

### Eastern NY/Upper Hudson/Lower Adirondacks

Heavy rains in the Mohawk valley and the northern part of the Capital District are making field work impossible. The southern part of the region (southern Rens and Columbia) have so far avoided complete saturation. June-bearing strawberries nearing full bloom in southern areas, but cloudy weather and rain may be holding them back. Raspberry canes show good growth; some winter damage becoming apparent as canes finally waking up. Blueberries in very early bloom in most places. Ribes did have green fruit (saw some the day after the call!)

### Stephentown, Eastern NY

Has escaped the heavy downpours others have mentioned. Only 0.6" this week. Some freeze damage however, to the strawberries w/o row cover. June bearers under row cover look great with huge receptacles. The younger blueberries have begun to bloom. Fall raspberries in the High Tunnel are 18-24" high. 1<sup>st</sup> strawberries grown in HT will be picked this week.

### Suffolk County, LI

Very rainy spring, but last week the good weather provided and opportunity for lot of field work to get done – some folks were even irrigating! Raspberries have buds; early strawberries have green fruit and all the rest of the varieties are in bloom.

### Amherst Massachusetts

Very wet, making fields work difficult. Heavy rains will be an issue for herbicide efficacy and fertilizer leaching. Blueberries started to bloom, but weather has slowed progress.

**Rhode Island:** Damp, although not tons of rain until this past weekend. Blueberries have been blooming for about a week.

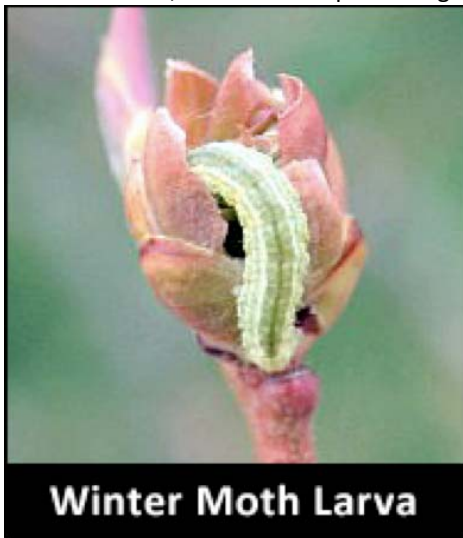
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### Special guest topic: Winter Moth

Heather Faubert from the University of Rhode Island Extension discussed Winter Moth, a pest in New England and Nova Scotia.

**Intro:** Winter Moth is an inchworm/geometric moth originally from Europe. This pest was 1<sup>st</sup> detected in Nova Scotia in the 1930's and then found in the Pacific Northwest in the 1970's, but in 2004 it was found in Rhode Island. The insect is a forest defoliator and thus has a huge host range including oaks, maples, prunus spp, new growth of spruce, catalpa and witch hazel among others.

**Life Cycle:** Moths emerge in Nov./Dec. There may be clouds of them around lights on a warm night. The male moths fly, while the female moths climb up trees in a fashion similar to gypsy moths. They deposit eggs singly, all the way up the tree. The eggs hatch in early spring, and the worms wriggle immediately to the protection of a bud. A good phenological cue for when this happens is green tip in apple. Once inside the buds, it is very difficult to control them as they are protected from insecticide sprays. The larvae eat and burrow inside the bud until the larvae is about 1" long about mid-May. Then, as the bud opens, the larvae emerge and begin feeding on the rest of the plant. While they do this they protect themselves with a loose "cocoon" of silk. In mid-June, the larvae drops to the ground and pupates – until the adult emerges in mid-November to repeat the cycle.



**Control:** Understanding when to spray is important. Spinosad, Imidan and Dormant oil all would be effective in controlling winter moth if the timing of these materials was before the larva enters the bud. A GDD model might be better if it were based on a Base 40 model. Some challenging aspects of this pest are that it can move by ballooning from a silk thread, like other inchworm species. This makes it difficult to manage commercial blueberry plantings that are surrounded by infested trees as the insect can continue to re-enter despite earlier eradication success. Still the pest hasn't moved a lot – almost 80 years has elapsed since it was first found in Nova Scotia, possibly due to the fact that female moths do not fly. Movement lately may be encouraged due to human and vehicular traffic and possibly nursery stock. Nova Scotia and elsewhere have introduced a tachnid fly that may parasitize the winter moth by laying eggs that the moth ingests and then the fly larvae develops inside the gut of the winter moth eventually killing it. Mating disruption does not seem as plausible given the broad host range. Also, it is unlikely that cold temperatures do anything to deter the winter moth.

