

**2013 Hudson Valley Lab Scouting Report
NYSAES Entomology Dept., Highland, NY**

Baskerville-Emin (BE)

<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
	43 F	50 F	
3/1	18.9	0.0	Beginning degree day accumulations beginning 1 Jan. 2013
3/4	18.9	0.0	Apple – McIntosh – Dormant
			0.0” Weekly Rainfall (Clintondale W.G. Minard)
			0.0” Total Rainfall from 1 March (Clintondale W.G. Minard)
3/11	23.4	0.2	Apple – McIntosh – Dormant Apple – Empire, Ginger Gold, Spur Red Delicious – Dormant Pear – Bartlett / Bosc - Swollen bud Spotted Green Fruitworm (SGFW) trap set (3/08/13)
			0.0 Psylla eggs / bud (0 egg / 100 buds / 2 trees)
			0.0 Spotted Green Fruitworm (SGFW) (1/0)
			0.72” Weekly Rainfall (Clintondale W.G. Minard)
			0.72” Total Rainfall from 1 March (Clintondale W.G. Minard)
3/18			Apple – McIntosh – Dormant Apple – Empire, Ginger Gold, Spur Red Delicious – Dormant Pear – Bartlett / Bosc - Swollen bud
			0.0 Psylla eggs / bud (0 egg / 100 buds / 5 trees)
			0.0 Spotted Green Fruitworm (SGFW) (0/0)
	36.7	7.9	Highland
	26.3	3.4	Hudson
	36.2	6.4	Marlboro
	35.3	7.0	Red Hook
			0.0” Weekly Rainfall (Clintondale W.G. Minard)
			1.75” Total Rainfall from 1 March (Clintondale W.G. Minard)
3/25			Apple – McIntosh – Dormant
			<0.1 Psylla eggs / cluster (1 egg / 100 buds / 5 UT Bartlet stems)
			0.0 Psylla nymphs / cluster (0 nym. / 100 buds / 5 UT Bartlet stems)
			0.58” Weekly Rainfall (Clintondale W.G. Minard)
			2.33” Total Rainfall from 1 March (Clintondale W.G. Minard)

Baskerville-Emin (BE)

<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
	43 F	50 F	# / trap / day (pheromone trap)
4/1			Apple – McIntosh – Dormant Apple – Empire, Ginger Gold, Spur Red Delicious – Dormant Pear – Bartlett / Bosc - Swollen bud Psylla eggs / bud (1 egg / 100 buds / 5 trees)
			0.5 Red Banded Leafroller (RBLR) (4 / 3)
			1.6 Spotted Green Fruitworm (SGFW) (8 / 15)
			1.3 Spotted Tentiform Leafminer (STLM) (10 / 8)
	55.3	12.3	Highland
	39.6	5.8	Hudson
	52.2	8.2	Marlboro
	49.9	9.8	Red Hook
			0.17” Weekly Rainfall (HVL)
			2.54” Total Rainfall from 1 March (Clintondale W.G. Minard)
4/8			Apple – McIntosh – Silver Tip Apple – Empire - Green Tip Apple – Ginger Gold- Green Tip Apple – Spur Red Delicious – Silver Tip Pear – Bartlett - Swollen Bud Pear – Bosc - Dormant Stanley plum – Dormant Apricot – Early – Swollen Bud Cherry – Early (Danube) – Swollen Bud Cherry – Late – (Regina) Dormant Early Peach – Swollen Bud Late Peach – Dormant
			<0.1 Psylla eggs / cluster (6 egg / 100 buds / 5 UT Bartlet stems)
			0.0 Psylla nymphs / cluster (0 nym. / 100 buds / 5 UT Bartlet stems)
			0.1 Red Banded Leafroller (RBLR) (2 / 0)
			2.1 Spotted Green Fruitworm (SGFW) (6 / 24)
			0.0 Spotted Tentiform Leafminer (STLM) (0 / 0)
	77.5	19.4	Highland
	60.2	12.2	Hudson
	71.8	13.7	Marlboro
	70.7	16.8	Red Hook
			0.00” Weekly Rainfall (HVL)
			0.04 Total Rainfall for April (HVL)
			2.58” Total Rainfall from 1 March (HVL)

Baskerville-Emin (BE)

Date DD Accumulations (previous day NEWA) Field Observations / Trap Catches / Models

43 F 50 F # / trap / day (pheromone trap)

4/15

Apple – McIntosh – Green Tip
 Apple – Empire - ½” green
 Apple – Ginger Gold- 20% ½” green
 Apple – Spur Red Delicious – 20% ½” green
 Pear – Bartlett – Swollen Bud
 Pear – Bosc - Dormant
 Pear – Oriental: Hosui – >50% Bud Burst
 Stanley plum – Swollen Bud
 Apricot – Early – Swollen Bud
 Cherry – Early (Danube) – 10% Bud Burst
 Cherry – Late – (Regina) Swollen Bud
 Early Peach – Swollen Bud
 Late Peach – Swollen Bud

0.4 Psylla eggs / cluster (40 egg /100 buds / 5 UT Bartlett stems)
 0.0 Psylla nymphs / cluster (0 nym. /100 buds/ 5 UT Bartlett stems)

First sap beetle observed in vinegar trap in cane berry*

0.1 Oriental Fruit Moth (OFM) (0 / 2) * (first capture)
 2.3 Red Banded Leafroller (RBLR) (22 / 10)
 1.2 Spotted Green Fruitworm (SGFW) (4 / 13)
 0.0 Spotted Tentiform Leafminer (STLM) (0 / 0)

134.9 47.9
 88.1 23.2
 122.5 40.0
 115.7 36.4

Highland
 Hudson
 Marlboro
 Red Hook

0.85” Weekly Rainfall (HVL)
 0.89” Total Rainfall for April (HVL)
 3.47” Total Rainfall from 1 March (HVL)

4/17

Apple – McIntosh – ½” green
 1.2 Oriental Fruit Moth (OFM) (1 / 6) * (first capture)

Baskerville-Emin (BE)

Date DD Accumulations (previous day NEWA) Field Observations / Trap Catches / Models

43 F 50 F # / trap / day (pheromone trap)

4/22

Apple – McIntosh – Early Tight Cluster
 Apple – Empire - Tight Cluster
 Apple – Ginger Gold - Early Tight Cluster
 Apple – Crimson Crisp – ½” Green
 Apple – Spur Red Delicious – Early Tight Cluster
 Pear – Bartlett – Bud Burst
 Pear – Bosc – Early Bud Burst
 Plum - Shiro – Bud Burst
 Plum - Stanley – Bud Burst
 Apricot – Early (Harcot) - Full Bloom
 Apricot – Late – (Harglow) - Full Bloom
 Cherry – Early (Danube) - Bud Burst
 Cherry – Late – (Regina) Bud Burst
 Early Peach – (Red Haven) First Bloom
 Late Peach – (Variety?) Pink

0.1 Psylla eggs / cluster (14 egg / 100 buds / 5 UT Bartlett stem)
 0.0 Psylla nymphs / cluster (0 nym. / 100 buds / 5 UT Bartlett stem)

0.4 Oriental Fruit Moth (OFM) (2 / 3)
 4.1 Red Banded Leafroller (RBLR) (45 / 12)
 1.4 Spotted Green Fruitworm (SGFW) (6 / 13)
 0.6 Spotted Tentiform Leafminer (STLM) (3 / 5)

204.2	82.2	Highland
149.5	53.3	Hudson
185.4	70.2	Marlboro
179.5	68.6	Red Hook

0.89 Weekly Rainfall (HVL)
 1.84 Total Rainfall for April (HVL)
 4.36 Total Rainfall from 1 March (HVL)

(HVL) Baskerville-Emin (BE)

Date DD Accumulations (previous day NEWA) Field Observations / Trap Catches / Models

	43 F	50 F	# / trap / day (pheromone trap)
4/29			Apple – McIntosh – Early Pink Apple – Empire - Pink Apple – Ginger Gold - Pink Apple – Crimson Crisp – Tight Cluster Apple – Spur Red Delicious –Tight Cluster Pear – Bartlett – Green Cluster Pear – Bosc – Green Cluster Pear – Asian: Hosui – White Bud Pear – Asian: Ya Li – 90% Bloom Plum - Stanley – First Bloom Apricot – Early (Harcot) – Petal Fall Apricot – Late – (Harglow) - Petal Fall Cherry – Early (Danube, Balaton) – First Bloom Cherry – Late – (Regina, Sweetheart) 90% Bloom Early Peach – (Red Haven) Full Bloom
			0.20 Psylla eggs / cluster (20 egg / 100 buds / 5 UT Bartlet stems) 0.02 Psylla nym / cl. (2 nym. / 100 buds / 5 UT Bartlet stems) (1st obser.)
			6.8 Oriental Fruit Moth (OFM) (39 / 18) 29.4 Red Banded Leafroller (RBLR) (278 / 134) 0.9 Spotted Green Fruitworm (SGFW) (0 / 13) 29.6 Spotted Tentiform Leafminer (STLM) (268 / 147) 0.4 Lesser Apple Worm (LAW) (2/3) (1st flight)
	270.2	116.8	Highland
	194.6	77.8	Hudson
	247.9	102.9	Marlboro
	235.5	99.4	Red Hook
			0.0 Weekly Rainfall (HVL) 1.84 Total Rainfall for April (HVL) 4.36 Total Rainfall from 1 March (HVL)

(HVL) Baskerville-Emin (BE)

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

43 F **50 F** **# / trap / day (pheromone trap)**

5/6

Apple – Golden Delicious – Early Bloom
Apple – Crimson Crisp – Early bloom
Apple – McIntosh – Full bloom
Apple – Empire - Full bloom
Apple – Spur Red Delicious – Full bloom
Apple – Ginger Gold – Early Petal Fall
Pear – Bartlett – Full bloom
Pear – Bosc – Full bloom
Pear – Asian: Hosui – Full bloom
Pear – Asian: Ya Li – Full bloom
Plum - Stanley – Full bloom
Apricot – Early (Harcot) – Petal Fall; shucks on
Apricot – Late – (Harglow) - Petal Fall; shucks on
Cherry – Early (Danube, Balaton) – Full Bloom
Cherry – Late – (Regina, Sweetheart) Early Petal Fall
Early Peach – (Red Haven) Petal Fall; shucks on

0.04 Psylla eggs / cluster (4 egg / 100 buds / 5 UT Bartlet stems)
0.02 Psylla nymphs / cluster (2 nym. / 100 buds / 5 UT Bartlet stems)