**Summary:** Winter moth has become a significant pest for eastern MA, RI, and Nova Scotia. Some damage has occurred in southern NH and eastern CT. No reports of winter moth in NY or VT. This insect can become a real problem. An orchard and a blueberry planting in Sekonk, MA has had 5 years without a crop due to winter moth defoliation.

**Resources:** For information about controlling winter moth in blueberries, see this UMASS fact sheet written by Sonia Schloemann and Robert Childs: <http://www.umass.edu/fruitadvisor/pdf/Winter%20Moth%20Recommendations%20in%20Blueberry.pdf>. Also, Bob Childs did a webinar for the NEIPM Webinar series and that is archived at: <http://www.fruit.cornell.edu/berry/webinar/archive.html#blueberry>.

### Troubleshooting:

**Should growers worry that fertilizer is leaching out of blueberry root zone due to exceptional rainfall?** Ammonium sources of N that are used in blueberries (ammonium sulfate and urea) do not leach as badly so re-application is not necessary. Nitrogen application should be split anyway to allow blueberry roots to adequately pick up the nutrients. The second application should be in early – mid June. Fertilizer rates vary according to age of plant – check the Cornell Guidelines for more exact information. <http://ipmguidelines.org/BerryCrops/default.asp>.

**What might be the best way to approach fungicide applications for strawberries since it has been very difficult to get anything down so far this spring?** Constant rain may actually help knock off spores, but still if weather ever clears, be prepared to get right out there with sprayer. This will be especially important if weather gets warm (as it is) because of anthracnose and botrytis pressure. Spore release can happen in just a few hours. Try to rotate chemicals – one option would be a Captan/Switch tank mix followed by Rovral, but maybe start with Pristine first as it offers a bit of kick-back activity and if you cannot get out to spray that

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might provide a bit of protection. (Anthracnose could also be a problem for blueberries, so getting a cover spray on them would be helpful.

**Is there any way to know before fruit set if your pollination (in blueberries) has been acceptable?** First remember that bumble bees and other native pollinators that blueberries really depend on are MUCH hardier flyers than are honeybees. Then, look at the blueberry corollas as they fall off the plant. If the corolla's are white, then pollination has occurred. If the corolla is a purple-brown color then pollination has not happened. This kind of information prior to fruit set might help the grower decide if she wanted to apply gibberellins to improve fruit size. The following paragraph, written by last weeks' guest Dr. Eric Hanson, details this strategy and more information is available on the MSU website:

<http://www.ipmnews.msu.edu/fruit/Fruit/tabid/123/articleType/ArticleView/articleId/905/Manipulating-blueberries-with-Gibberellin.aspx>

*When pollination is limited by poor weather, gibberellin (GA) sometimes improves percentage set and berry size. Several GA products (ProGibb, GibGro) are labeled for highbush blueberries. GA may result in retention of some seedless (parthenocarpic) fruit that normally drop, and increases the size of berries with low seed numbers. GA can be applied in a single spray during bloom (80 gram active ingredient per acre) or two 40 g sprays, one during bloom and the second 10-14 days later. Higher spray volumes (40 to 100 gallons per acre) may improve coverage and effects. Slow-drying conditions also increase absorption. Also make sure your spray water pH is not above 7.5.*

**Is there a chart that lists the durability of fungicides when they are on the plant (ie how long till they are washed off?)** not that anyone knows – but that would be great information.

**Cyclamen mite showed up in High tunnel strawberries after 3 years. Is there any good control for them?** In the field cyclamen mite seem to increase if April is dry. 'Cucumeris' seems to be an effective predator and has worked well in the field. If cyclamen mite is a problem on a young planting, efforts should be made to eradicate it, or at the very least, prevent the movement of the pest. Thionex and Portal are the 2 labeled pesticides for this pest. Make sure that spray volume and pressure is adequate to move material into plant crown in order to get control.