3.4 Oriental Fruit Moth (OFM) (8/40)
18.6 Red Banded Leafroller (RBLR) (188/72)
0.0 Spotted Green Fruitworm (SGFW) (0/0)
272.0 Spotted Tentiform Leafminer (STLM) (275/269)
0.1 Oblique Banded Leafroller (OBLR) (1/1)
0.0 Spotted Wing Drosophila (SWD) (0/0)
6.5 Brown Marmorated Stink Bug (BMSB) (26/ trap) (First Capture)

381.4 183.4 Highland
265.4 125.5 Hudson
344.5 159.0 Marlboro
339.7 163.9 Red Hook

0.0 Weekly Rainfall (HVL)
0.0 Total Rainfall for May (HVL)
4.36 Total Rainfall from 1 March (HVL)

(HVL) Baskerville-Emin (BE)

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

43 F **50 F** **# / trap / day (pheromone trap)**

5/13

Apple – Jersey Mac	Petal Fall; 9.5 mm
Apple – Ginger Gold	Petal Fall; ≥ 5 mm
Apple – Golden Delicious	80% Petal Fall
Apple – Crimson Crisp	80% Petal Fall
Apple – McIntosh	80% Petal Fall
Apple – Empire	Fruit Set; < 5 mm
Apple – Spur Red Delicious	Petal Fall
Pear – Bartlett	Fruit Set; 9 mm
Pear – Bosc	Fruit Set; 9 mm
Pear – Asian: Hosui	Fruit Set; <5 mm
Pear – Asian: Ya Li	Fruit Set; <5 mm
Apricot – Early (Harcot)	Fruit Set; shucks off; 13 mm
Apricot – Late – (Harglow)	Fruit Set; shucks off
Cherry – Early (Danube, Balaton)	Fruit Set; shucks off
Cherry – Late (Regina, Sweetheart)	80% Petal Fall
Peach Early (Red Haven)	shucks off
Peach – Late	shucks off
Plum - Stanley	Fruit Set; shucks off

0.8	Psylla eggs / cluster	(19 egg / 100 buds / 5 UT Bartlet stems)
0.3	Psylla nymphs / cluster	(8 nym. / 100 buds / 5 UT Bartlet stems)

1.3	Oriental Fruit Moth (OFM) (15/3)
5.4	Red Banded Leafroller (RBLR) (53/22)
0.0	Spotted Green Fruitworm (SGFW) (0/0)
15.1	Spotted Tentiform Leafminer (STLM) (109/102)
0.0	Oblique Banded Leafroller (OBLR) (0/0)
0.0	Spotted Wing Drosophila (SWD) (0/0)
3.1	Lesser Apple Worm (LAW) (7/37)
0.7	Brown Marmorated Stink Bug (5 adults)

51.0	PC Model: Accumulated DD (base 50°F) from PF
47.0	CM Model: First eggs laid at about 50 DD, hatch at 220 DD.
	OBLR Model:

506.6	261.6	Highland
331.8	168.3	Hudson
459.7	228.7	Marlboro
454.9	236.0	Red Hook

0.98	Weekly Rainfall (HVL)
0.98	Total Rainfall for May (HVL)
5.34	Total Rainfall from 1 March (HVL)

(HVL) Baskerville-Emin (BE)

Date DD Accumulations (previous day NEWA) Field Observations / Trap Catches / Models

43 F 50 F # / trap / day (pheromone trap)

5/20

Apple – Jersey Mac	15.0 mm (King Fruit – KF)
Apple – Ginger Gold	12.5 mm KF
Apple – Golden Delicious	9.0 mm KF
Apple – Crimson Crisp	8.0 mm KF
Apple – McIntosh	9.5 mm KF
Apple – Empire	10.0 mm KF
Apple – Spur Red Delicious	9.0 mm KF
Pear – Bartlett	12.5 mm
Pear – Bosc	12.5 mm
Pear – Asian: Hosui	10.5 mm
Pear – Asian: Ya Li	11.5 mm
Apricot – Early (Harcot)	> 22 mm
Apricot – Late – (Harglow)	> 22 mm
Cherry – Early (Danube, Balaton)	9.0 mm
Cherry – Late (Regina, Sweetheart)	13.0 mm
Peach Early (Red Haven)	9.0 mm
Peach – Late	10.5 mm
Plum - Stanley	9.0 mm

0.2	Psylla eggs / cluster	(4 egg / 100 buds / 5 UT Bartlet stems)
0.2	Psylla nymphs / cluster	(5 nym. / 100 buds / 5 UT Bartlet stems)
1.3	Brown Marmorated Stink Bug	(5F/4M-9 adults)
1.7	Codling Moth (CM)	(8 / 4)*
0.9	Lesser Apple Worm (LAW)	(0 / 13)
0.0	Oblique Banded Leafroller (OBLR)	(0 / 0)
1.4	Oriental Fruit Moth (OFM)	(16 / 3)
1.8	Red Banded Leafroller (RBLR)	(25 / 0)
0.0	Spotted Green Fruitworm (SGFW)	(0 / 0)
8.0	Spotted Tentiform Leafminer (STLM)	(74 / 38)
0.0	Spotted Wing Drosophila (SWD)	(0 / 0)

595.8	312.2	Highland
418.3	219.5	Hudson
545.1	276.3	Marlboro
534.6	280.7	Red Hook

0.27	Weekly Rainfall (HVL)
1.25	Total Rainfall for May (HVL)
5.61	Total Rainfall from 1 March (HVL)

* - 1st trap capture

(HVL) Baskerville-Emin (BE)

Date	DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models		
	43 F	50 F	# / trap / day (pheromone trap)		
5/28			0.2	Psylla eggs / cluster (5 egg / 25 leaves / 5 UT Bartlet stems)	
			0.6	Psylla nymphs / cl. (14 nym. / 25 leaves / 5 UT Bartlet stems)	
			3.8	Oriental Fruit Moth (OFM) (7/20)	
			1.1	Red Banded Leafroller (RBLR) (15/0)	
			0	Spotted Green Fruitworm (SGFW) (0/0)	
			2	Spotted Tentiform Leafminer (STLM) (15/13)	
			0	Oblique Banded Leafroller (OBLR) (0/0)	
			0	Spotted Wing Drosophila (SWD) (0/0)	
			0.4	Lesser Apple Worm (LAW) (3/3)	
			2.1	Codling Moth (CM) (17/13)	
		733.5	406.3		Highland
		661.6	371.8		Hudson
		679.8	369.5		Marlboro
		671.3	376.0		Red Hook
				1.47	Weekly Rainfall (HVL)
			2.72	Total Rainfall for May (HVL)	
			7.08	Total Rainfall from 1 March (HVL)	

Date	DD Accumulations (previous day NEWA)		Field Observations / Trap Catches / Models		
	43 F	50 F	# / trap / day (pheromone trap)		
6/3			290.0	Plum curculio 308 DD accumulation after petal fall.	
			0.6	Psylla eggs / cluster (14 egg / 25 leaves / 5 UT Bartlet stems)	
			0.5	Psylla nymphs / cl (12 nym. / 25 leaves / 5 UT Bartlet stems)	
			0.3	Brown Marmorated Stink Bug (1F/1M-1 adults)	
			1.2	Oriental Fruit Moth (OFM) (2/13)	
			0.0	Red Banded Leafroller (RBLR) (0/0)	
			0.0	Spotted Green Fruitworm (SGFW) (0/0)	
			0.3	Spotted Tentiform Leafminer (STLM) (3/1)	
			0.6	Oblique Banded Leafroller (OBLR) (3/6)*	
			0.0	Spotted Wing Drosophila (SWD) (0/0)	
			0.1	Lesser Apple Worm (LAW) (2/0)	
			1.6	Codling Moth (CM) (13/10)	
		858.8	498.3		Highland
		785.8	464.9		Hudson
		803.6	460.1		Marlboro
	791.9	465.9		Red Hook	
			0.05	Weekly Rainfall (HVL)	
			0.00	Total Rainfall for June (HVL)	
			7.13	Total Rainfall from 1 March (HVL)	

* - 1st trap capture

(HVL) **Baskerville-Emin (BE)**

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

6/10

Predictive modeling

Pear psylla 2nd generation egg laying increasing.

24 DD STLM 2nd gen flight: DD_{43F} Model (Biofix) 9 June
(no emergence observed, no control required until 690DD)

SJS crawler: no emergence observed, no control required yet)

644.7 DD SJS 500 DD_{50F} model emergence prediction (5 June)

209.7 SJS DD_{50F} adult male model (adult biofix (Geneva) 5/23)

21 June SJS 1st DD_{50F} adult male model prediction date for 400DD

141 DD OBLR 340DD_{43F} model prediction (biofix 6.3)

17 June OBLR 340DD_{43F} model prediction approximate date
(no control required yet)

383 DD PC 308DD_{50F} model for required insecticide residue (complete)

4 June PC 308DD_{50F} model achieved (biofix 5.33 no control required)

332 DD CM egg hatch at 220 DD_{50F} model prediction (biofix 5.20)
(control required beginning 2 June)

43 F

50 F

/ trap / day (pheromone trap)

2.5 Psylla eggs / cluster (62 egg / 25 leaves / 5 UT Bartlet stems)

0.5 Psylla nymphs / cluster (13 nym. / 25 leaves / 5 UT Bartlet stems)

1.0 Brown Marmorated Stink Bug (3 F/ M-4 adults)

0.4 Oriental Fruit Moth (OFM) (1 / 5)

0.1 Red Banded Leafroller (RBLR) (1 / 1)

6.2 Spotted Tentiform Leafminer (STLM) (31/ 56)

0.9 Oblique Banded Leafroller (OBLR) (10/ 3)

0.0 Spotted Wing Drosophila (SWD) (0 / 0)

0.7 Lesser Apple Worm (LAW) (3/ 7)

0.2 Codling Moth (CM) (1/ 2)

1068.1 644.7

999.5 615.5

1011.7 605.5

992.5 605.4

Highland

Hudson

Marlboro

Red Hook

2.27 Weekly Rainfall (HVL)

2.27 Total Rainfall for June (HVL)

9.40 Total Rainfall from 1 March (HVL)

-
- - 1st trap capture

(HVL) Baskerville-Emin (BE)

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

6/17

Predictive modeling

Pear psylla 2nd generation egg laying and hatch increasing.
Codling Moth 1st generation adult flight increasing.

168 DD STLM 2nd gen flight: DD_{43F} Model (Biofix) 9 June
(no emergence observed, no control required until 690 DD)

739 DD SJS 500 DD_{50F} model emergence prediction (5 June)

340 DD SJS DD_{50F} adult model (male biofix (Geneva) 5/23

20 July SJS DD_{50F} date for crawler emergence 380-400DD₅₁

SJS crawlers observed under overwintering females.