*Does anyone know what this plant(left) is? It must have come in on the mulch because it is not anywhere else on the farm and it's just in the row of blueberries. I think it is in the poison parsnip, angelica family, but not sure if it just looks so robust because it's been fertilized?*

### Weather Data for Week Ending Sunday, May 15, 2011

Station	Temperature (°F)				Growing Degree Days Base 50° <sup>1/</sup>			Precipitation (Inches) <sup>1/</sup>				
	High	Low	Avg	Dep. from Norm	Week	Season	Dep. from Norm	Week	Dep. from Norm	Season	Dep. from Norm	
<b>Hudson Valley</b>												
Albany	77	43	60	+4	69	213	+94	0.12	-0.65	5.53	+0.95	
Glens Falls	76	40	57	+3	49	145	+57	0.13	-0.69	5.95	+1.27	
Poughkeepsie	78	40	60	+3	70	244	+97	0.18	-0.80	5.78	+0.20	
<b>Mohawk Valley</b>												

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Boonville	75	36	54	+4	35	78	+18	0.54	-0.44	11.41	+4.66
<b><u>Champlain Valley</u></b>											
Plattsburgh	75	41	56	+3	45	117	+28	1.01	+0.38	8.98	+4.83
<b><u>St. Lawrence Valley</u></b>											
Canton	76	37	56	+4	44	136	+61	1.01	+0.38	8.20	+3.94
Massena	77	41	57	+4	49	134	+48	1.10	+0.54	7.29	+3.44
<b><u>Great Lakes</u></b>											
Buffalo	85	43	62	+7	83	192	+82	1.29	+0.59	8.32	+3.98
Wales	82	35	59	+6	63	134	+58	1.42	+0.65	9.35	+3.88
Niagara Falls	81	40	59	+4	64	156	+35	0.64	+0.01	6.97	+2.41
Rochester	81	40	58	+3	61	170	+43	0.76	+0.18	7.28	+3.40
Watertown	77	33	57	+5	50	127	+49	1.20	+0.61	7.97	+4.21
<b><u>Central Lakes</u></b>											
Dansville	87	37	62	+8	87	220	+106	0.29	-0.34	6.06	+1.90
Geneva	78	39	59	+5	64	153	+48	0.31	-0.32	8.11	+3.82
Honeoye	86	35	60	+5	69	158	+50	0.45	-0.16	7.15	+2.87
Ithaca	79	34	58	+5	57	146	+57	0.02	-0.69	8.31	+3.89
Penn Yan	78	38	60	+6	72	172	+67	0.10	-0.53	7.02	+2.73
Syracuse	81	40	63	+8	94	244	+119	0.24	-0.46	10.00	+5.11
Warsaw	80	38	57	+6	54	110	+45	0.86	+0.09	9.40	+4.38
<b><u>Western Plateau</u></b>											
Angelica	80	37	59	+7	62	138	+74	2.35	+1.73	10.95	+6.87
Elmira	81	34	59	+5	66	165	+67	0.15	-0.55	7.32	+3.16
Franklinville	83	32	57	+7	54	110	+61	2.57	+1.80	10.66	+5.73
Jamestown	83	37	60	+8	69	145	+78	1.37	+0.53	10.00	+4.36
<b><u>Eastern Plateau</u></b>											
Binghamton	75	43	58	+5	61	154	+61	0.01	-0.76	10.93	+6.20
Cobleskill	74	38	56	+3	41	121	+40	0.18	-0.61	6.98	+2.02
Morrisville	75	40	57	+5	52	114	+39	0.01	-0.82	8.67	+3.87
Norwich	81	35	57	+3	48	126	+41	0.00	-0.84	9.67	+4.53
Oneonta	78	36	56	+4	42	125	+53	0.12	-0.86	9.69	+4.16
<b><u>Coastal</u></b>											
Bridgehamton	71	43	58	+3	55	164	+75	0.18	-0.67	3.36	-2.50
New York	72	52	62	+2	85	298	+74	0.42	-0.44	6.05	+0.36

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