Emergence will occur toward the latter part of this week

285 DD OBLR 340DD_{43F} model prediction (biofix 6.3)

19 June OBLR 350DD_{43F} model prediction approximate date

OBLR control should begin this Wednesday, 19 June

427 DD CM egg hatch at 220 DD_{50F} model prediction (biofix 5.20)
(required control beginning 2 June)

43 F

50 F

/ trap / day (pheromone trap)

9.3 Psylla eggs / cluster (232 egg/ 25 leaves / 5 UT Bartlet stems)

2.1 Psylla nymphs / cluster (52 nym./ 25 leaves / 5 UT Bartlet stems)

0.0 Brown Marmorated Stink Bug (0 F/ 0 M adults)

0.9 Codling Moth (CM) (0/ 12)

0.6 Lesser Apple Worm (LAW) (2 / 7)

0.4 Oblique Banded Leafroller (OBLR) (5/ 1)

0.2 Oriental Fruit Moth (OFM) (1 / 2)

0.0 Red Banded Leafroller (RBLR) (0 / 0)

0.0 San Jose Scale (SJS) (0 / 0)

19.7 Spotted Tentiform Leafminer (STLM) (130/ 146)

0.0 Spotted Wing Drosophila (SWD) (0 / 0 / 0 / 0)

1212.1 739.7

1139.0 706.0

1154.7 699.5

1124.9 689.0

Highland

Hudson

Marlboro

Red Hook

2.14 Weekly Rainfall (HVL)

4.41 Total Rainfall for June (HVL)

11.54 Total Rainfall from 1 March (HVL)

(HVL) **Baskerville-Emin (BE)**

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

6/24

Predictive modeling

17-year cicada management required in Brood II regions

Pear psylla 2nd generation egg & nymph numbers increasing.

353 DD STLM 2nd gen flight: DD_{43F} Model (Biofix) 9 June
(no hatch observed, no control required until 690DD)

SJS crawler: emergence observed, 1st white cap, control required in blocks with active SJS crawlers.

OBLR peak egg hatch, control required in blocks with active larva.

470 DD OBLR 340DD_{43F} model prediction (biofix 6.3)

19 June OBLR 340DD_{43F} model prediction approximate date

563 DD CM egg hatch at 220 DD_{50F} model prediction (biofix 5.20)
(hatch continuing, control required beginning 2 June)

43 F

50 F

/ trap / day (pheromone trap)

26.0 Psylla eggs / cluster (130 egg / 25 leaves / 5 UT Bartlet stems)
2.1 Psylla nymphs / cluster (52 nym./ 25 leaves / 5 UT Bartlet stems)

0.0 Brown Marmorated Stink Bug (0 F/ 0 M adults)
1.0 Oriental Fruit Moth (OFM) (7 / 7)
2.4 Red Banded Leafroller (RBLR) (21 / 12)
31.3 Spotted Tentiform Leafminer (STLM) (187 / 252)
2.7 Oblique Banded Leafroller (OBLR) (17 / 21)
0.0 Spotted Wing Drosophila (SWD) (0 / 0 / 0 / 0)
0.2 Lesser Apple Worm (LAW) (0 / 3)
0.3 Codling Moth (CM) (2 / 2)
0.6 San Jose Scale (SJS) (3 / 5)

1397.2

875.8 Highland

1324.5

842.6 Hudson

1340.8

836.6 Marlboro

1305.0

815.6 Red Hook

0.12 Weekly Rainfall (HVL)

5.80 Total Rainfall for June (HVL)

13.05 Total Rainfall from 1 March (HVL)

(HVL) Baskerville-Emin (BE)

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

7/1

Predictive modeling

Pear psylla 2nd generation nymph damage observed in Bosc.

579 DD STLM 2nd gen flight: DD_{43F} Model (Biofix) 9 June
(no emergence observed, no control required until 690DD)

22 June SJS crawler: emergence observed, 2nd contact application is
required for crawlers if Adulticides or Movento were not used.

634 DD OBLR 340DD_{43F} model prediction (biofix 6.3)

17 June OBLR 340DD_{43F} model prediction approximate date
(nearing hatch mid-point, control required beginning 2 June)

43 F

50 F

/ trap / day (pheromone trap)

0.5 Psylla eggs / cluster (egg 12/ 25 leaves / 5 UT Bartlet stems)
0.6 Psylla nymphs / cluster (nym 15 /25 leaves / 5 UT Bartlet stems)

0.0 Brown Marmorated Stink Bug (0 F/ 0 M adults)
0.2 Oriental Fruit Moth (OFM) (0 / 3) Start of 2nd gen. 1st flt.
4.6 Red Banded Leafroller (RBLR) (22 / 10) Start of 2nd gen. 1st flt.
25.3 Spotted Tentiform Leafminer (STLM) (199 / 155) Peak flt.
2.7 Oblique Banded Leafroller (OBLR) (17 / 21)
0.0 Spotted Wing Drosophila (SWD) (0 / 0 / 0 / 0)
0.4 Lesser Apple Worm (LAW) (0 / 5)
0.1 Codling Moth (CM) (2 / 0)
0.0 San Jose Scale (SJS) (0 / 0)
0.0 Apple Maggot (AM) (0 / 0 / 0 / 0)

1622.8 1052.4 Highland
1558.5 1027.6 Hudson
1567.4 1014.2 Marlboro
1530.5 997.4 Red Hook

3.34 Weekly Rainfall (HVL)
9.14 Total Rainfall for June (HVL)
16.39 Total Rainfall from 1 March (HVL)

(HVL) Baskerville-Emin (BE)

Date DD Accumulations (previous day NEWA) Field Observations / Trap Catches / Models

7/8

Predictive modeling

Pear psylla 2nd generation nymph damage observed in Bosc with nymphs above threshold and increased egg laying observed.

Apple maggot nearing threshold of 5 adults / trap
No control required

Japanese beetle adults feeding on foliage

826 DD STLM 2nd gen flight: DD_{43F} Model (Biofix) 9 June
(onset of egg hatch, larval emergence and sap feeding)

943 DD OBLR 340DD_{43F} model prediction (biofix 6.3)
17 June OBLR 340DD_{43F} model prediction approximate date
(nearing hatch end, large larvae)

43 F	50 F	# / trap / day (pheromone trap)
		7.8 Psylla eggs / cluster (egg 195/ 25 leaves / 5 UT Bartlet stems)
		2.9 Psylla nymphs / cluster (nym 73 /25 leaves / 5 UT Bartlet stems)
		0.0 Brown Marmorated Stink Bug (0 F/ 0 M adults)
		4.1 Oriental Fruit Moth (OFM) (25 / 32)
		2.1 Red Banded Leafroller (RBLR) (29 / 0)
		34.2 Spotted Tentiform Leafminer (STLM) (190 / 289)
		0.6 Oblique Banded Leafroller (OBLR) (0 / 8)
		0.0 Spotted Wing Drosophila (SWD) (0 / 0 / 0 / 0)
		0.5 Lesser Apple Worm (LAW) (4 / 3)
		0.1 Codling Moth (CM) (0/ 1)
		0.1 San Jose Scale (SJS) (0 / 1)
		0.3 Apple Maggot (AM) (3 / 4 / 0 / 2) first capture
1870.8	1251.4	Highland
1813.9	1234.0	Hudson
1818.9	1216.7	Marlboro
1782.1	1200.0	Red Hook
		Weekly Rainfall (HVL)
	2.05	Total Rainfall for July (HVL)
	18.44	Total Rainfall from 1 March (HVL)

(HVL) Baskerville-Emin (BE)

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

7/15

Predictive modeling

Pear psylla 2nd generation nymph damage observed in Bosc

Increasing BMSB captured in traps; 4th instar nymphs observed

2nd generation SJS male emergence (biofix)

Japanese beetle adults continue to feed on foliage

1053 DD STLM 2nd gen flight: DD_{43F} Model (Biofix) 9 June
(sap and tissue feeding stages present)

43 F

50 F

/ trap / day (pheromone trap)

0.2 Psylla eggs / cluster (egg 6/ 25 leaves / 5 UT Bartlet stems)
0.8 Psylla nymphs / cluster (nym 19 /25 leaves / 5 UT Bartlet stems)

8.1 BMSB (0 F/ 0 M / 9 - 2nd / 37 - 3rd / 11 - 4th / 0 - 5th)
1.2 Oriental Fruit Moth (OFM) (7 / 10)
2.1 Red Banded Leafroller (RBLR) (39 / 0)
10.5 Spotted Tentiform Leafminer (STLM) (132 / 15)
0.2 Oblique Banded Leafroller (OBLR) (0 / 3)
0.0 Spotted Wing Drosophila (SWD) (0 / 0 / 0 / 0)
0.2 Lesser Apple Worm (LAW) (1 / 2)
0.6 Codling Moth (CM) (6 / 3)
44.5 San Jose Scale (SJS) (381 / 242)
< 0.1 Apple Maggot (AM) (0 / 0 / 0 / 1)

2098.2 1429.8
2047.8 1418.9
2025.4 1374.2
2009.8 1378.7

Highland
Hudson
Marlboro
Red Hook

0.5 Weekly Rainfall (HVL)
2.5 Total Rainfall for July (HVL)
18.49 Total Rainfall from 1 March (HVL)

<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
7/22	43 F	50 F	# / trap / day (pheromone trap)
			0.8 Psylla eggs / cluster (egg 19/ 25 leaves / 5 UT Bartlet stems)
			0.0 Psylla nymphs / cluster (nym 0 /25 leaves / 5 UT Bartlet stems)
			6.7 BMSB (1 F/ 0 M / 9 - 2 nd / 18 - 3 rd / 25 - 4 th / 1 - 5 th)
			1.3 Oriental Fruit Moth (OFM) (4 / 14)
			0.6 Red Banded Leafroller (RBLR) (9 / 0)
			28.8 Spotted Tentiform Leafminer (STLM) (217 / 186)
			0.2 Oblique Banded Leafroller (OBLR) (3 / 0)
			0.9 Lesser Apple Worm (LAW) (7 / 5)
			0.3 Codling Moth (CM) (3 / 1)
			147.7 San Jose Scale (SJS) (1,182 / 883)
			0.5 Apple Maggot (AM) (4 / 0 / 0 / 10) Threshold
			0.5 Spotted Wing Drosophila (SWD) (Grape 1 / Peach 0 / Pum 3 / Cherry 12 / Rasp 0) 1 st Capture
	2364.8	1647.4	Highland
	2317.3	1639.4	Hudson
	2292.6	1592.4	Marlboro
	2268.2	1588.1	Red Hook
			0.0 Weekly Rainfall (HVL)
			2.5 Total Rainfall for July (HVL)
			18.49 Total Rainfall from 1 March (HVL)

<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
7/29	43 F	50 F	# / trap / day (pheromone trap)
			0.6 Psylla eggs / cluster (egg 15 / 25 leaves / 5 UT Bartlet stems)
			0.3 Psylla nymphs / cluster (nym 7 /25 leaves / 5 UT Bartlet stems)
			4.4 BMSB (7 F/ 2 M / 1 - 2 nd / 10 - 3 rd / 9 - 4 th / 11 - 5 th)
			0 Oriental Fruit Moth (OFM) (0 / 0)
			0.2 Red Banded Leafroller (RBLR) (3 / 0)
			12.1 Spotted Tentiform Leafminer (STLM) (145 / 24)
			0.2 Oblique Banded Leafroller (OBLR) (2 / 1)
			0.4 Lesser Apple Worm (LAW) (3 / 3)
			1.3 Codling Moth (CM) (13 / 5)
			16.6 San Jose Scale (SJS) (112 / 120)
			0.2 Apple Maggot (AM) (2 / 1 / 0 / 3)
			1.2 Spotted Wing Drosophila (SWD)
			(Tartarian Honeysuckle (wild) 34 Grapes 2 / Peach 0 / Pumice 14 / Cherry 0 / Raspberry 1)
	2561.8	1795.4	Highland
	2512.7	1785.8	Hudson
	2487.8	1738.6	Marlboro
	2463.6	1734.5	Red Hook
			1.7 Weekly Rainfall (HVL)
			4.2 Total Rainfall for July (HVL)
			70.1 Total Rainfall from 1 March (HVL)

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

8/5 43 F 50 F # / trap / day (pheromone trap)

Predictive modeling

Declining Pear psylla 2nd generation nymph in Bosc

Increasing BMSB captured in traps; 5th instar nymphs observed
Adults and nymphs observed in peach, tomato and apple
Fruit injury observed in perimeter apple in Columbia Co.

Increasing SWD captured in traps placed in Grapes, Peach and Cherry
100% infestation in unsprayed blackberry & raspberry in Ulster Co.

319.8 SJS emergence DD model from biofix (7/15)
19 Aug. SJS crawler emergence date using 600 to 700 DD from biofix

Low apple maggot emergence

0.16 Psylla eggs / cluster (egg 4 / 25 leaves / 5 UT Bartlet stems)
0.24 Psylla nymphs / cluster (nym 6 / 25 leaves / 5 UT Bartlet stems)

4.8 BMSB (0 F / 1 M / 1 - 2nd / 8 - 3rd / 8 - 4th / 16 - 5th)

0.7 Oriental Fruit Moth (OFM) (2 / 8)

0.4 Red Banded Leafroller (RBLR) (5 / 0)

24.0 Spotted Tentiform Leafminer (STLM) (279 / 57)

0.2 Oblique Banded Leafroller (OBLR) (0 / 0)

0.4 Lesser Apple Worm (LAW) (2 / 3)

1.3 Codling Moth (CM) (0 / 4)

1.0 San Jose Scale (SJS) (6 / 8)

0.1 Apple Maggot (AM) (1 / 1 / 0 / 2)

2.5 Spotted Wing Drosophila (SWD) (Tartarian Honeysuckle (wild) 26 /
Grapes 4 / Peach 9 / Pumice 26 / Cherry 39 / Raspberry 0)

2752.4 1937.0

2705.2 1929.3

2669.9 1872.3

2567.6 1810.5

Highland

Hudson

Marlboro

Red Hook* (Only measured up until 8/1/13)

0.51 Weekly Rainfall (HVL)

0.51 Total Rainfall for August (HVL)

19.00 Total Rainfall from 1 March (HVL)

<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
8/12	43 F	50 F	# / trap / day (pheromone trap)
			Predictive modeling
			Declining Pear psylla 2 nd generation nymph in Bosc
			Increasing CM and OFM adult flight
			BMSB captured in traps
			Adults and nymphs observed in peach, tomato and apple
			Fruit injury observed in peach and Asian pear in Dutchess Co.
			Increasing SWD captured in traps throughout the region
			100% injury observed in treated blackberry and raspberry in the HV
457.5			SJS emergence DD model from biofix (7/15)
20 Aug.			SJS crawler emergence date using 600 to 700 DD from biofix
			Apple maggot emergence increasing in higher moisture blocks
0.3			Psylla eggs / cluster (egg 8 / 25 leaves / 5 UT Bartlet stems)
< 0.1			Psylla nymphs / cluster (nym 2 / 25 leaves / 5 UT Bartlet stems)
2.3			BMSB (0 F / 1 M / 0 - 2 nd / 1 - 3 rd / 6 - 4 th / 8 - 5 th)
2.6			Oriental Fruit Moth (OFM) (22 / 14)
0.7			Red Banded Leafroller (RBLR) (10 / 0)
21.6			Spotted Tentiform Leafminer (STLM) (216 / 86)
0.0			Oblique Banded Leafroller (OBLR) (0 / 0)
1.5			Lesser Apple Worm (LAW) (8 / 13)
2.7			Codling Moth (CM) (21 / 17)
0.0			San Jose Scale (SJS) (0 / 0)
0.2			Apple Maggot (AM) (1 / 0 / 0 / 4)
4.5			Spotted Wing Drosophila (SWD) (Tartarian Honeysuckle (wild) 40 Grapes 9 / Peach 44 / Pumice 38 / Cherry 52 / Raspberry 7)
2939.1	2074.7		Highland
2891.9	2066.8		Hudson
2853.5	2006.9		Marlboro
2838.2	2011.0		Red Hook* (Only measured up until 8/1/13)
		3.60	Weekly Rainfall (HVL)
		4.11	Total Rainfall for August (HVL)
		22.60	Total Rainfall from 1 March (HVL)

<u>Date</u>	<u>DD Accumulations (previous day NEWA)</u>		<u>Field Observations / Trap Catches / Models</u>
8/19	43 F	50 F	# / trap / day (pheromone trap)
	43 F	50 F	# / trap / day (pheromone trap)
			0.68 Psylla eggs / cluster (egg 17 / 25 leaves / 5 UT Bartlet stems)
			0.04 Psylla nymphs / cluster (nym 1 /25 leaves / 5 UT Bartlet stems)
			2.6 BMSB (0 F/ 1 M / 0 - 2 nd / 0- 3 rd / 4 - 4 th / 13 - 5 th)
			2.1 Oriental Fruit Moth (OFM) (3 / 23)
			2.4 Red Banded Leafroller (RBLR) (19 / 15)
			10.9 Spotted Tentiform Leafminer (STLM) (73 / 80)
			0.0 Oblique Banded Leafroller (OBLR) (0 / 0)
			1.3 Lesser Apple Worm (LAW) (14 / 4)
			0.5 Codling Moth (CM) (3 / 4)
			1.6 San Jose Scale (SJS) (12 / 10)
			0.2 Apple Maggot (AM) (1 / 0 / 0 / 4)
			35.8 Spotted Wing Drosophila (SWD) (Tartarian Honeysuckle (NO
FRUIT- end of Trapping) Grapes 174 / Peach 112 / 580 / Cherry 0 (NO FRUIT) / Raspberry 387)			
	3108.1	2194.7	Highland
	3045.1	2186.3	Hudson 7
	3018.5	2122.9	Marlboro
	2999.5	2123.2	Red Hook
			0.85 Weekly Rainfall (HVL)
			4.96 Total Rainfall for August (HVL)
			23.54 Total Rainfall from 1 March (HVL)

Date **DD Accumulations (previous day NEWA)** **Field Observations / Trap Catches / Models**

8/26	43 F	50 F	# / trap / day (pheromone trap)
			0.0 Psylla eggs / cluster (egg 0 / 25 leaves / 5 UT Bartlet stems)
			0.08 Psylla nymphs / cluster (nym 2 / 25 leaves / 5 UT Bartlet stems)
			2.7 BMSB (1 F / 2 M / 0 - 2 nd / 0- 3 rd / 4 - 4 th / 13 - 5 th)
			0.6 Oriental Fruit Moth (OFM) (4 / 5)
			8.9 Red Banded Leafroller (RBLR) (66 / 58)
			22.4 Spotted Tentiform Leafminer (STLM) (156 / 157)
			0.4 Oblique Banded Leafroller (OBLR) (1 / 5)
			0.4 Lesser Apple Worm (LAW) (3 / 3)
			0.6 Codling Moth (CM) (4 / 4)
			0.0 San Jose Scale (SJS) (0 / 0)
			0.5 Apple Maggot (AM) (3 / 2 / 4 / 6)
			27.5 Spotted Wing Drosophila (SWD) Grapes 114 / Peach 106 / Pumice
492/ Raspberry 57)			
	3299.5	2337.1	Highland
	3254.5	2331.4	Hudson
	3206.4	2261.8	Marlboro
	3185.5	2260.2	Red Hook
			0.01 Weekly Rainfall (HVL)
			4.97 Total Rainfall for August (HVL)
			23.55 Total Rainfall from 1 March (HVL)

HVL) **Baskerville-Emin (BE)**

Date DD Accumulations (previous day NEWA) Field Observations / Trap Catches / Models

9/3	43 F	50 F	# / trap / day (pheromone trap)
			0.0 Psylla eggs / cluster (egg 0 / 25 leaves / 5 UT Bartlet stems)
			0.0 Psylla nymphs / cluster (nym 0 /25 leaves / 5 UT Bartlet stems)
			2.0 BMSB (4 F/ 2 M / 2 - 2 nd / 1 - 3 rd / 2 - 4 th / 3 - 5 th)
			0.2 Oriental Fruit Moth (OFM) (2 / 1)
			19.0 Red Banded Leafroller (RBLR) (111 / 155)
			47.1 Spotted Tentiform Leafminer (STLM) (361 / 298)
			0.0 Oblique Banded Leafroller (OBLR) (0 / 0)
			1.9 Lesser Apple Worm (LAW) (2 / 25)
			0.6 Codling Moth (CM) (4 / 4)
			8.1 San Jose Scale (SJS) (72 / 41)
			0.9 Apple Maggot (AM) (5 / 4 / 7 / 9)
			1.1 Spotted Wing Drosophila (SWD) Grapes 4 / Peach 13 / Pumice 14 / Raspberry 0)
	3544.1	2525.7	Highland
	3506.1	2527.0	Hudson
	3447.8	2447.2	Marlboro
	3433.0	2451.7	Red Hook
			4.20 Weekly Rainfall (HVL)
			2.84 Total Rainfall for September (HVL)
			27.75 Total Rainfall from 1 March (HVL)
